

www.ifrc.org
Saving lives,
changing minds.

Emergency Plan of Action Final Report

Global: Zika Outbreak

 International Federation
of Red Cross and Red Crescent Societies

Emergency Appeal	Operation n° MDR42003
Date of Issue: 23 August 2018	Glide number: EP-2015-000175
Date of disaster:	Global disease outbreak, PHEIC declared 1 February 2016
Operation start date: 1 February 2016	Operation end date: 31 December 2017
Host National Society(ies): Antigua and Barbuda, Barbados, Bolivia, Brazil, Chile, Colombia, Cuba, Dominica, Ecuador, Grenada, Guatemala, Guyana, Haiti, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Salvadoran, Spanish, Suriname, the Bahamas, Trinidad & Tobago, Venezuela.	Operation budget: 6,991,574 Swiss francs
Number of people affected: Global disease outbreak (affected 84 countries as March 2017)	Number of people assisted: 346,253 people (directly), 7.41 million indirectly.
N° of National Societies involved in the operation: 21	
N° of other partner organizations involved in the operation: Over 40 including Ministries of Health from affected countries, Pan American Health Organization/World Health Organization (PAHO/WHO), UN partners (UNOCHA, UNDP, UNICEF, UNESCO), the Caribbean Public Health Agency (CARPHA), the Inter-American Development Bank, Save the Children, REDLAC, USAID, HC3, Anthrologica.	

This is the final report. A preliminary report was published on the 31 of March. The final report was delayed by two outstanding provision from two National Societies which have now been resolved. The content of this final report matches the preliminary report.

As per the financial report attached, this operation closed with a balance of **CHF 40,815**. The International Federation seeks approval from its donors to reallocate this balance to the 2018 Americas Region Operation Plan (MAA42003) to support health related activities. Partners/Donors who have any questions in regard to this balance are kindly request to contact Diana Ongiti, Emergency Appeals & Marketing Senior Officer, at diana.ongiti@ifrc.org within 30 days of publication of this final report. Pass this date the reallocation will be processed as indicated.

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

A. SITUATION ANALYSIS

Description of the disaster

Zika virus is an emerging mosquito-borne virus predominantly transmitted through the bite of infected *Aedes* mosquitoes (*Aedes aegypti* and *Aedes albopictus*) - the same type of mosquitoes that spreads dengue, chikungunya and yellow fever. In addition to mosquito bites, sexual transmission of the Zika virus has also been reported.

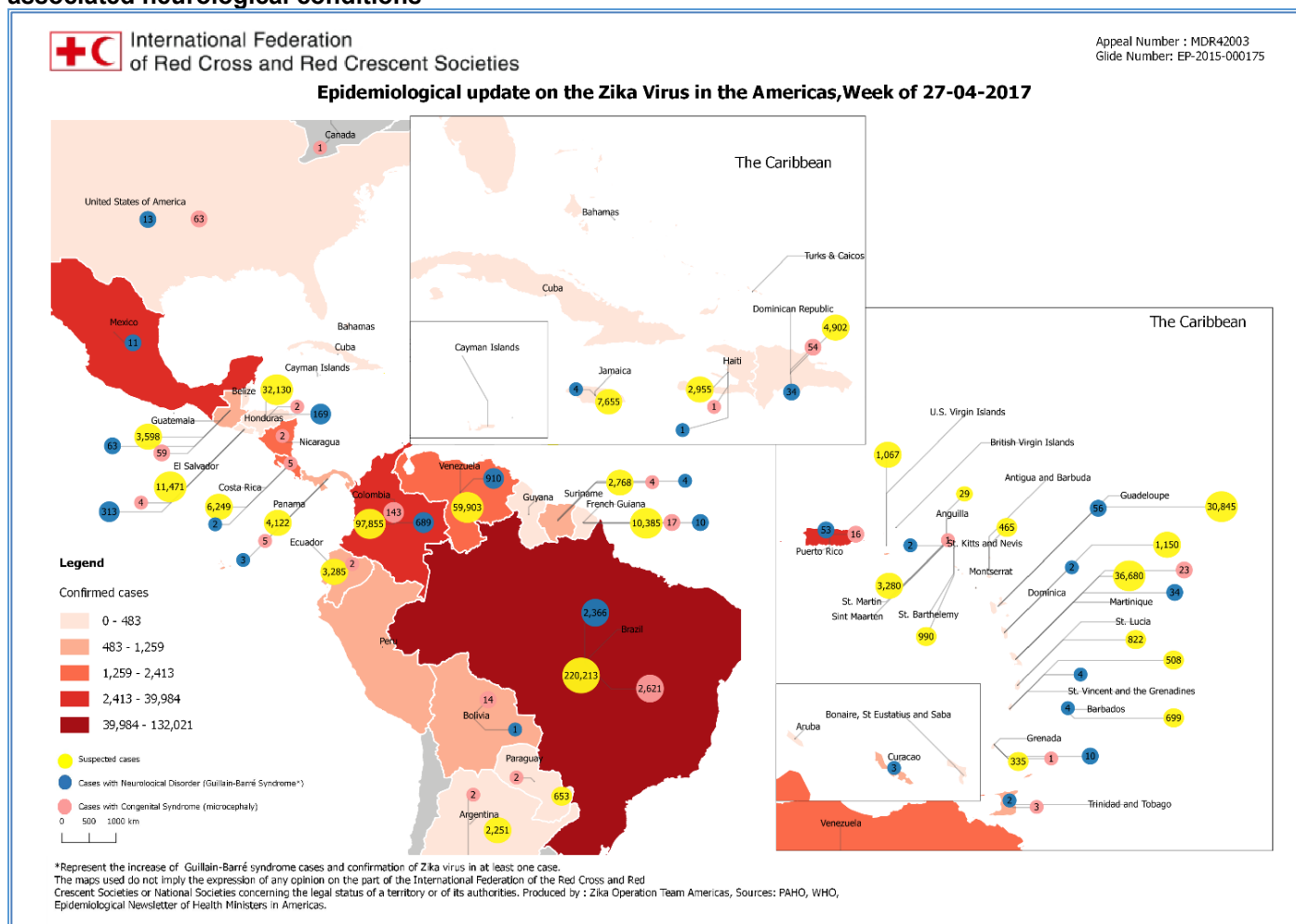
Symptoms of Zika infection are usually mild and last for two to seven days. Symptoms include mild fever, skin rash, conjunctivitis, muscle and joint pain, malaise or headache. It has been estimated that only one in five people infected with the virus will show any symptoms. Potential outcomes of the disease are more worrying. There is a proven link between microcephaly as well as other neurological manifestations (together called "congenital Zika virus syndrome") and Zika infection in pregnancy. Additionally, significant increases in Guillain-Barre Syndrome (GBS) seen in countries with large-scale Zika virus outbreaks are considered a rare outcome of Zika virus.

Following a Zika virus outbreak in Brazil in 2015, the virus has been steadily spreading around the globe in areas where the Aedes mosquito is present. WHO declared the Zika virus a Public Health Emergency of International Concern (PHEIC) in February 2016 and the IFRC initiated its Zika response the same month. On March 8, the Zika Emergency Committee announced there was evidence of a causal association between Zika and the neurological disorders and WHO recommended enhanced surveillance, research, and aggressive measures to reduce infections, particularly amongst pregnant women and women of childbearing age. By November 2016, WHO had announced that Zika was no longer a PHEIC however Zika is expected to remain a significant enduring public health challenge requiring intense action.

As of the last situation report issued by the World Health Organization (WHO) on the 10th of March 2017, 84 countries reported evidence of Zika transmission. Forty-eight (48) countries in the Americas have reported local transmission of Zika since the beginning of the outbreak (Map 1). Thirty-one (31) countries globally and 24 in the Americas have reported microcephaly or central nervous system (CNS) malformation believed to be associated with congenital Zika virus infection. GBS associated with the Zika virus has been observed in 23 countries, 22 from the Americas region.

The Zika outbreak posed a significant threat because of the risk of the international spread of the virus, the lack of public information and experience with the disease, the lack of immunity in newly affected areas, and the absence of vaccines, treatments and rapid diagnostic tests.

Map 1. Epidemiological situation in the Americas. Suspected and confirmed cases of Zika virus and Zika-associated neurological conditions



Summary of response

The IFRC America's Regional Office launched a regional Emergency Appeal on the 2nd of February 2016 in response to the ongoing spread of the Zika virus across the region and growing concern about the links between the virus and the complications it was yet to be definitively linked to – microcephaly and Guillain-Barre Syndrome.

The initial Americas Zika Operation was structured around five outcomes, each falling under a sector of intervention:

1. Community health and emergency care
2. Water sanitation and hygiene promotion
3. Community engagement and accountability

4. Coordination and Information Management
5. Quality Programming

The Global Appeal was launched on the 4th of March 2016, one month after the declaration of Zika as Public Health Emergency of International Concern (PHEIC). Though the Americas Regional Office had already developed a plan of action, the shift to a global appeal saw the development of 4 new plans of action with one for each region and another for the Secretariat. Thus, there were 5 plans of action.

