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Emergency Plan of Action Final Report Kenya: Cholera Outbreak

 International Federation
of Red Cross and Red Crescent Societies

Emergency Appeal n° MDRKE035	Glide n° EP-2015-000013-KEN
Date of Issue: 31 May 2016	Date of disaster: Initial outbreak began on 6 January, 2015. Second outbreak began on 28 July, 2015
Operation start date: 23 August, 2015	Operation end date: 23 February, 2016
Host National Society: Kenya Red Cross Society	Operation budget: CHF 1,511,314
Number of people affected: 678,434	Number of people assisted: 371,376
N° of National Societies involved in the operation: British Red Cross	
N° of other partner organizations involved in the operation: Ministry of Health (MOH), Islamic Relief, UNICEF, ACTED, Action Aid, Save the Children, World Vision Kenya, Plan International-Kenya, Action Against Hunger, Médecins Sans Frontières (MSF)	

Appeal history:

- A **Preliminary Emergency Appeal** was launched on 23 August, 2015 for CHF 1,511,314 for 6 months to assist 678,434 beneficiaries.
- CHF 140,000 was allocated from the International Federation of Red Cross and Red Crescent (IFRC) Disaster Relief Emergency Fund (DREF) as start-up funds.
- **Operations update no. 1** was published on 22 September 2015 and provided a progress update on the deployment of staff and volunteers.
- **Operations update 2** was published on 2 October, 2015 aligning activities with anticipated funding.

A. Situation analysis

Description of the disaster

Cases of cholera were reported in different counties in the country following an outbreak that was picked by surveillance system in the last week of December 2014, in Nairobi County. Twenty nine (29) counties reported cases and this included counties that had successfully controlled the outbreak, 10 counties still have ongoing outbreaks, Counties such as Kirinyaga, Embu, Baringo and Migori (among others) reported new cases after successfully controlling the first wave of outbreak and were declared as cholera free. Other counties such as Baringo and Wajir reported cases in sub-counties that had previously not reported any case. Some counties

are vast and an outbreak in one part of the county may not be related to an outbreak in another part of the county in terms of transmission). New outbreaks were also reported in Marsabit and Tharaka Nithi. As of 4 April 2016, the National figures for cases and fatalities were 14,007 and 225 deaths respectively (Case Fatality Rate 1.6%). The Ministry of Health took lead in outbreak control (management of cases and in efforts for prevention of new infections) and although significant gains had been made, re-emergence of second and third waves of the outbreak is a big challenge in the control efforts. This has resulted in cases being reported months from the index case. Laboratory investigations in the recent past pointed that the *Vibrio* responsible for the outbreak was *Vibrio cholerae* (serovar ogawa). Results for genetic mapping were not shared and therefore not quite clear whether it was the same serotype causing the outbreak in the 29 counties.

On 2 August 2015, the International Federation of Red Cross and Red Crescent Societies (IFRC) released 140,124 Swiss franc from the Disaster Relief Emergency Fund (DREF) as a loan to support the Kenya Red Cross Society (KRCS) respond to the needs of the affected population. The DREF loan operation was intended to support 30,893 households (185,360 people) with health care, water, sanitation and hygiene promotion activities in the Wajir and Baringo counties over a period of 3 months.

The appeal coverage was only 22%. The IFRC, on behalf of the Kenya Red Cross, would like to thank all those that have contributed to this Emergency Appeal namely: China Red Cross - Hong Kong branch, Finnish Red Cross, Japanese Red Cross Society, Red Cross of Monaco, and the Netherlands Red Cross (from the Netherlands Government).

For details on the situation in specific counties refer to [operations update 2](#).

Summary of response

Overview of Host National Society

The KRCS has a long standing experience of implementing cholera operations given its recurrence in the country. Following the outbreak in January 2015, KRCS responded through the Cholera DREF operation (MDRKE033), as well as mobilized resources for interventions being carried out within other counties. This included the provision of medicine, mobilization/training of volunteers and preparation of cholera treatment sites. However, it was recognized that there were remaining needs, which could not be met through the existing operations and as such the KRCS requested for an emergency appeal allocation to enable additional activities to be undertaken. As noted, the KRCS was able to complete planned activities within the operation including: training of volunteers on response against cholera outbreaks using the ECV manual; disinfection of facilities and use of ORS; awareness raising/ sensitization; production of information, education and communication materials; procurement of protective equipment for volunteers, hygiene and sanitation materials for communities and beneficiaries.

At the National level, the KRCS participated in the Health and WASH clusters meetings. The KRCS is a member of the WASH cluster Water and Environmental Sanitation Coordination (WESCOORD) and therefore played a major role in these meetings by providing information on the situation at community level. The KRCS participated in other coordination and clusters meetings with different government bodies and other agencies on a regular basis.

