

DREF operation final report



International Federation
of Red Cross and Red Crescent Societies

Kenya: Cholera Outbreak

DREF operation n° MDRKE005

GLIDE n° EP-2007-000244-KEN

8 July 2009

The International Federation's Disaster Relief Emergency Fund (DREF) is a source of un-earmarked money created by the Federation in 1985 to ensure that immediate financial support is available for Red Cross Red Crescent response to emergencies. The DREF is a vital part of the International Federation's disaster response system and increases the ability of national societies to respond to disasters.

Summary: CHF 104,492 (USD 100,473 or EUR 64,701) was allocated from the Federation's Disaster Relief Emergency Fund (DREF) on 14 May 2008 to support the National Society in delivering assistance to some 60,000 beneficiaries, or to replenish disaster preparedness stocks.

This operation was implemented from May 2008 and completed by October 2008. During this period the Kenya Red Cross Society (KRCS) provided the Ministry of Public Health and Sanitation (MoPHS) with drums of chlorine, detergents, water purifiers and chlorination pots to chlorinate water sources. Latrines were also decontaminated by use of disinfectants. The National Society also supplied antibiotics oral re-hydration salts (ORS) and infusions to Kisumu East, Homabay, Kisumu West and Nyando district to assist them manage patients effectively. The KRCS health team supported the Ministry of Health (MoH) and KRCS branches with cholera kits. The National Society trained its volunteers on good hygiene practices with emphasis on cholera prevention. The volunteers in turn cascaded this information to the communities and schools through a series of sensitization workshops.

This operation was conducted in collaboration with the Kenyan Government, the Federation, Netherlands Red Cross, Care Kenya, United Nations Children's Fund (UNICEF) and World Vision. The major donors to the DREF are the Irish, Italian, Netherlands and Norwegian governments and ECHO. Details of all donors can be found on: <http://www.ifrc.org/what/disasters/responding/drs/tools/dref/donors.asp>

[<Click here for the final financial report or here to view contact details>](#)

The situation

The first confirmed Cholera case in Nyanza and/or Western region was reported in Suba district on 12 December 2007. Lab analysis was undertaken on 13 specimens from health facilities in Takawiri island of Mfangano division and Suba district hospital in central division. This confirmed the presence of vibrio cholera virus. There were indications that the likely sources of the outbreak were Uganda and Bondo to Takawiri Island and the other probable route was from Homa Bay and Migori to Sindo. Movement of persons especially by boats was a likely factor in the spread of the disease. The epidemic later spread to 9 districts namely Nyando, Kisumu East and West, Homabay, Rongo, Rachuonyo, Busia and Migori during the first outbreak between January and April 2008. There were a total of 708 cholera cases during the first outbreak. The re-emergence of the second cholera outbreak was realized between June and August 2008 where 492 cases were reported in Kisumu East and West, Nyando, Homabay, Rachuonyo, Suba, Busia, Samia and Rachuonyo. There were 42 deaths resulting from the two outbreaks. During the two outbreaks, the regional

health team did conduct rapid assessments upon which interventions were carried out to control the epidemic. The first assessment was done on February 2008 while the second one was conducted in May 2008. The interventions targeted people in the communities, pupils and students in schools.

Coordination and partnerships

During the first and second outbreak, the Kenya Red Cross Society regional health team partnered with Ministry of Health (MoH) and other stakeholders through branch coordinators and volunteers in the respective branches to prevent and control the outbreak. A provincial joint Public Health and Sanitation Committee chaired by the Provincial Medical Officer of Health (PMO) Nyanza was formed who developed Cholera response activity plan which emphasized on four intervention areas including: Water and Sanitation, Clinical management, Community mobilization and advocacy and Food safety and law enforcement. Sub-committees were consequently formed along the same strategies. The committees were led by the Public Health Officer Kisumu East, Disease Surveillance Coordinator, PHO and Municipality Enforcement department respectively.