- Africa region
- Americas region
- Asia-Pacific region
- Europe region
- Middle East and North Africa (MENA) region
- Secretariat (Geneva)

In the shift to the global appeal the Secretariat through the Health Department guided the development of plans through the identification of ten priority interventions. They are:

1. Risk communication to the general public
2. Community-based surveillance
3. Community “clean up” campaigns
4. Household and personal protection
5. Chemical vector control
6. Blood safety
7. Protection for particular settings
8. Staff and volunteer safety
9. Information and commodities for pregnant women in Zika affected countries
10. Psychosocial support for affected families

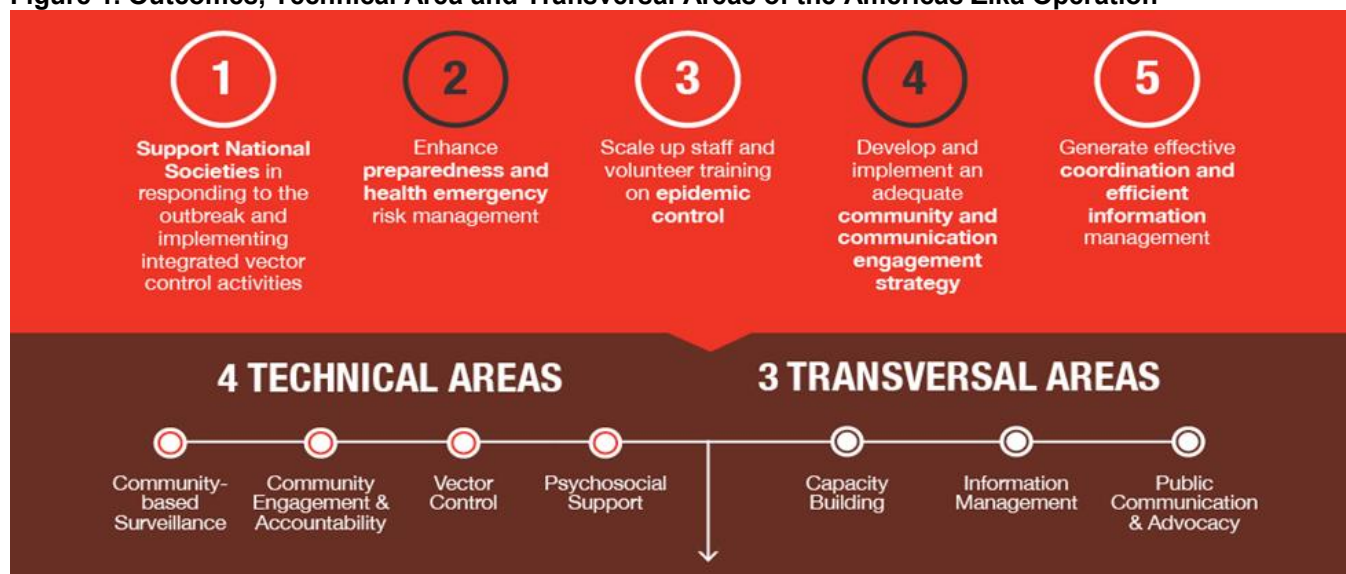
The Americas regional office Emergency Plan of Action was edited and released to be aligned with these 10 priority interventions. This continued to be the focus throughout the operation, however, National Societies in the Americas chose to or were only able to focus on some of the activities (see map 2).

Map 2. Distribution of 10 Priority Interventions by Country



The Americas regional office, seeking to provide the operation with a clear operational structure later organized their activities into 4 technical areas and 3 transversal (cross-cutting) areas (see Figure 1).

Figure 1. Outcomes, Technical Area and Transversal Areas of the Americas Zika Operation



This organization, of sectors, priority interventions, technical and transversal areas evolved over the course of the 23-month operation. Organization and alignment of activities and outcomes throughout the appeal while responsive to internal capacities and needs highlight the complexities of managing and coordinating a global appeal.

Overview of Host National Societies

National Societies outside of the Americas region did not directly participate in the operation. Despite emergency plans of action being generated for each of the five regions resources were not made available for National Societies outside of the Americas region and they subsequently removed from the appeal in February 2017.

Ten National Societies in Latin America completed their planned response actions in response to the Zika virus outbreak in May 2017. The Zika Operation in Latin America has administered CHF 2.7 million under the guidance of the Zika Operation Team based out of Panama. These National Societies began their plans in February 2016 on the release of the first Americas regional Appeal (later expanded to the Global Zika Appeal in March 2016).

Table 1. Participating Host National Societies and Key Figures from Latin America

Countries supported	People reached directly	Volunteers activated	Branches/Committees
Brazil	64.000	730	40
Colombia	29.102	2.018	60
Guatemala	23,765	65	7
El Salvador	56.191	25	60
Nicaragua	10.000	15	1
Paraguay	21.468	260	12
Panama	36.175	70	5
Bolivia	20.000	118	5
Peru	15.275	14	3
Venezuela ¹	----	----	----
Sub-total Latin America	275,976	3.315	193

In September 2016, USAID confirmed support for Zika response in the English-speaking Caribbean through 10 National Societies, providing an additional USD 4.86 million. At this same time a parallel Zika Operation Cell was set up in the Americas, one focused on the already existing operation in Latin America and the new cell focusing on the English-Speaking Caribbean. In April 2017 under the same support from USAID Haiti Red Cross joined the operation. The English-speaking Caribbean and Haiti continued to implement activities within the operation until December 2017 (see Table 2).

¹ Due to severe political crisis and ongoing instability within Venezuela activities came to a halt in the country. Training support in Epidemic Control, WASH and PSS were still provided in country by the Americas Zika Operation Team with support from CREPD however, the monitoring of the ongoing implementation of skills learnt in this training has not been possible in current conditions.

Table 2. Participating Host National Societies and Key Figures from English-Speaking Caribbean and Haiti

Countries supported	People reached directly	Volunteers activated	Branches/Committees
Antigua and Barbuda	1629	28	2
Barbados	5629	5	1
Dominica	2979	42	3
Grenada	29471	53	1
Guyana	6209	42	1
Haiti	9335	208	1
Jamaica	12107	118	8
Saint Lucia	836	35	1
St Vincent and the Grenadines	1044	52	2
St Kitts and Nevis	65	42	2
Trinidad and Tobago	973	52	3
Sub-total Caribbean	70,277	677	23

Overview of Red Cross Red Crescent Movement

A start-up loan from the IFRC's Disaster Relief Emergency Fund (DREF) for CHF 200,002 was released to support initial relief and response activities including household application of larvicides, fogging, social mobilization awareness campaigns and procurement and distribution of relevant personal equipment for staff and volunteers, beginning with the operation in Brazil. On 27 January 2016, the IFRC activated the Regional Intervention Team to mobilize regional resources for Zika response. The first RIT, from Colombian Red Cross Society, was deployed on 8 February for one month to support sanitation assessment in Brazil. On 6 February 2016, the IFRC activated its Field Assessment and Coordination Team (FACT) Surge Information Management Support (SIMS) to provide global support remotely and direct support in Panama through the deployment of a delegate from the British Red Cross for one month.

On 13 February a FACT alert was launched, requesting surge capacity for health (public health coordinator), psychosocial support and WASH / vector control. The Operation Coordinator and the psychosocial support senior officers were supported with interim consultancy arrangements on 18 February, and the external communication was supported by Spanish Red Cross deployment for one month.

The IFRC disaster management unit in the Americas Regional Office in Panama is the communication and coordination hub for all National Societies in the Americas, including the French Red Cross's Platform for the Americas and the Caribbean (PIRAC) as well for those Partner National Societies, which are stakeholders in the region, as the response operation unfolds. Canadian Red Cross, Finnish Red Cross, American Red Cross, Swedish Red Cross, Japanese Red Cross Society, Netherlands Red Cross Society and Red Cross of Monaco have generously supported the appeal.

The Zika Operation Team collaborated with the Centro de Referencia Institucional en Preparación para Desastres (CREPD Centre for Institutional Disaster Preparedness) and through this collaboration has developed a ToT package - *"Instructor Certification Course in Sanitation and Hygiene Promotion, Psychosocial Support in Emergencies and Epidemic Control for Volunteers, with emphasis in Zika response"*. The Red Cross Caribbean Disaster Risk Management Reference Centre (CADRIM) led technical support to the expansion of training activities in the English-speaking Caribbean and Haiti.

The Americas Operation has and continues to receive technical support from the Global PSS Reference Centre, specifically through linkages to the Psychosocial Support Consultants in Latin America and the Caribbean.

Overview of non-RCRC actors

Multiple partners have been involved in the coordinated response to Zika in the Americas region. IFRC has specifically sought partnerships and collaboration with:

- World Health Organization (WHO) and Pan American Health Organization (PAHO): worked closely with affected countries since May 2015 when the current epidemic started. WHO is conducted research on Zika providing guidance on control of the virus including through the Strategic Response Framework to which IFRC has contributed. WHO convened regular partners calls in which IFRC participated that were focused on risk communications for Zika around the globe and the coordination of risk communication activities.
- The organization has mobilized staff and members of the Global Outbreak Alert and Response Network (GOARN), in which IFRC is a member, to assist ministries of health in the strengthening of their capabilities to detect Zika virus transmission through clinical case definitions, laboratory testing and rapid reporting. WHO/PAHO is scaling up and strengthening the surveillance systems in countries that have reported cases of Zika and of microcephaly and other neurological conditions that may be associated with the virus.
- Office for the Coordination of Humanitarian Affairs (OCHA): A coordination meeting takes place each week in OCHA's office in Panama with all humanitarian agencies in the Americas to determine and coordinate next steps and share information for information management.
- Caribbean Public Health Agency (CARPHA) is providing support to its member states by enhancing regional surveillance and the Agency's capacity for Zika testing, monitoring regional and global developments, collaborating with regional and international stakeholders, and providing updates for Ministries of Health and

other stakeholders. CARPHA has joined efforts with PAHO to launch a Caribbean mosquito awareness week, as agreed by the CARICOM Council of Health Ministers.

- United Nations Children's Fund (UNICEF) is co-leading, with IFRC, the risk communication and community engagement-working group. IFRC, UNICEF and WHO are closely coordinating regionally and globally, as part of the global interagency-group engaging other partners in activities for global, regional and national campaigns and community engagement activities carrying shared messages on control and prevention actions.
- United Nations Development Program (UNDP) and IS Global Institute Barcelona have developed in partnership the study on "The Socioeconomic Impact of Zika Virus in Colombia, Suriname and Brazil".
- UNESCO has worked to produce radio spots and other communication and advocacy actions in the media.
- Save the Children is involved in community engagement activity planning and has entered an alliance with IFRC at a regional level. The co-production of risk communication materials has been a key component of Save the Children and IFRC's partnership thus far. Save the Children has also been engaged to support transition into longer term programming for Latin America and will remain a key risk communication partner for the Caribbean.
- SC Johnson has played a crucial role in the supply of repellents through logistical coordination with the IFRC.
- All implementing National Societies utilized their auxiliary status to work alongside and in collaboration with respective Ministries of Health.