Due to the low appeal coverage, not all planned activities were implemented. Key successes were as follows:

- KRCS set up 16 Cholera Treatment Centers (CTCs): 4 CTCs in Siaya, 3 in Migori, 2 in Baringo, 3 in Wajir, 2 in Tharaka Nithi, 1 in Garissa and 1 in Marsabit. In Mombasa and Nairobi, the CTCs were set up by the MoH and MSF.
- A total of 8 screening tents were set up and 4 temporal sanitation facilities were constructed in Migori and Baringo. Most of the CTCs used the existing sanitation facilities that were in the health facilities.
- A surge team of 6 staff per county (1 clinical officer, 3 nurses, 1 PHO and 1 lab technician) and 10 volunteers in each county were deployed to work together with MoH in managing the cases in the CTCs

- A total of 482 cases were managed in the CTCs, with a total of 60 fatalities reported where 87% were community based fatalities.
- Wajir, Migori and Siaya county were replenished with medical supplies after experiencing the second wave of the outbreak.
- A total of 4 cholera kits were procured and distributed to Migori, Wajir, Garissa county and one left to HQ for contingency purpose.
- A total of 3,200 jerry cans were distributed to help in safe storage of water where 80% were received from UNICEF.
- There were a total of 10 (Oral Rehydration Salt (ORS) points that were set up in different counties. At least 1,015 people were treated within the ORS points put in place. In Migori, Siaya and Wajir counties, the CTCs served as the ORS points for severe dehydration cases.
- One hundred and fifty nine (159) volunteers were trained on the assessment of levels of dehydration of the patients.
- Hundred (100) water filters were distributed in Wajir County.

Overview of Red Cross Red Crescent Movement in country

The International Federation of Red Cross and Red Crescent Societies (IFRC) through its East Africa and Indian Ocean Islands Multi-Country Cluster Office , which is based in the country, supports operations in 15 countries in the region, including KRCS.

The KRCS hosts a number of Participating National Societies including: American, Austrian, British, Danish, Finnish, German, Japanese, and Norwegian Red Cross Societies. Please note that WASH related items (hand washing kits, jerry cans, soap and water purification chemicals) were drawn from Election Contingency Planning stocks provided by the British Red Cross, DFID and ECHO, and are complementing the response of the KRCS through this operation.

Overview of non-RCRC actors in country

The county Public Health departments from the 4 counties deployed medical personnel to the county health facilities to work with KRCS, established Cholera Treatment Centres (CTCs) in the Wajir referral hospital and Marigat sub-county hospital, and also organized weekly meetings with partners involved in the response to ensure coordination. Other Government actors included Ministry of Health (including affiliated institutions like the National Public Health laboratories, Kenya Medical Research Institute (KEMRI) and Field Epidemiology and Laboratory Training Programme) and the Ministry of Water and Irrigation (County Water Services Boards).

Non-Governmental Organizations involved in the first wave of cholera outbreak response such as Médecins Sans Frontières (MSF), Plan International-Kenya, United Nations Children's Fund (UNICEF), World Health Organisation (WHO) and World Vision continued to support control of the epidemic.

In the first wave of the outbreak, UNICEF contributed supplies and funding from the Central Emergency Fund (CERF) while the WHO provided technical support to MoH and its partners. The European Commission Humanitarian aid provided financial support through UNICEF. In the second wave of the outbreak, the partners working in Wajir included UNICEF (provided 2 drums of chlorine, 250 buckets, ORS and Intravenous Fluids), Islamic Relief (supported water treatment at household level for 4 days), Save the Children (supported radio messages) and APHIA Imarisha (donated 50,000 aqua tabs to the county government of Wajir).

Needs analysis and scenario planning

Joint assessments were conducted in collaboration with the MoH in all at risk counties as new cases were reported with the following priorities identified: water sanitation and hygiene interventions, early identification of cases, contact tracing and prophylaxis, community and facility based case management, laboratory, community mobilization and advocacy, communication and social mobilization (ACSM) and coordination. Sub-counties and sub-locations in Homa Bay, Migori, Mombasa, Nairobi, Baringo, Wajir and Nakuru counties were prioritized at the onset of the epidemic. Please refer to Operations Update no.1 for information on the needs of the affected/at risk population.

Risk Analysis

Joint efforts were done by all partners to address the outbreak management and control strategy ranging from health promotion, advocacy, communication and social mobilization (ACSM) and coordination, case management, laboratory analysis, contact tracing and disease surveillance teams helped ensure the risk of the epidemic spreading to other areas was mitigated. In addition, the infection of the response teams was equally mitigated through proper sensitization of the volunteers, and provision of protective wear to response teams and provision of prophylaxis for all response teams - especially in the informal settlement areas in Wajir (Jogoo, Barwaqo), Baringo (areas around the Perkerra irrigation scheme), Mombasa (Tudor), Nairobi (Kibra) and Garissa (Dadaab camp), which were among areas identified to be most at risk with vulnerable population for person to person contamination

B. Operational strategy and plan

Overall Objective

To contribute to the cholera prevention and management of cases in 10 counties (Wajir, Baringo, Mombasa, Kilifi, Nairobi, Isiolo, Siaya, Kisumu, Migori and Garissa), targeting 371,376 people in support of the Ministry of Health and supporting preparedness in high risk counties of Mandera and Marsabit.

Proposed strategy

Due to the low appeal coverage, counties with the highest number of Cholera cases were prioritised and the counties included: Wajir, Baringo, Siaya, Migori, Mombasa, Garissa (Dadaab), Tharaka-Nithi, Marsabit and Nairobi.

Strategy 1: Outbreak Confirmation and Continuous Joint Assessments

KRCS worked closely with the Ministry of Health in the different target counties in the surveillance and management of cholera cases. Laboratory diagnosis were conducted by use of RDTs and weekly stool cultures for selected cases to monitor drug sensitivity and guide management of cases. This strategy was done to monitor the outbreak spread, and to confirm cases in new locations/villages. The implementation was done through the use of Rapid Diagnostic Kits.