The partners who worked together with KRCS health team in cholera interventions were United Nations Children Fund (UNICEF), Care-Kenya, World Vision, Municipal council of Kisumu and Kisumu Water and Sewerage Company. UNICEF supported the Ministry of Health with detergents, protective gear, logistics, water purifiers and chlorination pots. Care-Kenya on its part supplied the MoH with chlorine granules for chlorination of water wells and also assisted in reticulation of water supplies to the communities in Kisumu East district. Other stakeholders including World Vision supplied water purifiers to the MoH, supported the advocacy teams and also provided 1 vehicle for logistical support to the Ministry of Public Health and Sanitation in Kisumu East district. Most of the stakeholders apart from Kenya Red Cross Society and UNICEF directed their efforts to control cholera epidemic in Kisumu East district alone. Ministry of Public Health and Sanitation was the coordinating institution during the cholera interventions in the region. Through collaborations and joint planning, KRCS was able to focus on areas not being supported by other stakeholders to avoid duplication and waste of resources.

During the cholera outbreak in the region, the Federation supported the cholera control in Nyanza and Western province interventions through KRCS whereby public health, clinical interventions, community mobilization and sensitization, logistical support to MoPHS and Monitoring and Evaluation was undertaken. The Federation on its part funded all areas of the interventions in line with the request submitted by the field teams.

Red Cross and Red Crescent action

Progress towards objectives

Goal: To contribute towards the reduction of cholera outbreak in Nyanza Province in Kenya, targeting 60,000 people.

Water, sanitation and hygiene promotion

Objective 1: To reduce the spread of cholera through provision of cholera kits and social mobilization to reach 60,000 people in 10 districts within Nyanza Province.

Activities planned

- Distribution of 2 cholera kits to the medical facilities in the affected areas.
- Printing and distribution of 10,000 information, education and communication (IEC) materials with cholera prevention messages.
- Replenishment of cholera kits in the Eastern African Zone Office.

Achievements

Cholera kits

The KRCS health team supported the MoH and KRCS branches with cholera kits and other supplies. A total of 5 Cholera kits were given to the MoH Kisumu East, 3 kits were also sent to Rachuonyo and 5 cholera kits were provided to the Busia Branch.

Community Social Mobilization and Sensitization

At the start of the first outbreak in January 2008, the level of understanding among the people in the cholera affected parts was very low. It was argued that this might have contributed to very fast spread of the outbreak in the region despite the obvious low standards of sanitation and poor access to safe water. In this regard three advocacy teams (A team of 15 KRCS volunteers in Nyando, 10 in Homa Bay and 10 in Kisumu East districts) were constituted by KRCS health team during the second outbreak to sensitize the communities on the presence of the cholera epidemic in their respective areas. Focus points for Kisumu advocacy team was the Kisumu municipal council estates, schools, markets and central business district (CBD) of Kisumu city were targeted. The informal settlements targeted were Kajulu, Kibos, Obunga, Nyalenda, Bandani, Otonglo, Kanyakwar, Nyahera, Dunga, Kibuye, Kolwa, Chiga, Chulaimbo, Rabuor, Nyamasaria, Mamboleo and Nyawita. In Nyando district three divisions (Nyando, Muhoroni and Miwani) were targeted. In Homa Bay Makongeni and Kambeke villages were targeted. Volunteers used public address system, plays, skits and community barazas to sensitize the communities.

The KRCS also employed campaigns through two radio stations (Nam Lolwe FM and Lake Victoria FM). A total of 150 presenter mentions were done, 240 recorded messages were played and 2 talk times of 60 minutes was also done. The talk time enabled listeners interact with the Provincial Disease Surveillance Coordinator and clarify issues that may have been left out in other sensitization strategies. The messages spread to the communities during the community mobilization and sensitization including through FM radios were;

- Washing hands before eating and after visiting the toilet.
- Eating well-cooked food and while still hot.
- Treating water with Pur, aqua tab or water guard for domestic use.
- Using latrines and not defecating in the open.
- Mothers are encouraged to wash their hands before breast-feeding their children.

The community was also educated on what is cholera, what causes, signs and symptoms and what they should do when they come across any Cholera patient before the person reaches the health facility. During the community sensitization and mobilization, demonstrations on the use of aqua tabs and PUR for domestic water treatment were conducted.

School level sensitisation

Among the people being admitted in the health facilities (district hospital and health centres) in Kisumu East and Nyando districts for cholera management were the school going pupils and students. As a result of this, schools were targeted for sensitisation on cholera in the two districts. Since June to August 2008, a total 100 schools in Kisumu and 20 schools were visited by the advocacy teams.