Needs analysis and scenario planning

The complexity and scale of the emergency and the current spread of the virus called for robust regional coordination to ensure coherence and consistency across the organization and to provide adequate operational support of the various National Societies' responses.

Risk communication and community engagement

A key health risk was the limited knowledge about the Zika virus. Providing accurate information about a largely unknown communicable disease and its suspected effects on communities is important not only for public health reasons but also because it reduces unnecessary anxieties in people and their communities. To know what the disease is, how to prevent it, what the symptoms are, what is the population at risk and what actions should be considered if symptoms appear, are key issues to address in this outbreak, together with concrete measures and commodities to increase the level of personal and household protection. Although prevention mechanisms are the same as those which have been developed to face dengue and chikungunya, these messages had to be adapted for this specific virus, particularly addressing the information and protection needs of pregnant women and women of reproductive age due to Zika's potential to affect a pregnancy.

When reports started to surface about the possible association of microcephaly in newborns and GBS with the Zika virus, media reports and messages about the virus increased, which also caused an increase in confusion, fear and generated a perception of lack of control within communities. It was evident that to achieve relevant behavioral changes at the community level, more investment was needed in community engagement for the elimination of breeding grounds of this vector, as well as the adoption of personal protection measures building on existing community mobilization programmes.

To address this need both the Latin American and Caribbean arms of the operation implemented Knowledge Attitudes and Practices (KAP) Surveys. A month following the declaration by WHO that Zika was considered a PHEIC, WHO coordinated with strategic response partners that included UNICEF, CDC, UNFPA, Anthrologica, GOAL and IFRC to develop the "Knowledge, Attitudes and Practice surveys Zika virus disease and potential complications: Resource pack". From this pack subsequent KAP surveys were adapted and developed for Latin America and Caribbean.

The initial KAP survey conducted in the Latin American arm of the operation experienced two key challenges: sampling methodology and analysis. The Regional Zika Operations Team worked with Georgia University to develop a sampling strategy and analysis plan. This sampling strategy saw over 1000 surveys collected using ODK, however through attempting to tailor the surveys to national priorities and localize context, as well as the application of methodologies differently in each National Society, analysis became complicated. Ultimately, the data from these KAP were never analyzed. Lessons from this experience were later utilized in the administration of the Caribbean KAP surveys.

When the English-Speaking Caribbean and Haiti joined the operation KAP surveys were done in all 11 countries. In this iteration of the Zika KAP Survey, also based on WHO but differently adapted, much smaller sample sizes were used on the advice of the Global Zika Cell. Findings demonstrated an awareness of Zika and its mosquito borne-transmission but little awareness of sexual transmission or understanding of the complications Zika can cause. Respondents were also found to be much more likely to engage in personal and household protection methods as opposed to community risk reduction methods. In this instance the major challenge was transforming the findings of the survey into action with risk communication work. National Societies had by this time developed communication materials and plans that were not easily then changed with information from the KAP and continue to be adapted as Zika response moves into programming.

Community-Based Surveillance

Community-based surveillance within the Zika response proved challenging because the majority of people who are infected with Zika will be asymptomatic cases or only have mild symptoms that are often unreported or mis-diagnosed. However, surveillance is critical in any communicable disease outbreak. As the surveillance systems in many countries in the Americas were not robust enough to deal with this outbreak the Red Cross is uniquely placed to link with communities and establish two-way communication to address risks and respond to emerging threats. Specifically, the Red Cross sought to position itself as bringing added value through community level data collection and community-based surveillance systems (alongside community action to understand and reduce risk).

Vector control

The vector for Zika, *Aedes aegypti* is found throughout the Americas excluding Canada and continental Chile. The presence of the vector is exacerbated in areas where water and sanitation are poor. Insufficient drainage and solid waste removal provide mosquitoes with ample breeding sites. Intermittent water supply creates the need for onsite water storage, providing ideal conditions for mosquito eggs. The mosquito is an urban mosquito.

Most of community-based health and epidemic control tools within the Red Cross are suited to rural settings. The Zika operation faced the challenge of adapting interventions to tackle the high level of risk in urban settings. Vector control actions for the prevention of the Zika virus are no different from those that must be implemented to prevent dengue and chikungunya; what is lacking is a systematic and intensive response mechanism. Small measures will not produce results; only an overwhelming response to mosquito numbers can break the cycle of transmission and eliminate the threat.

Psychosocial support

People may react in various ways to being affected by Zika virus and its potential consequences. In normal times, on average one in five women presents symptoms of distress during pregnancy or after childbirth. Women who have contracted Zika virus infection during pregnancy and/or who are told their child may have or has microcephaly may be even more likely to develop symptoms of distress. As a result, those directly affected by this outbreak and related health consequences may have increased levels of stress and need for psychosocial support. Many pregnant women in affected countries did not have access to support during their pregnancies to discuss their concerns, alleviate their fears and develop plans to reduce their risk.

Gender sensitivity

At the beginning of the outbreak, risk communications interventions from many stakeholders targeted pregnant women and women of child bearing age and put the responsibility on them for preventing pregnancy, while simultaneously providing little information on family planning methods beyond condoms. The approach was viewed as gender insensitive as it did not consider the realities of women and the role that men play in decision making and caring for partners and families.

Gender, diversity and protection issues were mainstreamed in this response. The operation actively sought to involve women and their partners in reducing risk of transmission and involved women and men in taking responsibility for reducing risk to themselves, their families, and their communities.

Beneficiary selection

The target vulnerable groups most at risk are young women of reproductive age and pregnant women living in areas with poor sanitation in urban contexts. It should be noted that while women of reproductive age and especially pregnant woman were the target vulnerable group it was their risk being targeted – that is – the risk that their infection would be passed to an unborn child and result in congenital Zika syndrome. Thus, in reducing these risk not only pregnant mothers were targeted but also efforts to reduce presence of the *Aedes aegypti* mosquito, and commit partners, families, and communities to reducing risks were made.

Risk Analysis

The outbreak carried several risks which included:

- a) Long term humanitarian risks: the impacts of the Zika outbreak have been concentrated in poor and underdeveloped parts of the country which have higher exposure to mosquitos, tropical climate and less resources and capacity for disease control. WHO confirmed this risk in removing the status of Zika and a PHEIC and indicating it would require long term investment to mitigate its impact globally. Zika virus prevention and response is being mainstreamed into health programming throughout the Americas, incorporated into epidemic control training and guidance globally through incorporation in global approaches including Community-Based Health and First Aid (CBHFA) and Epidemic Control for Volunteers (ECV).
- b) There was a risk of further geographic spread of the disease. Urbanization and global travel pose risks of increased cases of transmission across borders and via main air transport routes. Limited resources made available through the appeal prevented action from being taken in other regions despite the presence of the Zika virus. Despite this, tools lessons learnt, and experiences continued to be shared with other regions, especially the Asia-Pacific region which incorporated them into their ongoing programmatic and emergency responses to dengue outbreaks.

- c) The cyclical nature of disease outbreaks such as Zika will likely see peaks and period of calm. The operation ended during a period where case reports are low. However, with the reduction of herd immunity over time Zika is likely to return. The operation and the mid-term programmes that followed the operation in the Americas sought and continues to seek partnerships with new innovations in vector management and is keeping abreast of developments in the Vector Control Advisory Group (VCAG) to ready itself for potential future outbreaks.
- d) Knowledge gaps, rumors and misinformation can hamper mitigation efforts as well as make the lives of those people potentially affected or already infected more difficult to manage. Efforts were made within the operation to monitor rumors and address them within communications plans. From the experience of the operation and in conjunction with the CDAC guidance on Rumors Monitoring IFRC released a Rumors and Misinformation Guidance that is being utilized and refined in National Societies (e.g. Guyana Red Cross Society is implementing a tracking rumors data).
- e) The potentially abrupt removal of support for countries in the region as the global response shifts from a Public Health Emergency of International Concern to a sustained public health issue could have failed to support transition towards integrated responses to Zika and neglect to launch much needed responses in areas newly affected. Bearing this in mind IFRC sought mid-term support to ongoing Zika response and prevention and is currently implementing two projects across Latin America (5 countries, implementing a community centered project alongside Save the Children and supported by USAID) and the Caribbean (13 countries supported by USAID). Both of these projects are due to finish in September 2019 and program managers are engaging in early efforts to work with National Society Development (NSD) support to develop exit and sustainability plans.

B. OPERATIONAL STRATEGY

Proposed strategy

The overall objective of the Global Zika Operation was to ensure that IFRC Regional Offices and Red Cross Red Crescent National Societies in affected and/or at-risk countries can effectively and efficiently support regional, national and community measures to reduce risks associated with Zika infection. This Operation also aimed at supporting the National Society responses across several areas of work through providing necessary resources to the country-level responses.

The expected outcomes of the Zika Operation were:

- Outcome 1: The risk of Zika transmission is reduced through public information and health preparedness activities in affected and at-risk countries in the Americas region
- Outcome 2: The risk of Zika transmission has been reduced through hygiene promotion and vector control in countries affected by the virus.
- Outcome 3: Consequences of Zika virus disease on community health have been mitigated through dissemination of targeted information and commodities for pregnant women to reduce the risk of infection and through provision of psychological support to address stigma and discrimination in countries affected by the virus.
- Outcome 4: The National Societies of the Red Cross increase their capacity to deliver on programmes and services in future disasters
- Outcome 5: The management of the operation is informed by a comprehensive monitoring and evaluation system
- Outcome 6: Key decisions of the operation are informed by regular consultation with and participation by the affected people at community level, including national and international stakeholders.
- Outcome 7: Issues of gender equality and other groups with specific needs are considered by the operation.