Strategy 2: Case Management

During the reporting period, KRCS set up CTCs in Wajir, Baringo, Siaya, Migori, Tharaka Nithi, Garissa and Marsabit; and through the MoH and support from MSF they set up CTCs in Mombasa and Nairobi. The CTCs were run to help manage cholera patients based on MoH cholera management guidelines. KRCS deployed a

surge team to run the CTCs. The team included: Clinical Officer (1), Nursing Officers (3) and Laboratory Technologist (1) and 10 volunteers (5 to cover day time and 5 to cover night) per CTC. The KRCS team worked alongside the MoH.

KRCS procured supplies to be used by the surge teams to complement what the ministry was providing. The supplies included: 4 big tents and eight medium sized tents, consumables (including Ringers Lactate, Normal Saline, 5% Dextrose and infusion sets), Cholera beds (70 in Wajir and 50 in Baringo), Infection control supplies (90kg Chlorine, which was also used for chlorination of wells by Hygiene Promotion Teams) and Lab supplies including specimen collection kits, Cary Blair Transport Media, cold boxes.

At the community level, Oral Rehydration points were established to manage cases with moderate dehydration, with severe cases being referred to the CTC.

Strategy 3: Advocacy, Communication and Social Mobilisation

Sensitisation on the Cholera outbreak and need to participate in efforts to contain the outbreak was conducted at the community level and in schools through a public health team. This was carried out through public meetings, through the involvement of religious leaders and local administrators. The sensitization was conducted through the use of Information, Education and Communication (IEC) materials, pictorials and other visibility materials as well as use of public address systems. In areas such as Wajir, sensitization was carried out through radio talk shows on the local radio by broadcasting key prevention messages.

KRCS through the ICT department utilized TERA messaging tool to deliver Cholera prevention messages to populations in specific target locations and also inform where the nearest CTC was based in their location.

Strategy 4: Hygiene promotion and enhanced surveillance

The KRCS team conducted hygiene promotion including promotion of safe faecal matter disposal (Wajir has a high water table and bucket toilets are used instead of latrines), hand washing, hygienic food handling (including closure of food kiosks in trading centres in areas such as Mombasa), chlorination of wells in areas like Wajir as well as distribution of point of use water treatment chemicals and delivery of key messages to individuals and families. The teams were equipped with cholera kits and hygiene promotional materials. Frequent disinfection of compounds within and around CTCs was carried out to ensure vector control in and around CTCs.

The teams worked hand in hand with Public Health Team from MoH to promote food hygiene as the MoH enforces Public Health Act. In Mombasa County, the food vending premises that did not meet hygiene standards were closed down. Community surveillance and mortality surveillance prospectively was also conducted by the teams, reaching 2,674 households. Investigations of mortalities were conducted in Wajir to identify the immediate cause of death. The results of community and mortality surveillance were fed into the county Health Information System.

As a measure to prevent the spread of the cholera virus, people who were in contact with patients were advised on measures to take to avoid infections and in addition decontamination was done (on vomitus and faecal material left behind by the patient).

In Migori, Baringo and Siaya GPS coordinates were taken to support mapping of the outbreak. This was used to forecast the prevention interventions.

Strategy 5: Enhancing emergency preparedness in high risk counties

The counties of Mandera and Marsabit were identified as high risk counties based on outbreaks in neighbouring counties and the interconnectedness of these counties' economies and the constant migration by pastoral communities. As such, KRCS worked on strengthening preparedness in these counties in case of an outbreak. The strategy worked well for Mandera County where Mandera Girls High school reported 35 cases of diarrhoea and through the preparedness from KRCS volunteers quick measures were taken to avert the situation. All the water points and storage facilities at the school and the surroundings were disinfected with chlorine. However for Marsabit it didn't work due to the porous border between Kenya and Ethiopia at Moyale town. To date there are still cases being reported and 2 CTCs have been set up to manage the cases. 1 CTC in Moyale Sub county hospital managed by MSF and MoH personnel and the other in Laisamis Sub County Hospital managed by KRCS and MoH personnel.

Operational support services

Human resources (HR)

As an effort to strengthen the response capacity, KRCS deployed surge teams to work together with the MoH in the management and control of cholera. The surge teams were deployed in Migori, Siaya, Baringo, Tharaka Nithi, and Wajir and currently in Marsabit. The teams included 1 clinical officer, 1 laboratory technician, 1 public health officer and 3 nurses and a team of 10 volunteers.

Logistics and supply chain

Logistics and supply chain support was in accordance with the KRCS procedure of procurement and the following services were provided to support the operation:

- Local procurement of cholera response related NFIs including chlorine powder drums (45kg), chlorination pots, disinfection equipment (knapsack sprayers and overalls), Lysol 6% (5 litres) and Sodium Hypochlorite 3.5% (5 litres). In addition, two complete cholera kits were procured/deployed to Homa Bay and Migori to support volunteers carrying out community based prophylaxis activities. Please note that hand washing kits, jerry cans, soap and water purification chemicals were also mobilized from election preparedness stocks supported by BRC, DFID, ECHO and UNICEF.
- Receiving and storing of all items prior to their transportation to the areas of implementation, which was managed in accordance with KRCS supply chain management rules and regulations.
- Transportation of cholera response related NFIs, as well as staff and volunteers to carry out the activities planned.