The awareness was conducted to schools population where emphasis was made on the following transmission route- poor hygiene and sanitation, poor food handling and use of water from unprotected water source. Human behaviour like bathing and washing of clothes and utensils in the river, poor hygiene behaviours like not washing hands with soap on visiting latrines, before food handling and preparations.

Community meetings and/or barazas

Among the groups targeted for awareness, sensitization and health education on cholera interventional measures were the community barazas. Through the provincial administration 15 community barazas in Kisumu and 7 barazas in Nyando were organized.

People reached

Over 1 million people were reached through community and schools mobilization and sensitizations in all the districts that were covered during the two cholera outbreak.

Objective 2: To promote individual and environmental hygiene in order to break the transmission chain of the epidemic.
Activities planned
<ul style="list-style-type: none">Conduct health education on cholera prevention and control. Respond to new cases through early detection, provision of oral rehydration salts (ORS) and disinfection.

Achievements

Case management

Under case management, three main activities were carried out: infection control and prevention, Laboratory confirmation of cholera specimens and patient management. In infection control and prevention, cholera patients were isolated in a cholera ward to avoid spreading the bacteria to other patients, people and even clinicians. The KRCS supported this activity by providing Lysol to the Ministry of Health (see table 1 below) to soak the cotton cloth at the entrance of cholera ward so that people do not leave the ward with the bacteria on the feet and hence propagate its survival in the outside environment.

Under patient management, the KRCS supplied antibiotics (Erythromycin tabs and syrup, Doxycycline capsules, Nalidix acid) ORS and infusions (sets and I.V fluids) to Kisumu East, Homabay, Kisumu West and Nyando district to assist them manage patients effectively.

Disinfection of water supplies

To ensure that people access clean and safe water, the KRCS health team supported the MoPHS with drums of chlorine, detergents, water purifiers and chlorination pots. Chlorine was used to chlorinate wells through Pot Chlorination methods whereas water purifiers were meant to promote domestic water treatment. **Table 1** below shows the supplies received by MoPHS from Kenya Red Cross Society.

Table 1: Items provided by the Kenya Red Cross Society to the Ministry of Public Health and Sanitation

District	Chlorine Drums	Aqua tabs Cartons	Pur Cartons	Wells – put with Chl. Pots
Kisumu East	9	6	50	200
Kisumu West	2	5	20	0
Nyando	9	4	40	0
Busia	2	25	20	0
Homabay	4	4	23	0
Suba	2	2	17	0

N/B. A drum of chlorine weighs 45kgs, carton of Aqua tabs has 3,200 tabs while that of Pur has 240 sachets

Table 2: Water sources chlorinated in every district

No	District	Wells	Water sources
1	Kisumu East	500	4
2	Kisumu West	52	1
3	Nyando	72	2
4	Homabay	32	1

Latrines were decontaminated by use of disinfectants. This was targeted at latrines that were considered to be likely sources of well contamination. As support of MoPHS, the KRCS health team issued 5 litre containers of Lysol to various MOHs. Nyando received 18 containers, Kisumu East 33 containers and Homabay 16 containers. The exercise of latrine disinfection was carried out by PHO from the MoPHS. A total of 385 latrines in Kisumu, 121 in Nyando and 91 in Homabay were disinfected.

Training of Volunteers on Cholera Interventions

To ensure volunteers pass the right message during the social mobilization and sensitization of the communities, the health team trained 60 volunteers from 4 KRCS branches (Kisumu, Busia, Nyando and Homa Bay branches) on cholera. The volunteers actively participated in distribution of the supplies and sensitizing the communities on cholera prevention and control. Besides, a total of 20 volunteers from 8 KRCS branches (Nyamira-1, Rachuonyo-2, Kisumu-3, Busia-3, Homabay-3, Siaya-3, Nyando-3, and Migori-3) were trained on Participatory Hygiene and Sanitation Transformation (PHAST) methodology. The concerted effort of KRCS health team, MoH, UNICEF and other partners contributed magnificently to the reduction of the incidence rate.