National Societies in the Americas developed plans based on ten key interventions to meet Outcomes 1-3 (See Box 1). To do this National Societies implemented combinations of the ten priority interventions. Outcomes 5-7 were cross-cutting and were coordinated and supported by the IFRC regional office in the Americas and the Port of Spain Cluster Office in the Caribbean and the IFRC Health Department in the Geneva Secretariat.

Box 1: Outcomes 1-3 mapped against the ten priority interventions

Outcome 1: The risk of Zika transmission is reduced through public information and health preparedness activities in affected and at-risk countries in the Americas region

Intervention 1: Risk communication to the general public

National Societies were ideally placed to communicate with affected and at-risk communities as they are embedded in communities and are thus best able to deliver messages in relevant and culturally appropriate ways and can gain the trust of the communities in which they operate. National Societies utilized a variety of communication mediums to engage people and communities including: social media, radio and TV.

Mass communication campaigns were closely coordinated with community mobilization activities. Intensive public information campaigns were combined with regular communication and engagement activities (i.e. radio call-in programmes, mobile cinema and interactive theatre activities) that were aimed at promoting healthy behaviors, reducing anxiety, addressing stigma, dispelling rumors and resolving cultural misperceptions.

Intervention 2: Community-based surveillance

Red Cross Red Crescent volunteers were well placed to access and gather information from communities that could help to shape epidemic response. Community-based surveillance for Zika was challenging as 80% of cases are asymptomatic and so are under-reported; some countries have experienced delays in reporting or have difficulty establishing national surveillance systems; there are inter-country differences in case definitions, surveillance systems, and reporting systems; there are weaknesses in health service provision, exacerbated by access barriers including poverty, high clinical caseloads, and violence; and there is a lack of laboratories with adequate services or limits to how many can and should have access to laboratory confirmation.

Volunteers sought to support, where needed, the work of their respective Ministries of Health in national surveillance systems and IFRC supported building systems to monitor community information that can contribute to epidemic response including rumor monitoring and vector control. Digital data gathering devices using ODK and quality-proofed surveys, are excellently placed to strengthen the national surveillance systems and this was utilized in the creation of a Community Based Surveillance and Monitoring Toolkit.

Outcome 2: The risk of Zika transmission has been reduced through hygiene promotion and vector control in countries affected by the virus.

Intervention 3. Community 'clean up' campaigns

To reduce the risk of the *Aedes aegypti* vector, community clean ups were organized. Community clean ups were organized with communities in their neighborhoods and schools. Special attention was paid to empowering communities to tailor their clean-up activities to seasonal risks, using seasonal calendars with clean up interventions matching times of risk (e.g. cleaning water containers during those times when more people are storing water, preparing for rainy seasons etc.). The use of the Zika Dengue Chikungunya Toolkit supported the use of community mapping exercises in driving understanding of vector risk, finding and removing the most productive *Aedes* breeding sites and empowering community member with knowledge around how to sustain lowered vector risk.

Intervention 4. Household and personal protection

Messages and measures for household level and personal protection against mosquito bites focused on keeping the household free from standing water and using correct repellents in a correct way for maximum individual protection. Quality assurance of messages was undertaken while considering conflicting evidence used to guide Ministry of Health messages (e.g. mosquito nets were promoted across the region by Ministries of Health despite their use being primarily at night time and the *Aedes aegypti* being a day biting mosquito).

Intervention 5. Chemical vector control

Preventing or reducing Zika virus transmission depends primarily on controlling the mosquito or the interruption of human–vector contact. Transmission control activities target the *Aedes Aegypti* in its immature state (egg, larva, and pupa) and adult stages in the household and immediate vicinity. Dosing of larvicides in water tanks attacks the larvae while fogging affects adult mosquitoes. Technically well-planned chemical vector control campaigns using larvicides and insecticides that match the resistance pattern in the area will be supported.

Outcome 3: Consequences of Zika virus disease on community health have been mitigated through dissemination of targeted information and commodities for pregnant women to reduce the risk of infection and through provision of psychological support to address stigma and discrimination in countries affected by the virus.

Intervention 6: Blood safety

Zika virus disease is predominantly spread by the bite of an infected mosquito of the species *Aedes*. However, there are reports on sexual transmission of the virus during active infection, which raised concerns that Zika viremia may result in the transmission of the virus through blood transfusions. Some countries asked potential blood donors not to give blood if within the last 3-4 weeks they have visited a Zika affected country. Red Cross Red Crescent activities for increased blood safety through information and selected screening activities of voluntary non-remunerated blood donors were only supported in Colombia.

Intervention 7: Protection for particular settings

Patients staying in hospitals, residents of care institutions, or inmates in prisons presented opportunity to tailor specific protection and information. This information was targeted towards clean up as well as vector control campaigns.

Intervention 8: Staff and volunteer safety

Zika response is not heavy on personal protective equipment. Most of the household and community level activities for clearing up, cleaning up and keeping it up can be carried out with heavy-duty protective gloves. Volunteer insurance and the use of regular protective and indicative equipment such as vests and nail-proof boots have been supported in Latin America and in the Caribbean. Particular attention was given to correct protection during handling of chemicals for larval or adult mosquito control or where volunteers provided support to chemical vector control

It is important to note that the activities within the operational plan of this appeal fit within the 10 interventions outlined in the overview above, albeit structured not by interventions, but by technical areas (information/surveillance/preparedness; water/ sanitation/ hygiene promotion; community health/ emergency care). There was a strong focus on communication and communication engagement activities, as well as on training for National Societies. Procurement and distribution of high-cost items are not planned for; in consequence, the percentage of overhead costs is higher than in emergencies, which rely heavily on such distributions.

Capacity Building

Enhancing capacity at regional level, including the development of new instructors for the topics of environmental sanitation and epidemic control was one of the main pillars of the response. The IFRC References Centers in the Americas Region – Centre for Institutional Disaster Preparedness (CREPD) and the Caribbean Disaster Risk Management Reference Centre (CADRIM), were heavily engaged by the Zika operation.

CREPD was active in creating and implementing a Zika training strategy and supporting the Americas regional Knowledge Management System put into place for the operation. It improved the quality of training, achieving high standards and shifting from traditional teaching methods to more interactive ones and to a skill-based approach.

To support the operation finance and PMER staff provided ongoing one-to-one support to NS and trained them in financial, planning, monitoring and reporting support and administrative advice.

Coordination

A global response was planned in response to a global outbreak however there was an eventual focus on the Americas, where most of activities were funded and took place. Extremely limited support was made available to other regions, with many regions not being able to receive technical support due to resource earmarking. This raises issues and lessons around the focus, requirements and approaches that need to be established, agreed and maintained to deliver a global response, versus the appropriate steps to focus on delivery at a specific regional or country level and how best to coordinate the two.

Initially, internal coordination was led by the Health Department in Geneva, supported by key technical and service departments. Specific focus was placed on the role of global coordination, on keeping abreast of evolving scientific data and disseminating this to partners, and on community engagement support. Better defined roles between health leadership and Disaster and Crisis Prevention, Response and Recovery (DCPRR) departments could have addressed gaps in the coordination of operational functions, such as publishing the Emergency Plan of Action (EPOA) and appeal and who had responsibility for certain key process or information sharing with partners and the field.

Two separate Zika cells were set up in the Americas following the addition of the English-Speaking Caribbean countries. The rationale given for setting up a separate cell included different language, geographical focus, and timeline for intervention. However, this set up provided barriers to an aligned regional strategy, coordination, planning and reporting, and cross-learning. There was an imbalance in the budgets / funding, as the budget for the Caribbean was beyond the needs and absorption capacities of the National Societies.

Evaluation

The Evaluation of the Zika Appeal was commissioned by the IFRC Secretariat to assess the Red Cross response to the 2016-2017 Zika outbreak and provide lessons to inform both the ongoing Zika response, and future regional and global health emergencies. The intention of the evaluation was to focus on the global and regional strategic issues faced by the IFRC, National Societies and relevant partners.

Following an initial evaluation report that had poor triangulation of data and few actionable recommendations the IFRC Secretariat and Regional Office worked together, committed to learning how to improve, where to set priorities for future outbreaks, took a step back to determine what could be meaningfully derived from the available data. Recommendations are currently under review that are derived from the draft evaluation report conclusions and informed by the November 2016 lessons learnt exercise, the operations updates and ongoing reported learning within the appeal up until December 2017.

C. DETAILED OPERATIONAL PLAN

The Global Zika Operation, which was focused on the Americas Region, constantly developed over its 23-month implementation. During this time, it underwent 3 revisions of the initially released Emergency Plan of Action, a shift from Americas Region to Global and back to Americas Region focus and various configurations of Human Resource support, focal points, coordinators and Zika Cells, operations and project managers. Though the operation was successful in supporting the capacity of 21 countries in responding to a complex global disease outbreak it is not without its challenges and lessons to be learnt. A major omission at the beginning of and throughout the planning process was establishing targets per country. This makes the figures reported in this section difficult to measure against expectations. Only actual figures are reported, and these must be measured against the key achievements, challenges and lessons learnt described in narrative.

The scale of the response was so large that to report on every activity of every country included in the appeal would not be practical. Thus, case studies focused on different intervention areas from which the Movement can learn are highlighted. Further information, communications and education materials that were produced by the Zika operation and that were disseminated for regional and global can be accessed on the Americas Regional website www.cruzroja-zika.org. This website contains consolidated information on all the training courses, interactive and educational materials, recorded webinars, radio programmes, links to YouTube videos and other Zika training materials. This interactive space represents an important tool for research and learning on Zika and related health emergencies. Its continuity is ensured as part of the three-year Zika Community Action Project (CAZ), in partnership with Save the Children and funded by USAID.

Finally, publication of plans of actions, appeals, and operations updates throughout the operation highlighted lack of clarity about coordination and responsibility for reporting. This was reflected by, late publication, duplication of publications, and failure to publish regional plans. To summarise Emergency Appeal, Plans of Actions and Operations Updates Table 4 has been put together.