Communications

The KRCS has worked closely with the structures and services of the MoH and sharing information on cooperation with partners, authorities and the media. The national headquarters has also ensured that the work of volunteers of the Red Cross are visible through the local media, via materials visibility and social media platforms.

A Trilogy Emergency Relief Application (TERA) SMS system was installed at telecommunications company Airtel in Kenya and handed over to KRCS. During the last week of February, KRCS sent out over 2 million SMS health promotion messages through the TERA SMS system and reached around 1.4 million people. This system will continue to send out millions of SMS messages per month as a permanent part of KRCS activities.

Security

The security situation in the cholera response areas was calm throughout the response; however, caution was equally taken to ensure that the volunteers and staff involved in the operation were protected. The KRCS security team through leadership of the senior management conducted security monitoring in close liaison with the government at National and County levels. The County governments ensured security of all responders through their chain of community security and policing. All the volunteers were provided with protective gears for ease of identification by authorities and members of the community.

The team deployed to Wajir included a security officer who conducted security assessments, liaising with security contacts and gathering intelligence information in the field. The information collected was triangulated with information from other sources by the security manager to inform decisions relating to security risks.

Planning, monitoring, evaluation, & reporting (PMER)

Continuous monitoring, assurance and coordination of the implementation of the Appeal operation was carried out by the NHQ operations unit. In total, 4 NHQ monitoring visits were conducted to Homa Bay, Migori, Wajir and Baringo counties. In addition, frequent visits were conducted in Nairobi as the sites were within the locality of Nairobi County (in the proximity of the NHQ). Please note that these missions also comprised representatives from the IFRC regional office (emergency operations assistant), as well from Finnish Red Cross.

C. Detailed Operational Plan

Quality Programming / Areas Common to all Sectors

Quality programming
<p>Outcome 1: Continuous joint assessments and analysis is used to inform the design and implementation of the operation.</p> <p>Output 1.1: The emergency plan of action is updated and revised as necessary following consultation with beneficiaries.</p> <p>Activities planned:</p> <ul style="list-style-type: none"> 1.1.1. KRCS county teams carry out joint visits with MoH to verify information and confirm outbreak. Information to be used locally and shared with national team to inform decisions and to enhance coordination 1.1.2. KRCS at HQ level to liaise with Disease Surveillance and Response Unit to continue implementing a common approach based on national guidelines for cholera outbreak control 1.1.3. Conduct KAP survey using ODK <p>Output 1.2: The findings of evaluations lead to adjustments in on-going plans and future planning as appropriate.</p> <p>Activities planned:</p> <ul style="list-style-type: none"> 1.2.1. Operational review/lessons learned 1.2.2. Management response to the evaluation completed including action planning
Achievements
<ul style="list-style-type: none"> 1.1.1. KRCS did not carry out continuous joint assessments but relied on the request that was done by the Ministry of Health in collaboration with county governments and other stakeholders in the counties, most notably MSF. 1.1.2. In Wajir County, the teams worked closely with the Ministry of Health and Public Health officials in confirmation of outbreaks. Activities included collection of specimens and transportation in line with recommended practice to laboratories for analysis. A total of 312

specimen were collected of which 218 specimen were examined. Case definition was applied to identify probable cases and random samples collected from different locations as other interventions continued. This strategy was done to monitor the outbreak spread, and to confirm cases in new locations/villages. Supplies used to implement the strategy included 100 Rapid Diagnostic Kits, 320 specimen collection kits and 4 cold boxes. The surge team worked hand in hand with the Ministry of Health to ensure that confirmation and active countermeasures were taken in concordance with confirmation to ensure rapid control of further cases. KRCS also worked with the Disease Surveillance and responses unit at MOH to track new outbreaks and implement joint responses based on emerging scenarios.

1.1.3. KRCS relied on MOH reports and thus did not carry out a Knowledge, Attitudes and Practice (KAP) survey. The reports were monthly SitReps which included all information from all counties. Initially KRCS started the data collection process for the KAP survey, but due to technological challenges explained below, they were unable to analyse and use the data collected.

1.2.1. The operation's plan was reviewed based on emerging scenarios where new counties reported new outbreaks that resulted in changes in the operation plan to include targeting of new areas. For example, in Nairobi County, ACSM strategy was earlier deployed and after 1 month as no intervention was realised the strategy was changed to contact tracing.

Challenges

- Information technology: The duration of the ODK training was inadequate as most of the volunteers were not familiar with the use of smartphones and needed more time to get acquainted with the technology. Due to the number of mobile phones available the number of volunteers was reduced to 4.
- The County Governments were not prepared for disaster emergencies thus with continuous feedback, the county government came up with contingency plans.