Conclusion

Lessons learned

The KRCS facilitated supportive Monitoring and Evaluation with the Provincial Disease Surveillance Officer. The objective of the support was mainly targeted at strengthening reporting at the health facilities especially at level 2 and 3. This was considered as the weaker link as most of the health facilities and dispensaries lacked PHOs to facilitate notification. Most facilities had only one staff most of the times a Nurse who was conducting diagnosis, prescription, dispensing, injection, and dressing and yet still expected to undertake disease surveillance activities. The KRCS health team with the Provincial Disaster Steering Committee (PDSC) was able to visit 10 health facilities in Suba, 2 in Homa Bay and 3 in Nyando so as to strengthen diseases surveillance.

How we work	
<p><i>All International Federation 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 is committed to the Humanitarian Charter and Minimum Standards in Disaster Response (Sphere) in delivering assistance to the most vulnerable.</i></p>	
<p>The International Federation's activities are aligned with its Global Agenda, which sets out four broad goals to meet the Federation's mission to "improve the lives of vulnerable people by mobilizing the power of humanity".</p>	<p>Global Agenda Goals:</p> <ul style="list-style-type: none"> • Reduce the numbers of deaths, injuries and impact from disasters. • Reduce the number of deaths, illnesses and impact from diseases and public health emergencies. • Increase local community, civil society and Red Cross Red Crescent capacity to address the most urgent situations of vulnerability. • Reduce intolerance, discrimination and social exclusion and promote respect for diversity and human dignity.
Contact information	
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[<Final financial report below; click here to return to the title page>](#)

International Federation of Red Cross and Red Crescent Societies

MDRKE005 - Kenya - Cholera

Final Financial Report

Selected Parameters	
Reporting Timeframe	2008/4-2009/6
Budget Timeframe	2008/4-2008/7
Appeal	MDRKE005
Budget	APPEAL

All figures are in Swiss Francs (CHF)

I. Consolidated Response to Appeal

	Goal 1: Disaster Management	Goal 2: Health and Care	Goal 3: Capacity Building	Goal 4: Principles and Values	Coordination	TOTAL
A. Budget	104,492					104,492
B. Opening Balance	0					0
Income						
<u>Other Income</u>						
Voluntary Income	94,547					94,547
C5. Other Income	94,547					94,547
C. Total Income = SUM(C1..C5)	94,547					94,547
D. Total Funding = B + C	94,547					94,547
Appeal Coverage	90%					90%

II. Balance of Funds

	Goal 1: Disaster Management	Goal 2: Health and Care	Goal 3: Capacity Building	Goal 4: Principles and Values	Coordination	TOTAL
B. Opening Balance	0					0
C. Income	94,547					94,547
E. Expenditure	-94,547					-94,547
F. Closing Balance = (B + C + E)	0					0

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MDRKE005 - Kenya - Cholera

Final Financial Report

Selected Parameters	
Reporting Timeframe	2008/4-2009/6
Budget Timeframe	2008/4-2008/7
Appeal	MDRKE005
Budget	APPEAL

All figures are in Swiss Francs (CHF)

III. Budget Analysis / Breakdown of Expenditure

Account Groups	Budget	Expenditure					TOTAL	Variance
		Goal 1: Disaster Management	Goal 2: Health and Care	Goal 3: Capacity Building	Goal 4: Principles and Values	Coordination		
A							B	A - B
BUDGET (C)		104,492					104,492	
Supplies								
Water & Sanitation	24,000							24,000
Medical & First Aid	22,471	12,660				12,660		9,811
Teaching Materials	1,485							1,485
Total Supplies	47,956	12,660				12,660		35,296
Transport & Storage								
Storage	748	641				641		107
Distribution & Monitoring		5,125				5,125		-5,125
Transport & Vehicle Costs	18,690							18,690
Total Transport & Storage	19,438	5,766				5,766		13,672
Personnel								
National Staff	11,428							11,428
National Society Staff	13,720							13,720
Total Personnel	25,148							25,148
General Expenditure								
Communications	4,158	203				203		3,955
Other General Expenses	1,000							1,000
Total General Expenditure	5,158	203				203		4,955
Contributions & Transfers								
Cash Transfers National Societies		69,030				69,030		-69,030
Total Contributions & Transfers		69,030				69,030		-69,030
Programme Support								
Program Support	6,792	6,094				6,094		698
Total Programme Support	6,792	6,094				6,094		698
Services								
Services & Recoveries		794				794		-794
Total Services		794				794		-794
TOTAL EXPENDITURE (D)	104,492	94,547				94,547		9,944
VARIANCE (C - D)		9,944				9,944		