Table 4. Published documents

Document	Publication Date	Comment
Americas Emergency Appeal	2 Feb 2016	
Americas Emergency Plan of Action	2 Feb 2016	
Global Emergency Appeal	4 Mar 2016	
Global Emergency Plan of Action	4 Mar 2016	
Americas Emergency Plan of Action (Revised)	4 Mar 2016	Revised around 10 priority interventions.
Africa Emergency Plan of Action	4 Mar 2016	
Asia-Pacific Emergency Plan of Action	4 Mar 2016	
MENA Emergency Plan of Action	4 Mar 2016	
Europe Emergency Plan of Action	4 Mar 2016	
Geneva Emergency Plan of Action	4 Mar 2016	
Americas Operations Update (Update 1)	1 Jun 2016	Republished on 22 of June as "Operation Update no 1"
Global Operations Update (Update 2)	1 Jun 2016	
Global Emergency Appeal Revision	9 Feb 2017	Only the Global (Geneva) revised plan was published, with the Americas revised emergency operation plan revision not published in error). Inclusion of 10 English-speaking Caribbean countries under the appeal.
Global Revised Emergency Plan of Action	9 Feb 2017	
Global Operations Update – 6 months	12 June 2017	Information reported as at October 2016 but due to internal delays not published until June 2017.
Global Operations Update – 12 months	16 August	Extension of Appeal to December 2017 and addition of Haiti.



Zika Information, Surveillance and Preparedness

	Latin America	Caribbean	Total
Outcome 1: The risk of Zika transmission is reduced through public information and health preparedness activities in affected and at-risk countries in the Americas region			
# of districts implementing Zika preparedness interventions.	144	9	152
# of districts implementing Zika response interventions.	95	128	222
# of male volunteers implementing Zika-related activities.	620	243	863
# of female volunteers implementing Zika-related activities.	788	434	1222
Output 1.1: National Societies provide the general public with information on the Zika virus			
# of developed and implemented CEA plans.	10	1	11
# of interactive radio spots and programs produced and broadcasted (# broadcasting).	275	1	276
# of people reached through mass media campaigns (radio and television).	6,500,000	915,435	7,415,435
# of people reached through social media campaigns.	1,780,000	52,482	1,832,482
# of households reached with Zika prevention measures through volunteer visits	-	23,955	23,955
Output 1.2: National Societies strengthen capacity in early detection of outbreaks and reporting of cases²			
# of districts implementing community-based surveillance activities.	45	0	45
# of districts actively implementing case monitoring.	8	0	8
# of reported events.	53	0	53
# of reported events which resulted from the investigation of cases.	26	0	26
# of cases being actively followed up.	26	0	26
# of male volunteers trained in community-based surveillance.	1100	0	1100
# of households where community-based surveillance activities are being carried out.	39,670	0	39,670
# of communities with improved information on rumour monitoring and vector control	0	336	336

Intervention 1. Risk Communication to the general public

Key Achievements

- IFRC worked with WHO and UNICEF to create a global "[Risk Communication and Community Engagement](#)" tool for prevention and control and joint guidance / messages for the response. A month following the declaration by WHO that Zika was considered a PHEIC, WHO coordinated with strategic response partners that included UNICEF, CDC, UNFPA, Anthrologica, GOAL and IFRC to develop the "[Knowledge, Attitudes and Practice surveys Zika virus disease and potential complications: Resource pack](#)". From this pack subsequent KAP surveys were adapted and developed for Latin America and Caribbean.
- In January 2017, IFRC developed the #GanaleAlZika (in English, #BeatZika) [video](#) along with a [user guide](#) for community use to generate community dialogue and collect and dispel rumors among affected populations. The video and associated guide is available in English and Spanish for use by volunteers, community health workers, community leaders, teachers, and other stakeholders. National Societies in the Caribbean began systematically monitoring rumors around Zika using the "[Rumours: Listen, Verify, Engage!](#)" Guidance.
- CEA support for the operation saw many countries implement two-way communication mediums. For example, Guyana and Barbados set up hotlines for people to ring in with questions to complement text blasts.
- National Societies and IFRC shared the unique and context appropriate interventions with partners through the [Red Cross Zika website](#) and the [Zika Communications Network](#) including, radio spots, posters, short educational videos for sharing on social media, brochures and billboards.

² National Societies in the Caribbean, are currently not engaged in community based surveillance of Zika disease outcomes due to low case numbers and low laboratory capacity for referral, however are beginning community level vector surveillance in 2017.

- Children were consistently engaged across National Societies as agents of change using the field tested [Zika, Dengue and Chikungunya Toolkit School module](#).

Case study 1: Creative ways of engaging children for change – Paraguay and Barbados

The use of drama-in-education and game playing has been a central component of many National Societies' work. Barbados Red Cross Society and Paraguay Red Cross Society provide key examples of the types of creative engagement with school children that help them learn and become agents of change. Both National Societies worked closely with school to develop lesson plans that explain what Zika is, explain risks and then help children understand how they can take action at school and at home to combat the threat of the *Aedes aegypti* mosquito. Barbados Red Cross's engagement of schools through community theatre saw them working with Haynesville Youth Club to develop a script with songs and an interactive play. Paraguay Red Cross used their existing long-term relationship with schools as an entry point to developing fun and interactive learning activities with children. Two videos (link below) capture some elements of the interactive and dramatic presentations. They demonstrate an effective and interactive method of engaging school children as agents of change. In both Paraguay and Barbados a central success of engaging with school children is the use of youth volunteers.



School children in Ñemby learn about Zika with Paraguay Red Cross Society.

Cesar Ramón, teacher of the basic school 3444 September 29, Ñemby commented that "The children of this school pay much more attention when the talks are given by young people. They are attracted to the activities while being entertained. The fight against the vector is and will be our struggle in all schools."

Video Links: [Barbados](#) and [Paraguay](#)

Challenges

- Using an appropriate and user-friendly sampling methodology for KAP surveys and analysis was a challenge in the operation. The Regional Zika Operations Team worked with Georgia University to develop a sampling strategy and analysis plan. This sampling strategy saw over 1000 surveys collected using ODK, however through attempting to tailor the surveys to national priorities and localize context, as well as the application of methodologies differently in each National Society, analysis became complicated. Ultimately, the data from these KAP were never analyzed. Subsequent KAP in Latin America within the programmatic approach have worked to overcome these challenges with a simpler sampling methodology and partnership to facilitate analysis.
- Most of community-based health and epidemic control tools within the Red Cross are suited to rural settings. The Zika operation faced the challenge of adapting interventions to tackle the high level of risk in urban settings.
- Measuring behavior change over the course of an Appeal is difficult because behavior change is a slow process. The use of children and agents of change has been shown to be useful in public health interventions in the past but over significantly longer time frames.
- Analysis and use of data collected about risk communication, and KAPs and focus group discussions is hindered by limited capacity in National Societies in data literacy.

Lessons Learned

- For future outbreaks refining globally developed questionnaires or developing Red Cross context specific questionnaire for KAP surveys prior to national level adaptation, will save time and possible duplication of efforts.
- IFRC should develop clear and easy to use sampling methodologies for KAPs in emergencies in low resource settings.
- To build National Society capacity for future emergency operations IFRC should support improved data literacy.
- Alongside building data literacy within the Movement IFRC benefits from partnerships and collaboration with academic institutions to provide the global and regional health teams and National Society staff and volunteers with support in research and data gathering / analysis.
- Outbreaks are increasingly in urban contexts and tools need to be adapted to be suited to these contexts.
- IFRC should continue to use children as agents of change with a focus on behavior change communication (see Case Study 1).
- National Societies need to coordinate their use of social media and implement quality controls to ensure that the same messages, such as hashtags, are used and that the most up-to date information is shared with the public.
- The development of regional websites, when adequate communications support is available is an asset to complex emergency operations (such as outbreaks).

Intervention 2. Community-based surveillance

Key Achievements

- Field testing of a new Community Based Disease and Monitoring Protocol (CBDSM) was conducted in Guatemala, Panama, Brazil and El Salvador. This work complements global guidance of Community Based Surveillance.
- Using this experience the Community Action for Zika team has produced the [Protocol for Community Based Monitoring and Surveillance](#) (Protocolo para la Vigilancia y Monitoreo Basado en la Comunidad) and an associated [Guideline for Volunteers](#) (Protocolo para la Vigilancia y Monitoreo Basado en la Comunidad – Guia Para Voluntarios).
- At the regional level country case counts using epidemiological reports were produced on a regular basis to share with National Societies, helping National Societies to understand their risk and scale of the outbreak.

Challenges

- Surveillance for Zika is challenging because many people will be asymptomatic or have only mild symptoms. As a result, the disease is typically underreported. Even when people present with symptoms testing is often not possible through local health clinics.
- While country level data could be collected from PAHO, National Societies are still working on the longer process of building up local surveillance systems that allow for community level risk assessment. This is not limited to epidemiological data but also vector risk data.
- Vector risk measurements using disease indices (e.g. container index, Breteau index, ovitrap monitoring) does not yet definitively link to disease incidence making monitoring of risk through secondary vector indicators challenging.

Case study 2: Drawing on National Experience for Community Based Surveillance

The experiences of the National Societies implementing Community Based Surveillance strategies as part of the Zika response in 2016 was drawn upon to make the Community Based Surveillance and Monitoring Protocol. Guatemala Red Cross Society implemented a system to identify suspected cases of Zika that helped alert local health authorities regarding possible new transmission zones. Brazil, El Salvador and Panama Red Cross Societies, in partnership with the IFRC, tested a community-based surveillance and monitoring (CBSM) pilot program to fight Zika virus disease in peri-urban communities in Brazil, El Salvador and Panama.