Lessons Learned

- PMER: For quality information and proper data collection, mobile phones (ODK) should be given at least three (3) days with field testing and simulation. It is important to give some time in between the general assessment and the KAP. It was not possible to analyse the data and information gathered to inform decisions and strategy on the operation because the assessment and KAP were done concurrently.
- KRCS/Agency Coordination: There is need for improved coordination at state and local levels. In future operations, mechanism should be put in place for information (reports and updates) sharing at the state levels to improve surveillance and avoid duplication of efforts
- Joint final evaluation with British Red Cross, Kenya Red and IFRC is currently ongoing and the findings of the report will be shared

Health and Care

Health and Care

Outcome 2: Contribute to the management of cholera cases in 10 counties

Output 2.1: Cholera Treatment Centres are set up and operational for up to 3 months in Wajir and Baringo and surge teams are deployed to Nairobi, Mombasa, Kisumu, Isiolo, Siaya, Garissa, Migori and Kilifi

Activities planned:

- 2.1.1. Deliver materials and supplies required for set up of CTC
- 2.1.2. Putting up of tents, demarcation of isolation areas, construction of temporary sanitation facilities at CTC
- 2.1.3. Deploy technical staff, hold consultative discussions with county departments for Health
- 2.1.4. Identify and train volunteers to provide support in the CTCs. Initial 1 day sensitization followed by on the job training
- 2.1.5. Manage cholera patients based on MoH protocols and guidelines
- 2.1.6. Replenish medical consumables in the CTC
- 2.1.7. Procure cholera kits for replenishment
- 2.1.8. Recruit and deploy surge teams to 8 counties
- 2.1.9. Surge teams to support counties in case identification and management in isolation facilities

Outcome 3: The risk of cholera transmission in communities is reduced through prevention in 10 counties over a period of 6 months

Output 3.1: 371,376 people are sensitized to increase awareness on cholera and necessary precautions to take to avoid infection

Activities planned:

- 3.1.1. Source and distribute protective (boots, gloves, sanitizers and disinfectants) and hygiene promotional materials (50 volunteers per county).
- 3.1.2. Source and deliver Epidemic Control Manuals for Volunteers and sensitise the volunteers based on these manuals.
- 3.1.3. Involve the volunteers in translating key messages into local languages to standardize messaging
- 3.1.4. Continuous Sensitization of religious leaders in Wajir, Kilifi and Mombasa as well as other opinion leaders in all target counties
- 3.1.5. Carry out food health promotion targeting food handlers

- 3.1.6. Conduct awareness sessions on cholera through community meetings and through religious gatherings
- 3.1.7. Conduct house to house visits for cholera prevention messaging, and to conduct community level surveillance
- 3.1.8. Decontamination is carried out in households where cases came from
- 3.1.9. Distribution of information, education and communication materials is done
- 3.1.10. GPS coordinates are taken to support in outbreak/risk mapping and inform the provision of prevention messages

Output 3.2: Community based cholera management and surveillance systems are established in 10 counties

Activities planned

- 3.2.1. Establish oral rehydration points in affected villages and train volunteers to prepare ORS (with pre-delivered ORS sachets)
- 3.2.2. Train volunteers on simple ways to assess levels of dehydration
- 3.2.3. Source and distribute water filters to community oral rehydration points to improve safety of water in use
- 3.2.4. Conduct case detection and referral of cases to nearest oral rehydration points and to nearest CTCs
- 3.2.5. Provide back up support and supervision to volunteers manning oral rehydration points Hygiene promotional messages are delivered to households and communities. Mortality surveillance is done and dignified burials are supervised
- 3.2.6. Supervision of the dignified management of the dead.
- 3.2.7. Carry out daily briefings and weekly reviews with all volunteers involved. Weekly reviews to continue during entire period of sensitization and hygiene promotion

Achievements

- 2.1.1. During the reporting period, KRCS set up 16 CTCs. These included 4 CTCs in Siaya, 3 in Migori, 2 in Baringo, 3 in Wajir, 2 in Tharaka Nithi, 1 in Garissa and 1 in Marsabit. In Mombasa and Nairobi, the CTCs were set up by the MoH and MSF.
- 2.1.2. A total of 8 (4 in each county) screening tents were set up and 4 (2 in each county) temporal sanitation facilities were constructed in Migori and Baringo. Most of the CTCs used the existing sanitation facilities that were in the health facilities.
- 2.1.3. A surge team of 6 staff per county (1 Clinical Officer, 3 nurses, 1 PHO and 1 lab technician) and 10 volunteers in each county were deployed to work together with the MoH in managing the cases in the CTCs
- 2.1.4. As per activity 2.1.3 the staff were trained on case management, case identification and ORS
- 2.1.5. A total of 482 cases were managed in the CTCs, with a total of 60 fatalities reported where 87% were community based fatalities.
- 2.1.6. Wajir, Migori, Daadab and Siaya were replenished with medical supplies after receiving the

second wave of the outbreak.

- 2.1.7. A total of 4 cholera kits were procured and distributed to Migori, Wajir, Garissa and 01 left to HQ for contingency purpose
- 2.1.8. As per activity 2.1.3
- 2.1.9. As per activity 2.1.3

- 3.1.1. KRCS procured 200 PPEs and supplies which were used in the control and management of Cholera. The personnel who attended to the cholera patients were equipped with PPEs including heavy-duty gloves, hand sanitisers and gumboots to protect them from the cholera virus. Each county, i.e. Siaya, Migori, Wajir and Baringo, received 50 PPEs.
- 3.1.2. A total of 50 epidemic control manuals were distributed in Tharaka Nithi, Migori and Siaya.
- 3.1.3. Most volunteers deployed in the control of the epidemic were from the local communities and therefore they translated the cholera messages that were in the IEC materials that were supplied by UNICEF. A total of 371,533 persons were reached with the IEC materials. The poster had the information about hand washing at critical moments such as before eating, after using latrine, after changing the baby's diapers.
- 3.1.4. Thirty (30) religious leaders were sensitized on cholera prevention from Wajir, Kilifi and Mombasa. The leaders were chosen from the nearby mosques that were populated and considered to pass the information to the community.
- 3.1.5. The KRCS teams together with the MoH carried out 22 food health promotion visits to food handlers to promote hygiene thus reducing risk of contamination from food. All these health promotion visits were conducted in Nairobi county as most of the cases in Nairobi were as result of food contamination. On these occasion the F-figure was taught as the main way of spreading cholera to reduce further risks of spreading.
- 3.1.6. A total of 371,533 people were reached through sensitization and awareness meetings carried out at community levels. The meetings were held in form of public barazas with religious leaders and the community. A total of 354 door-to-door meetings were also conducted as a way of reaching out to the people that did not attend to the public meetings.
- 3.1.7. KRCS reached a population of 53,092 people (10,618 HH) through house- to- house visits during which sensitization messages on cholera prevention were shared.
- 3.1.8. A total of 280 water sources (80 in Migori, 112 in Wajir and 88 in Mombasa) were disinfected as a measure to curb any contamination of the cholera virus. Safe disposal of faecal matter was conducted in Wajir. A total of 2,271 bucket latrines were disinfected. After disinfection, the number of cases started to reduce rapidly; for example in Mombasa (Tudor Centre) it was reported that the cases reduced from 61% to 23%.
- 3.1.9. 23 radio talks were conducted in Wajir County, while national radio stations like Nation FM, Classic FM, and Citizen FM sensitized the public on the cholera. Other radio stations like Koch FM and Ghetto FM were specifically passing the information from their locality i.e. Koch FM originate from Korogocho and Ghetto FM from Kibra, all these being informal settlements in Nairobi.
- 3.1.10. GPS coordinates were taken in Migori, Siaya and Baringo counties in order to carry out the mapping of outbreak. The following links shows the mapping of the 3 counties. <https://arcg.is/1RMlef5> and <http://arcg.is/1RMHSVK>.
- 3.2.1. A total of 10 ORS (2 in Migori, 3 in Siaya and 5 in Wajir) points were set up in different counties. At least 1,015 people were treated within the ORS points put in place. In Migori, Siaya and Wajir counties, the CTCs served as the ORS points for severe dehydration

cases.

- 3.2.2. One hundred and fifty nine (159) volunteers were trained on the assessment of levels of dehydration of the patients, in which they were used to administer the patients that were received in the CTC.
- 3.2.3. One hundred (100) water filters distributed in Siaya county. The filters were used by the beneficiaries to filter the river water which was turbid and later the water to be treated by dissolving aqua tab before consumption.
- 3.2.4. One thousand and fifteen (1,015) cases were detected and were referred to the nearest CTC
- 3.2.5. There were 6 supervisions of dignified management of the dead done in Wajir county
- 3.2.6. A total of 42 weekly briefings were carried out during the reporting period

Challenges

- Laboratory services in Wajir were not available in the first two weeks. The samples had to be flown to Nairobi for testing, thus taking a longer time ascertain the results.
- Lack of inclusion of nutrition aspect during the HP activity and CTC treatment, as it was not captured during the EPoA.

Lessons learned

- Proper case management at the CTC with correct passage of hygiene messages to the affected helps to disseminate to the neighbours.
- Epidemiologists should be sent to the field together with the first medical staff to ensure timely implementation of a surveillance system based on CTC/CTU/ORP data. This will enable a dynamic “approximate” mapping of the outbreak
- Adequate training for all health staff must be organized at an early stage
- Ready-to-use training modules (for cholera) could help to quickly organize short training sessions in the country
- Investigate adaptation to treatment protocols for malnourished cholera patients and cholera patients with HIV/AIDS
- Curative and preventive response activities should be implemented by two different teams, but following complementary strategies, under a common coordination mechanism. Curative and preventive strategies should be started at the same time in order to have a real impact on cholera.

Water, Sanitation and Hygiene Promotion

Water, sanitation and hygiene promotion

Outcome 4: Risk of cholera transmission is reduced through the provision of safe water and hygiene promotion for up to 6 months

Output 4.1: Population in affected villages is supported with means to make water for domestic use safe

Activities planned:

- 4.1.1. Distribution of Point of Use Water Treatment Chemicals to affected households. Supplies to include those donated by other partners
- 4.1.2. Distribution of jerry cans to improve safe water storage to affected households. Supplies/ donated (MoH/ UNICEF)
- 4.1.3. Distribution of chlorine to carry out disinfection of water supply source (shallow wells and springs as applicable).
- 4.1.4. Train population of targeted communities on safe water storage, on safe use of water treatment products
- 4.1.5. Monitor treatment and storage of water through household water quality tests
- 4.1.6. Chlorination of water supply sources; Chlorine to be mixed with sand in gunny bags to control release in wells and springs

Output 4.2: Target population in the affected areas are provided with hygiene promotion activities, which meet Sphere standards

Activities planned

- 4.2.1. Distribution of soap to affected households (UNICEF donation)
- 4.2.2. Promotion of hand washing in communities
- 4.2.3. Conduct hygiene promotion campaign targeting hand washing at key times promoted through demonstration at market, schools (once they reopen) and other public places
- 4.2.4. Conduct house to house visits for hygiene promotion cascading using the PHASTER methodology
- 4.2.5. Carry out food hygiene promotion targeting food handlers
- 4.2.6. TERA messages in local languages delivered to households in mapped locations
- 4.2.7. Conduct house to house visits for hygiene promotion cascading using the PHASTER methodology