Community-based surveillance (CBS) systems have been implemented in many parts of the world for the early detection and assessment of disease outbreaks. The Community Based Surveillance and Monitoring Protocol was developed to respond to diseases transmitted by the *Aedes aegypti* vector, such as the Zika virus. It maps both vector risks using ovitraps and actively seeks symptoms in risk populations (pregnant women). CBSM complements the epidemiological surveillance systems of Ministries of Health and helps to evaluate the effectiveness of the interventions of the National Societies.



A volunteer in El Salvador monitors his community for the presence of the vector in a typical breeding site.

This participatory approach empowers the community to identify their health conditions, risk factors, and the most vulnerable groups. Community-based surveillance is not an alternative system of epidemiological surveillance, but is a mechanism of community support for health authorities. Using the protocol, communities identify risk and inform local health authorities. Then, they can work together to find support solutions at the community level.

Lessons Learned

- Moving forward IFRC should utilize the mid-term application of the CBSM protocol to perform a longitudinal study of its effectiveness of monitoring disease risk and referring cases to health care facilities.
- IFRC should continue to support the use of IM tools for emergency operations and with improved data literacy of National Societies support the collection of more community level data to share with other stakeholders and guide response.
- The experience from the Zika response should be used to inform the work of community-based surveillance and community-based early warning for epidemics globally especially for epidemic related to the *Aedes aegypti* vector. .



Water, sanitation and hygiene

	Latin America	Caribbean	Total
Outcome 2: The risk of Zika transmission has been reduced through hygiene promotion and vector control in countries affected by the virus			
# of communities implementing community-based vector-control activities.	176	142	318
# of hours spent in chemical vector control.	126	0	126
Output 2.1: Affected National Societies receive technical support to carry out vector-borne diseases response			
# of male volunteers trained in community-based vector control.	1,123	217	1,340
# of female volunteers trained in community-based vector control.	1,511	385	1,896
# of male volunteers implementing community-based vector-control activities.	388	82	470
# of female volunteers implementing community-based vector-control activities.	654	147	801
# of communities implementing community-based strategies for vector-control.	77	142	219
# of communities with current action plans such as “ <i>Comunidades libres de criaderos</i> ” (communities free of breeding sites) or community strategies for vector control.	159	8	167
# of follow-up visits for community action plans.	155	0	155
# of community-based clean-up campaigns carried out.	315	107	422
# of communities declared free of breeding sites.	184	277	243
# of households reached with interpersonal communication sessions on Zika prevention and reduction of vectors.	39,670	23,955	63,625
# of social influencers (traditional, religious or political leaders) at community level that are mobilised and trained in Zika prevention and vector control.	851	0	851
# of students reached with Zika prevention and vector control information.	32,154	21,722	53,876
# of teachers reached with Zika prevention and vector control information.	2,632	100	2,732
# of schools where prevention and vector control activities were implemented.	315	100	415
# of households reached with larvicides.	4,666	0	4,666
# of community sites equipped with larvicides (abate).	158	0	158
# of households reached with spraying campaigns in their communities.	15,204	0	15,204
# of chemical vector-control workshops carried out in the NS.	162	0	162
# of male volunteers trained in chemical vector control	194	0	194
# of female volunteers trained in chemical vector control	170	0	170

Interventions 3-5 Community clean up campaigns, household and personal protection, and chemical vector control

Key Achievements

- The [Zika, Dengue and Chikungunya Toolkit](#) for [Communities](#) and [Schools](#) was developed in collaboration with the Red Cross Red Crescent Climate Centre and the Liverpool School of Tropical Medicine. The toolkit was and is being used in 16 countries to alert people to vector risks in their community and take action to remove them.
- The Americas region improved the Zika Dengue and Chikungunya Toolkit through the introduction of a seasonal calendar which helps communities track vector risks over time.
- National Societies were heavily engaged in community clean-up activities to remove the most productive breeding sites for the *Aedes aegypti* mosquito.
- An evidence-based guidance: [Fighting the Aedes aegypti mosquito: A menu for evidence based actions](#) was developed in the Caribbean and shared globally.

- The lessons learned about vector control and the capacity built within the region was used to provide expert guidance to the re-development of the Epidemic Control for Programme Managers Implementation Guide to be released in 2018 and strengthened community-based vector control approaches in the Community Based Health and First Aid (CBHFA).

Case study 3: House to house hunts for the *Aedes aegypti* mosquito

“We go about educating persons in our community about the Zika virus: how they contract Zika, how it’s being spread and at the same time we are on the lookout for breeding sites for the *Aedes* mosquito,” says Teddy Sukhdeo, Team Leader for the #64 Community Disaster Response Team (CDRT).

In remote areas of the country, Guyana Red Cross volunteers searched for clean standing water, close to houses, perfect breeding sites for the *Aedes aegypti* mosquito. This mosquito like to live close to humans and does not like to go far to lay her eggs or find a blood meal. In remote Guyana, it is very common for villagers to use plastic barrels to collect rain water.

“Once there are breeding sites it means that there will be more and more mosquitoes and there is a possibility that persons can get infected with Zika. As long as there are mosquitoes and they bite somebody who is infected, then the entire community can become infected. So our task is to go about sharing the correct information, letting them know how to protect themselves and their immediate family, and help them to eliminate breeding sites from around their homes,” explains Sukhdeo.



Guyana Red Cross performs a household visit and finds a perfect breeding site in a water tank in a woman’s home.

Sukhdeo and his team of community volunteers visit communities which have reported an increase in mosquitoes. By word of mouth it is fairly easy to know which areas need to be targeted as a matter of priority. The volunteers look out for these popular plastic barrels when they go from house to house as it is the most common breeding ground found around people’s homes.

Challenges

- The scale of coverage of the operation made it hard to give focused effort a particular community over time for vector control however reducing the risk of the vector requires sustained efforts.
- While the evidence suggests that the use of mosquito nets for the *Aedes aegypti* mosquito was poor, continue support for their use by Ministries of Health, and the expectation that Red Cross could provide nets for mosquito-borne diseases was hard to overcome. While the Operation team tried to focus all efforts to distribute nets on the use in particular settings (while resting during the day) there is a concern that the use of nets in the appeal promoted a misconception about the *Aedes aegypti* behavior.
- For personal protection, insect repellents provide a barrier to mosquito bites. Repellents were successfully made available through a partnership with SC Johnson, but proved difficult to mobilize in the English-Speaking Caribbean. This proved a challenge when explaining to pregnant women that they should use repellents and there were none to provide.

Lessons Learned

- To improve the sustained effect of community clean-up activities the incorporation of the risk mapping methods (adapted from Community Led Total Sanitation Methodologies) in the Zika, Dengue and Chikungunya toolkit into regular clean up activities provides communities with knowledge about breeding site clean up and the impetus to clean up breeding sites after the Red Cross is gone.
- Where Red Cross staff and volunteers are involved in chemical vector control minimum standards of training need to be met for staff and volunteer safety. Ministries of Health are typically involved in providing the training in chemical vector control and where Red Cross are partners we need to ensure sufficient safety instruction and personal protection equipment has been provided.



Community Health and Emergency Care

	Latin America	Caribbean	Total
Outcome 3: Consequences of Zika virus disease on community health have been mitigated through dissemination of targeted information and commodities for pregnant women to reduce the risk of infection and through provision of psychological support to address stigma and discrimination in countries affected by the virus			
Output 3.1: Affected NS have increased capacity in health emergency risk management and response			
Safe blood donation protocols adapted to Zika virus.	2	0	2
# of donors tested for Zika.	4,598	0	4,598
# of NS members trained in safe blood donation and Zika.	15	0	15
# of Zika-free blood bags.	1,253	0	1,253
# of prisons where interventions were carried out.	5	0	5
# of hospitals/health centres where interventions were carried out.	11	15	22
# of business/companies where interventions were carried out.	18	0	18
# of PS sessions in particular settings.	44	0	44
# of awareness-raising sessions focused on fighting stigma and discrimination in particular settings.	17	0	17
# of staff members and volunteers trained in health and safety for Zika-related activities.	1,200	0	1,200
# of volunteers participating in the Zika response that have insurance coverage.	1,200	307	1,507
# of pregnant women reached with information sessions on Zika-related risks.	2,632	2,899	5,531
# of women of reproductive age reached with information on Zika.	84,433	692	85,125
# of kits distributed with items for pregnant women.	1,309	1,037	2,346
# of kits distributed with items for at-risk populations.	603,380	1,037	604,417
# of pregnant women participating in PS activities in affected communities.	1,000	117	1,117
# of affected women participating in support or self-help groups within a specific period of time.	266	0	266
Output 3.2: Affected National Societies have the resources and the competence to mobilise volunteers for well-defined, comprehensive and evidence-based psychological support activities among affected and at-risk communities			
# of staff members and volunteers trained in PS.	361	203	564
# of families facing the negative results of Zika-affected pregnancies participating in sessions on coping strategies.	82	0	82
# of awareness-raising sessions carried out with strategic partners and communities and focused on fighting stigma and discrimination.	18	43	61

Interventions 6-8 Blood safety, protection in particular settings and staff and volunteer safety

Key Achievements

- Colombia Red Cross was the only National Society to carry out blood safety interventions. Their specific protocols resulted in 4,500 donors and 1,200 Zika free blood units.
- Work with prisoners within existing prison outreach programmes in three countries (Dominican Republic, Colombia and Brazil) reached a difficult to reach population with key messages and involved them in risk reduction action.
- As Zika was a new virus information about the disease was sometimes slow to move through government training systems. The Red Cross supported training of hospital and health clinic staff in Bolivia, Colombia, Nicaragua, Venezuela, Paraguay and Antigua and Barbuda.

Case study 4: Working in prisons in Dominican Republic

In close collaboration with local prison and health authorities, the Dominican Red Cross launched a sanitation and disinfection program at the La Victoria penitentiary. La Victoria has capacity for 2,000 incarcerated people and is today one of the most crowded in the Caribbean.

Volunteers delivered clean-up kits at the center to develop clean-up campaigns and to train prisoners and security personnel through workshops on health issues related to Zika. These groups of people became health focal points within the penitentiary center.