Achievements

- 4.1.1 A total 231,267 PUR were distributed and 1,574,404 aqua tabs to make water safe for consumption. Siaya and Migori received PUR as most of the beneficiaries were using river water while the rest of the counties received aqua tabs and water guard. The supplies were received from UNICEF and PSK.
- 4.1.2 A total of 2,200 (1200 in Wajir while 1000 in Marsabit) jerry cans were distributed to help in safe storage of water where 80% were received from UNICEF

- 4.1.3 82 drums of chlorine was distributed in Kisumu, Garissa, Wajir and Marsabit for disinfection of water to make it conducive for use
- 4.1.4 KRCS team trained a total of 1,367 persons on safe water storage, safe use of water treatment products.
- 4.1.5 In total 1,234 HH were monitored through household water quality test. It was found that 98% of the houses visited in Baringo practiced safe water storage and there was presence of chlorine in drinking water while in Wajir had low turnout (42%). The beneficiaries complained about the smell and the taste the aqua tabs had in water, they were advised to store for longer period before consuming the water to remedy this.
- 4.1.6 As per activity 3.1.8.
- 4.2.1. Thirty thousand (30,000) pieces of soap were distributed to the communities in target counties. The soaps were to be used in personal hygiene and hand washing at critical times.
- 4.2.2. As per activity 4.2.3
- 4.2.3. Hygiene promotion activities were carried out in schools in counties in which a total of 123 schools were reached (15 schools in Wajir and 13 schools in Baringo and rest in Nairobi, Mombasa, Siaya, and Migori).
- 4.2.4. Hygiene promotion using the PHASTER methodology was carried out through house to house visits in 1367 houses. This was to improve personal hygiene during this critical moment and also nurture the behaviour change in life time.
- 4.2.5. **As per activity 3.1.5**
- 4.2.6. KRCS sent out over 2 million SMS health promotion messages through the TERA SMS system and reached around 1.4 million people
- 4.2.7. As per activity 4.2.3

Challenges

- Some beneficiaries felt that KRC should have distributed more items, including medical supplies and non NFIs, although the activities were strictly limited to support them for 3 months. This expectation led to some disappointment among these beneficiaries.
- Volunteer's payment was a major issue in motivating them. KRCS introduced the MPESA payment that is done centrally from HQ, thus it would take like 2-3 weeks before receiving their dues

Lessons learned

- Volunteers were given special sessions during debriefs, mutually coming up with ways to deal with expectations that the operation could not meet. For example, volunteers were told to remind beneficiaries that the soap, PUR and ORS distributed were only for use for a short while, and that people could rely on home-made ORS and ash in place of soap.
- Disaster preparedness and risk reduction: There is need for the KRCS to pre-stock relief items to complement the items covered with the UNICEF to reach at least 90% of the affected population. In future operations it would be ideal to provide all targeted beneficiaries with NFIs. Some of the people did not benefit from the NFIs that were provided because they were not enough.
- Logistics and supply chain: Procurement plans should begin along with planned activities to avoid unnecessary delay and ensure that affected population are provided relief at the peak of the disaster

Preparedness

Preparedness
<p>Outcome 5: Preparedness measures are enhanced in high risk counties</p> <p>Output 5.1: Target population in the affected areas are provided with hygiene promotion activities, which meet Sphere standards</p> <p>Activities planned</p> <ul style="list-style-type: none"> 5.1.1. Additional volunteers are trained based on ECV 5.1.2. Supplies are mobilized and prepositioned (volunteers modules and beds) 5.1.3. Coordination is enhanced with county governments 5.1.4. Risk mapping is done and county specific contingency plans developed and updated 5.1.5. Hygiene promotion and community sensitization efforts are scaled-up
Achievements
<ul style="list-style-type: none"> ● 5.1.1. Community Health Volunteers (42 male and 25 female) were trained on basic information were trained on cholera management ● 5.1.3 On capacity building and coordination ,cholera meeting were held with various stakeholders weekly basis and issues discussed were updates, trends, wash gaps and team agreed to improve on matters that arose ● 5.1.5 Hygiene and health promotion and community sensitization have been scaled up in school and this has led to peer to peer and pupils exchange of knowledge and behavioural change ● Due to low appeal coverage, it was not possible to implement all the planned activities
Challenges
Cultural practises for example on not sharing latrines with in-laws has been a major contributing factor to low latrine coverage and usage
Lessons learned
Participatory child centre methodology in health promotion is the fastest means of sharing information between peer to peer and children to adults thus leading to positive behavioural change

D.THE BUDGET

The overall appeal budget was 1,511,314 Swiss franc although only 328,925 Swiss franc was received as funding representing 22% appeal coverage. This low appeal coverage explains the variance in the financial report as most planned activities could not be implemented due to lack of funds. KRCS had to prioritise and target the most affected counties.

- Balance of 5,091 Swiss franc is earmarked for an end of operation evaluation planned for May.
- Sixty (60) Swiss franc was wrongly booked under Personnel, volunteers. This relates to volunteer insurance costs and should have been booked in account 662.
- One hundred and seventy one (171) Swiss franc was spend on workshops and training refers to costs on refreshments during a meeting in designing the appeal between IFRC & KRCS, held at IFRC offices in Nairobi.

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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 Disaster 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 nonviolence and peace.

Find out more on www.ifrc.org

Disaster Response Financial Report

MDRKE035 - Kenya - Cholera Outbreak

Timeframe: 23 Aug 15 to 23 Feb 16

Appeal Launch Date: 02 Sep 15

Final Report

Selected Parameters

Reporting Timeframe	2015/8-2016/4	Programme	MDRKE035
Budget Timeframe	2015/8-2016/2	Budget	APPROVED
Split by funding source	Y	Project	*
Subsector:	*		

All figures are in Swiss Francs (CHF)

I. Funding

	Raise humanitarian standards	Grow RC/RC services for vulnerable people	Strengthen RC/RC contribution to development	Heighten influence and support for RC/RC work	Joint working and accountability	TOTAL	Deferred Income
A. Budget		1,511,314				1,511,314	
B. Opening Balance							
Income							
Cash contributions							
<i>China Red Cross, Hong Kong branch</i>		62,278				62,278	
<i>Finnish Red Cross</i>		43,664				43,664	
<i>Japanese Red Cross Society</i>		49,900				49,900	
<i>Red Cross of Monaco</i>		10,846				10,846	
<i>The Netherlands Red Cross (from Netherlands Government*)</i>		162,237				162,237	
C1. Cash contributions		328,925				328,925	
C. Total Income = SUM(C1..C4)		328,925				328,925	
D. Total Funding = B + C		328,925				328,925	

* Funding source data based on information provided by the donor

II. Movement of Funds

	Raise humanitarian standards	Grow RC/RC services for vulnerable people	Strengthen RC/RC contribution to development	Heighten influence and support for RC/RC work	Joint working and accountability	TOTAL	Deferred Income
B. Opening Balance							
C. Income		328,925				328,925	
E. Expenditure		-323,834				-323,834	
F. Closing Balance = (B + C + E)		5,091				5,091	

Disaster Response Financial Report

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Budget Timeframe	2015/8-2016/2	Budget	APPROVED
Split by funding source	Y	Project	*
Subsector:	*		

All figures are in Swiss Francs (CHF)

III. Expenditure

Account Groups	Budget	Expenditure					TOTAL	Variance
		Raise humanitarian standards	Grow RC/RC services for vulnerable people	Strengthen RC/RC contribution to development	Heighten influence and support for RC/RC work	Joint working and accountability		
	A					B	A - B	
BUDGET (C)			1,511,314			1,511,314		
Relief items, Construction, Supplies								
Water, Sanitation & Hygiene	61,810						61,810	
Medical & First Aid	333,143						333,143	
Teaching Materials	23,810						23,810	
Total Relief items, Construction, Sup	418,762						418,762	
Land, vehicles & equipment								
Office & Household Equipment	2,857						2,857	
Total Land, vehicles & equipment	2,857						2,857	
Logistics, Transport & Storage								
Distribution & Monitoring	9,714						9,714	
Transport & Vehicles Costs	126,171						126,171	
Logistics Services	7,467						7,467	
Total Logistics, Transport & Storage	143,352						143,352	
Personnel								
National Staff	7,143						7,143	
National Society Staff	404,971						404,971	
Volunteers	251,363		60			60	251,303	
Total Personnel	663,477		60			60	663,417	
Consultants & Professional Fees								
Consultants	32,000						32,000	
Professional Fees	13,810						13,810	
Total Consultants & Professional Fees	45,810						45,810	
Workshops & Training								
Workshops & Training			171			171	-171	
Total Workshops & Training			171			171	-171	
General Expenditure								
Travel	6,857		1,217			1,217	5,640	
Information & Public Relations	2,381						2,381	
Office Costs	4,286						4,286	
Communications	571		15			15	557	
Financial Charges	2,857		25			25	2,832	
Other General Expenses	127,864						127,864	
Total General Expenditure	144,816		1,257			1,257	143,559	
Contributions & Transfers								
Cash Transfers National Societies			300,360			300,360	-300,360	
Total Contributions & Transfers			300,360			300,360	-300,360	
Indirect Costs								
Programme & Services Support Recover	92,240		19,620			19,620	72,620	
Total Indirect Costs	92,240		19,620			19,620	72,620	
Pledge Specific Costs								
Pledge Earmarking Fee			965			965	-965	
Pledge Reporting Fees			1,400			1,400	-1,400	
Total Pledge Specific Costs			2,365			2,365	-2,365	
TOTAL EXPENDITURE (D)	1,511,314		323,834			323,834	1,187,480	
VARIANCE (C - D)			1,187,480			1,187,480		

Disaster Response Financial Report**MDRKE035 - Kenya - Cholera Outbreak**

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Final Report

Selected Parameters

Reporting Timeframe	2015/8-2016/4	Programme	MDRKE035
Budget Timeframe	2015/8-2016/2	Budget	APPROVED
Split by funding source	Y	Project	*
Subsector:	*		

All figures are in Swiss Francs (CHF)

IV. Breakdown by subsector

Business Line / Sub-sector	Budget	Opening Balance	Income	Funding	Expenditure	Closing Balance	Deferred Income
BL2 - Grow RC/RC services for vulnerable people							
Disaster response	1,511,314		328,925	328,925	323,834	5,091	
Subtotal BL2	1,511,314		328,925	328,925	323,834	5,091	
GRAND TOTAL	1,511,314		328,925	328,925	323,834	5,091	