The involvement of the inmates in the cleaning brigades, grew over the course of volunteer visits. The inmates highlighted the importance of being part of these health brigades and expressed their interest in being able to continue developing the activities.

In the same way, the inmates reiterated the importance of being able to have their messages and knowledge in sanitation campaigns replicated both inside and outside the center of La Victoria through visits from relatives or friends received regularly.



Prisoners and guards work together to clean their environment in La Victoria prison.

The initiative to integrate the group of inmates in vector control and disease prevention actions was viewed positively by prisoners and security staff and strengthens individual and community resilience.

This work was part of a long term program that the Dominica Red Cross developed in different detention centers for Dominicans in coordination with the General Directorate of Prisons.

Challenges

- IFRC did not have the on-site technical expertise in the regional office to provide assistance with blood safety. This response capacity must come from in country exiting management of blood supplies.
- Only National Societies currently working within the prison system (with other programmes) were able to do Zika work in them.
- The changing nature of the emerging evidence on the Zika virus proved challenging when training others about the disease.

Lessons Learned

- IFRC should review its capacity to support and monitor activities related to blood safety and plan for specific technical support.
- With an emerging outbreak, reference centers such as CREPD must have continuity of engagement with the roll out of training programmes to ensure quality and update with new information.

Interventions 9. Information and commodities for pregnant women

Key Achievements

- Red Cross National Societies partnered with local health facilities to reach out to pregnant woman at antenatal appointments. To reinforce their efforts, National societies also provided information sessions to community health workers and family planning organizations.
- A guidance document, "[Let's talk about sex !: Zika, sexual transmission and gender](#)" was developed in response to concerns about gender sensitivity in targeting the risk pregnant woman face.

Challenges

- Women from lower socio-economic groups were less receptive to prevention messages and birth control, either because of limited access to family planning services or due to cultural / religious norms and domestic situations, including abuse. It is not clear that risk messages were well enough targeted for these more vulnerable women.
- The English-Speaking Caribbean has intended to hand out repellents as part of personal protection efforts for pregnant women. However, delays in repellent provision later turned into cancellation of in-kind support with repellents which slowed the initial engagement with pregnant

- The prevention of sexual transmission was most important women because of the increased risk they face from Zika, but this message proved challenging to get across and needs more work to address the gender dynamics in each country.

Lessons Learned

- IFRC should ensure that National Societies are supported and guided in developing gender sensitive approaches especially where the target group is identified as a woman.
- It is important to recognize that targeting of pregnant women often meant targeting the increased risk they faced rather than placing of blame or responsibility solely on women to protect their unborn children.

Interventions 10. Psychosocial support for affected families

Key Achievements

- Guidance under development (and continuing within long term programming) for PSS in Zika.
- Trainings provided in PSS in Zika in the Caribbean addressed issues with low numbers of cases of congenital Zika syndrome by addressing the stress of parents pregnant during an outbreak, and behavior change.
- In Guyana and Grenada specific outreach and support was provided to people with Guillain-Barre Syndrome and their families.

Challenges

- Low case numbers in English-speaking Caribbean did not meet expectations of PSS needs and attention had to be redirected.
- Media coverage of the outbreak and its complications increased fear for some parents and made a spectacle of others which made it difficult for Red Cross to provide support without seeming opportunistic.

Lessons Learned

- PSS in crisis following rapid-onset disaster is distinct from the threat or reality of having a child with a severe disability. In similar outbreaks in the future, the Global PSS Reference Centre could be better utilized in the planning of response and through budgeting for their inclusion at the outset of the emergency so that guidelines and tools can be developed and then adapted at the field level.

Case study 5: Psychosocial Support for GBS in Grenada

One of the complications of the Zika virus is the debilitating neurological disease - Guillain-Barré syndrome (GBS) has been observed in affected countries.

Sixty-eight year old Helen Noel had been suffering from Zika induced GBS after first began experiencing symptoms in August 2016 which quickly spread throughout the body leading to a near-total paralysis of the legs, arms, and facial muscles. When her daughter Gale called the Grenada Red Cross hotline, the Red Cross ambulance service responded promptly and took her mother to the intensive care unit of the island's only hospital for treatment.

Helen remained in hospital for three months. Since being discharged, she has been recovering at home in the care of her family and the support of friends.

Volunteers of the Grenada Red Cross regularly a visit to the Noel family home to deliver care packages and spend some time with them. These volunteers have been specially trained in Zika prevention outreach and

psychosocial support services(PSS) as part of Zika Prevention project being implemented throughout the Caribbean region in collaboration with the International Federation of Red Cross and Red Crescent societies (IFRC).

The staff and volunteers have been a great comfort to the Noel family in their time of need and will continue to provide support during the long period of recovery.

Gale says, "It was really scary because I didn't understand what was going on with my mom. The doctors didn't know right away what was happening until they did the blood tests and neurological exams. It has been a challenge for me to take care of mom as she was totally paralyzed. Thanks to the Red Cross we were able to get her to the hospital quickly back then and now they are still helping us as she gets better. Red Cross really cares."

Long term supportive care in the community draws on Red Cross community presence and cares for those who are discharged from formal care.



National Society Capacity Building

	Latin America	Caribbean	Total
Outcome 4: The National Societies of the Red Cross increase their capacity to deliver on programmes and services in future disasters			
Output 4.1: National and local branch response teams are prepared to respond to crisis and emergencies			
# of responding offices/branches/committees or delegations.	193	23	216
# of male volunteers trained (in all trainings).	1,345	217	1,562
# of female volunteers trained (in all trainings).	1,155	390	1,545
# of active male volunteers involved in response efforts.	1,750	243	1,993
# of active female volunteers involved in response efforts.	1,565	434	1,999

Key Achievements

- CREPD was active in creating and implementing a Zika training strategy and revised and developed training of Trainers training package(s) on Epidemic Control, WASH and PSS and Zika Control.
- Inclusion of an online, self-directed Epidemic Control and Zika Virus Control course, included in the CREPD Online Learning Platform (<http://www.crepd.cruzroja.org/elearning>).
- National Societies replicated the trainings at national level and these were utilized to build capacity not only within the Red Cross but also of key stakeholders (for example community health workers, antenatal care providers, airport staff etc).

Challenges

- Translation of a large volume of training materials had to be undertaken, however the transition of a staff member from CREPD to CADRIM aided in this process by understanding how to transfer the training between Spanish and English-speaking regions.

Lessons Learned

- It is recommended that regional reference centers (CREPD and CADRIM) be further engaged at the global level to contribute lessons learned and to adopt new and evolving global approaches within their regional approach.
- IFRC should support improvement of project management skills within National Societies to improve the quality of operations and effective use of resources.

Case study 6: Risk Communication at scale – The Rio Olympics

The Rio 2016 Olympics brought visitors from all over the world into an area exposed to Zika. The Brazilian Red Cross prioritised reaching the public during this time which provided and opportunity not only for reducing the transmission of Zika but was also a campaign that brought strong visibility to the Red Cross.

Volunteers handed out information about prevention in the streets around the Olympic village. Information was accompanied by mosquito repellents.



Under the slogan “For the mosquitoes you are the main attraction”, more than one million people were reached through a massive campaign launched in the streets, in the public transport within the Olympic area and in national and international media.



Quality Programming; Programming support services

Outcome 5: The management of the operation is informed by a comprehensive monitoring and evaluation system

Output 5.1: Establishment of IFRC Regional Vector Control Diseases follow up team

Output 5.2: Continued and detailed assessment and analysis are used to inform the design and implementation of the operation at the national level

Outcome 6: Key decisions of the operation are informed by regular consultation with and participation by the affected people at community level, including national and international stakeholders

Output 6.1: Feedback mechanisms are established and used to inform communication with communities and revise programmes regularly

Outcome 7: Issues of gender equality and other groups with specific needs are considered by the operation.

Output 7.1: Gender, diversity and protection issues will be mainstreamed in this response

Key Achievements

- Intensive follow up support visits in Latin American operating countries allowed for a continuous flow of technical support and reduced risk of slowing activities in the project.
- Materials were produced for people with low literacy and are available in multiple formats and languages. In an example from Guyana, volunteers use their mobile phones when doing house to house visits so that both visual and audio tools can be used for the sight of hearing impaired.
- IFRC has worked to represent the work of Red Cross in Zika through multiple regional and global fora. IFRC regularly shares new materials and tools on the Zika Communication Network, a hub for stakeholders working in Zika across the world. After WHO, and PAHO, IFRC and National Societies have made available the largest number of tools, and communication materials on Zika of any organization. Over 100 organizations globally including UNICEF, WHO, PAHO, CDC, Save the Children and others utilize the platform to access resources on Zika.
- The Americas Regional Office partnered with UNDP, to develop and produce a report, “A Socioeconomic Impact of Zika Virus in Latin America: focus on Colombia, Suriname and Brazil”. This was seen a strong advocacy tool addressing gender and diversity issues and was a good example of collaboration between stakeholders to improve the reach of work on the Zika virus in the Americas. Using the media analysis conducted by UNDP on the report it was able to reach an estimated 800 million people.

Challenges

- Two separate Zika Cells were set up in the Americas following the addition of the English-Speaking Caribbean countries. Although there was some rationale given for setting up a separate cell (a different language, geographical focus, sub-regional group), this led to less coherence within the Americas regional office and uneven support provided to National Societies in the region.

Lessons Learned

- The Zika Operations Team in the Americas was successfully integrated into existing structures of the Regional Office, and this led to continuity of the unit as a health department at the end of the Operation.
- Health management and technical response capacity needs strengthening, and the Americas Regional Office should seek to expand their surge pools with health and management skills and technical skills in epidemiology, and vector control.
- In a global response evaluation planning should happen from the outset with a clear budget and role and responsibilities for moving forward the evaluation set early in the operation. Support from the PMER department from those with expertise in RTE should be sought early.

D. THE BUDGET

[Please find attached.](#)

Contact information

Reference documents



ClickTable
Published documents

4.

- Previous Appeals and updates
- [Emergency Plan of Action \(EPoA\)](#)

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

In the IFRC

- **Americas Regional Office:** Maria Tallarico, Health of the health and Care Unit, email: maria.tallarico@ifrc.org +507 3173086

In IFRC Geneva

- **In Geneva:** Christine Estrada, Operations Support, email: cristina.estrada@ifrc.org +41 22 7304529

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.

www.ifrc.org

Saving lives, changing minds.



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

Disaster Response Financial Report

MDR42003 - Zika Virus Disease Global Response

Timeframe: 01 Feb 16 to 31 Dec 17

Appeal Launch Date: 01 Feb 16

Final Report

Selected Parameters

Reporting Timeframe	2016/2-2018/7	Programme	MDR42003
Budget Timeframe	2016/2-2017/12	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			6,991,574			6,991,574	
B. Opening Balance							
Income							
Cash contributions							
American Red Cross			1,358,182			1,358,182	
Finnish Red Cross			49,862			49,862	
Japanese Government			197,414			197,414	
Japanese Red Cross Society			43,830			43,830	
On Line donations (from Australia - Private Donors*)			83			83	
On Line donations (from Austria - Private Donors*)			1			1	
On Line donations (from Bahrain - Private Donors*)			1			1	
On Line donations (from Botswana - Private donors*)			1			1	
On Line donations (from Brazil - Private Donors*)			2			2	
On Line donations (from Canada - Private Donors*)			46			46	
On Line donations (from China - Private Donors*)			11			11	
On Line donations (from Denmark - Private Donors*)			1			1	
On Line donations (from France - Private Donors*)			33			33	
On Line donations (from Germany - Private Donors*)			9			9	
On Line donations (from Great Britain - Private Donors*)			152			152	
On Line donations (from Hong Kong - Private Donors*)			2			2	
On Line donations (from Indonesia - Private Donors*)			9			9	
On Line donations (from Ireland - Private Donors*)			2			2	
On Line donations (from Italy - Private Donors*)			6			6	
On Line donations (from Japan - Private Donors*)			5			5	
On Line donations (from Kuwait - Private Donors*)			19			19	
On Line donations (from Lebanese - Private Donors*)			2			2	
On Line donations (from Malaysia - Private Donors*)			3			3	
On Line donations (from Mexico - Private Donors*)			2			2	
On Line donations (from Morocco Private Donors*)			6			6	
On Line donations (from Netherlands - Private Donors*)			11			11	
On Line donations (from New Zealand - Private Donors*)			2			2	
On Line donations (from Norway - Private Donors*)			9			9	
On Line donations (from Oman - Private Donors*)			2			2	
On Line donations (from Russia - Private Donors*)			6			6	
On Line donations (from Saudi Arabia - Private Donors*)			170			170	
On Line donations (from Singapore - Private Donors*)			16			16	
On Line donations (from Slovakia Private Donors*)			1			1	
On Line donations (from South Africa - Private Donors*)			36			36	
On Line donations (from Spain - Private Donors*)			11			11	
On Line donations (from Swedish - Private Donors*)			1			1	
On Line donations (from Switzerland - Private Donors*)			30			30	
On Line donations (from Trinidad & Tobago - Private Donors*)			9			9	
On Line donations (from Turkey - Private Donors*)			5			5	
On Line donations (from Unidentified donor*)			7			7	
On Line donations (from United Arab Emirates - Private Donors*)			88			88	
On Line donations (from United States - Private Donors*)			177			177	
On Line donations (from Vietnam - Private Donors*)			1			1	

Disaster Response Financial Report

MDR42003 - Zika Virus Disease Global Response

Timeframe: 01 Feb 16 to 31 Dec 17

Appeal Launch Date: 01 Feb 16

Selected Parameters			
Reporting Timeframe	2016/2-2018/7	Programme	MDR42003
Budget Timeframe	2016/2-2017/12	Budget	APPROVED
Split by funding source	Y	Project	*
Subsector:	*		

All figures are in Swiss Francs (CHF)

<i>Red Cross of Monaco</i>	16,481	16,481	
<i>S. C. Johnson & Son Inc.</i>	28,503	28,503	
<i>Swedish Red Cross</i>	59,670	59,670	
<i>The Canadian Red Cross Society</i>	72,691	72,691	
<i>The Canadian Red Cross Society (from Canadian Government*)</i>	153,083	153,083	
<i>The Netherlands Red Cross (from Netherlands Government*)</i>	272,253	272,253	
<i>United States Government - USAID</i>	3,062,397	3,062,397	88,863
C1. Cash contributions	5,315,340	5,315,341	88,863

Inkind Goods & Transport

<i>S. C. Johnson & Son Inc.</i>	438,521	438,521	
C2. Inkind Goods & Transport	438,521	438,521	

C. Total Income = SUM(C1..C4)	5,753,862	5,753,862	88,863
D. Total Funding = B + C	5,753,862	5,753,862	88,863

* 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			5,753,862			5,753,862	88,863
E. Expenditure			-5,713,048			-5,713,048	
F. Closing Balance = (B + C + E)			40,815			40,815	88,863

Disaster Response Financial Report

MDR42003 - Zika Virus Disease Global Response

Timeframe: 01 Feb 16 to 31 Dec 17

Appeal Launch Date: 01 Feb 16

Final Report

Selected Parameters

Reporting Timeframe	2016/2-2018/7	Programme	MDR42003
Budget Timeframe	2016/2-2017/12	Budget	APPROVED
Split by funding source	Y	Project	*
Subsector:	*		

All figures are in Swiss Francs (CHF)

III. Expenditure

Account Groups	Expenditure						TOTAL	Variance
	Budget	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)				6,991,574		6,991,574		
Relief items, Construction, Supplies								
Shelter - Relief				3,562		3,562	-3,562	
Clothing & Textiles	30,637			32,011		32,011	-1,374	
Food				97		97	-97	
Water, Sanitation & Hygiene	558,212			520,483		520,483	37,729	
Medical & First Aid	1,667			1,709		1,709	-42	
Teaching Materials	97,904			118,787		118,787	-20,883	
Utensils & Tools	1,335			2,160		2,160	-826	
Other Supplies & Services	2,422			302		302	2,119	
Total Relief items, Construction, Sup	692,176			679,113		679,114	13,063	
Land, vehicles & equipment								
Land & Buildings	900						900	
Computers & Telecom	39,388			33,301		33,301	6,086	
Office & Household Equipment	42,764			29,637		29,637	13,127	
Total Land, vehicles & equipment	83,051			62,938		62,938	20,113	
Logistics, Transport & Storage								
Storage	918			1,924		1,924	-1,007	
Distribution & Monitoring	14,661			15,320		15,320	-658	
Transport & Vehicles Costs	73,462			79,141		79,141	-5,679	
Logistics Services	8,963			33,457		33,457	-24,494	
Total Logistics, Transport & Storage	98,004			129,841		129,841	-31,837	
Personnel								
International Staff	975,250			877,036		877,036	98,214	
National Staff	255,909			187,565		187,565	68,344	
National Society Staff	739,434			587,334		587,334	152,100	
Volunteers	68,320			42,860		42,860	25,460	
Other Staff Benefits	24,827			30,062		30,062	-5,235	
Total Personnel	2,063,739			1,724,856		1,724,856	338,883	
Consultants & Professional Fees								
Consultants	380,603			364,584		364,584	16,019	
Professional Fees	65,960			34,170		34,170	31,791	
Total Consultants & Professional Fees	446,563			398,753		398,753	47,810	
Workshops & Training								
Workshops & Training	1,624,522			1,015,366		1,015,366	609,157	
Total Workshops & Training	1,624,522			1,015,366		1,015,366	609,157	
General Expenditure								
Travel	539,163			577,330		577,330	-38,167	
Information & Public Relations	402,406			275,762		275,762	126,644	
Office Costs	165,174			139,057		139,057	26,117	
Communications	62,583			40,178		40,178	22,405	
Financial Charges	37,506			34,434		34,434	3,072	
Other General Expenses	22,407			1,349		1,349	21,058	
Shared Office and Services Costs	259,353			234,689		234,689	24,664	
Total General Expenditure	1,488,593			1,302,800		1,302,800	185,793	
Indirect Costs								
Programme & Services Support Recover	422,282			345,388		345,388	76,895	
Total Indirect Costs	422,282			345,388		345,388	76,895	

Disaster Response Financial Report**MDR42003 - Zika Virus Disease Global Response**

Timeframe: 01 Feb 16 to 31 Dec 17

Appeal Launch Date: 01 Feb 16

Final Report

Selected Parameters

Reporting Timeframe	2016/2-2018/7	Programme	MDR42003
Budget Timeframe	2016/2-2017/12	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)				6,991,574			6,991,574	
Pledge Specific Costs								
Pledge Earmarking Fee	56,142			44,562			44,562	11,581
Pledge Reporting Fees	16,500			9,431			9,431	7,069
Total Pledge Specific Costs	72,642			53,992			53,992	18,650
TOTAL EXPENDITURE (D)	6,991,574			5,713,048			5,713,048	1,278,526
VARIANCE (C - D)				1,278,526			1,278,526	

Disaster Response Financial Report**MDR42003 - Zika Virus Disease Global Response**

Timeframe: 01 Feb 16 to 31 Dec 17

Appeal Launch Date: 01 Feb 16

Final Report

Selected Parameters

Reporting Timeframe	2016/2-2018/7	Programme	MDR42003
Budget Timeframe	2016/2-2017/12	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
BL3 - Strengthen RC/RC contribution to development							
Health	6,991,574		5,753,862	5,753,862	5,713,048	40,815	88,863
Subtotal BL3	6,991,574		5,753,862	5,753,862	5,713,048	40,815	88,863
GRAND TOTAL	6,991,574		5,753,862	5,753,862	5,713,048	40,815	88,863