

DREF Plan of Action

Paraguay: Dengue Outbreak

Operation DREF n°	MDRPY021		
Date of issue:	02 March 2020	Expected timeframe:	3 months
		Expected date of completion:	31 May 2020
Category allocated to the disaster or crisis: Yellow			
DREF allocated: CHF 263,806			
Total number of people affected:	106,127	Number of persons to be assisted:	11,400
Departments affected:	18	Departments targeted:	Asunción and Central
Host National Society presence: The Paraguayan Red Cross (PRC) has 18 branches, 10 sub-branches in the Central Department, 1000 volunteers and 15 staff.			
Red Cross and Red Crescent Movement partners actively involved in the operation: International Federation of Red Cross and Red Crescent Societies			
Other partner organizations actively involved in the operation: National Emergency Secretary (SEN), Ministry of Public Health and Social Welfare, Pan American Health Organization, Municipality (MSPBS), Governments, Departmental Governments, Municipalities.			

[<Click here for the DREF budget and here for the contact information >](#)

A. Situation analysis

Description of the disaster

A significant increase in dengue cases has been reported in Paraguay in recent weeks. According to the Pan American Health Organization's report for Epidemiology Week No. 7 (EW7 until February 15), dengue cases have increased to 106,127 suspected cases, 20,837 new cases (EW7) and 20 people who have died from the disease¹. These figures have surpassed the security ranges and epidemiological trends of past years, with the cases drastically increasing in the first seven weeks of 2020.

On February 18, the Government of Paraguay declared a State of Health Emergency throughout the country in response to the dengue epidemic for 90 days.

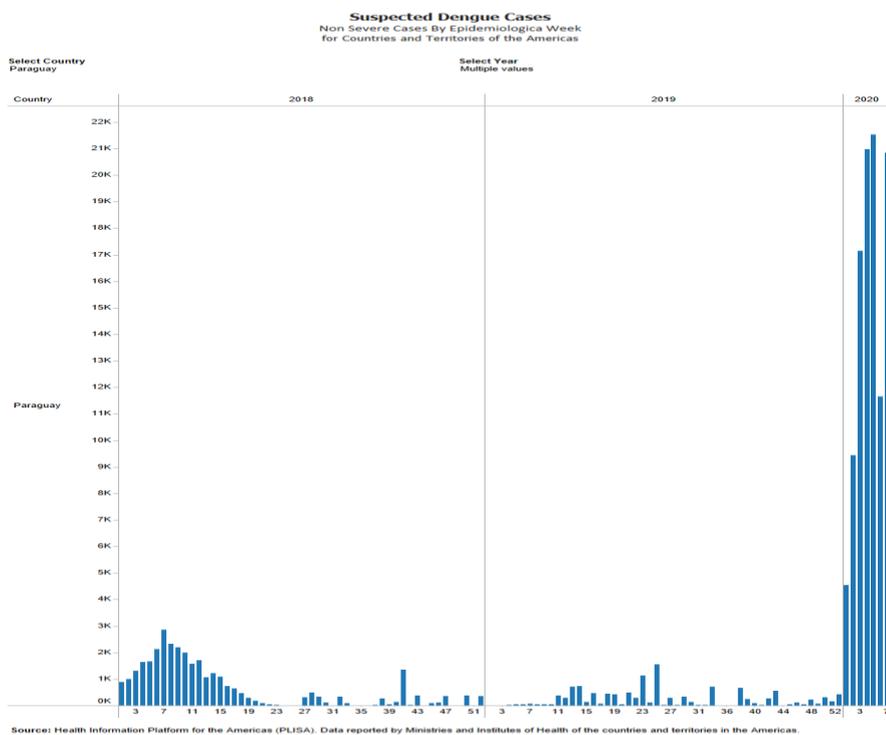
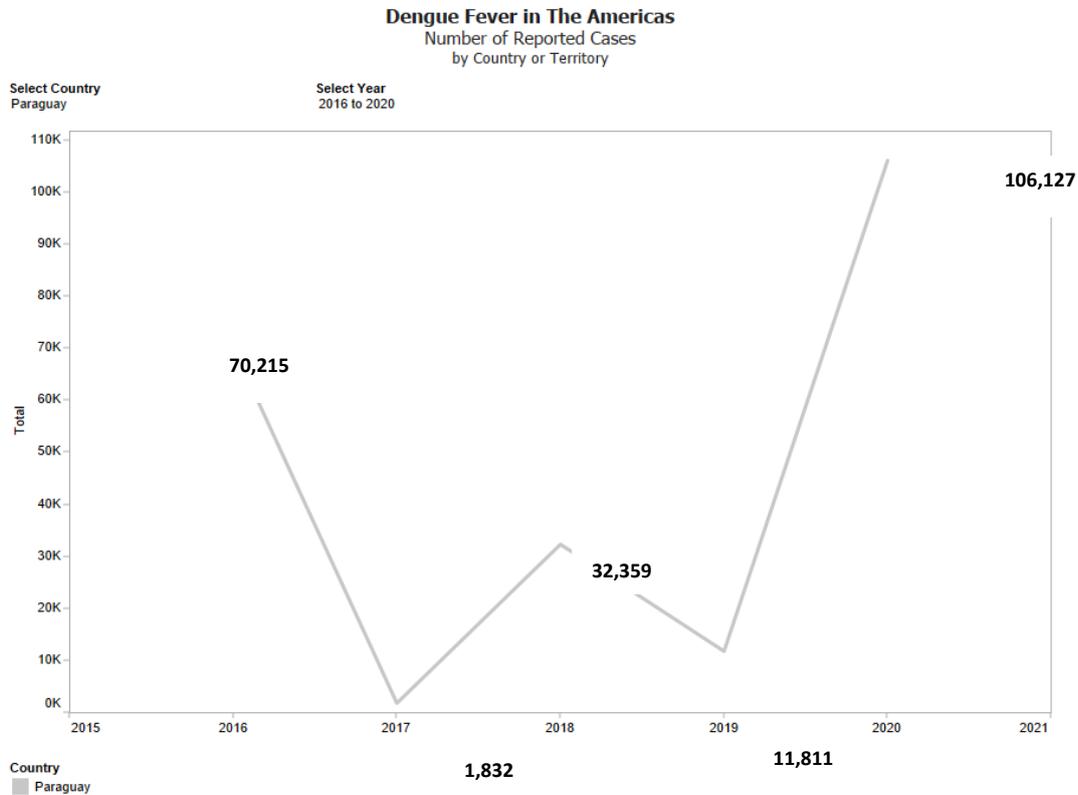
The country's climatic conditions due to rain in the summer period, inadequate waste management, and seasonal reproduction of mosquito have generated a significant increase in cases. There is a circulation of two serotypes DEN-2 and DEN-4, where in previous years only the serotype DEN-2 circulated, both serotypes being of higher risk of severe dengue.



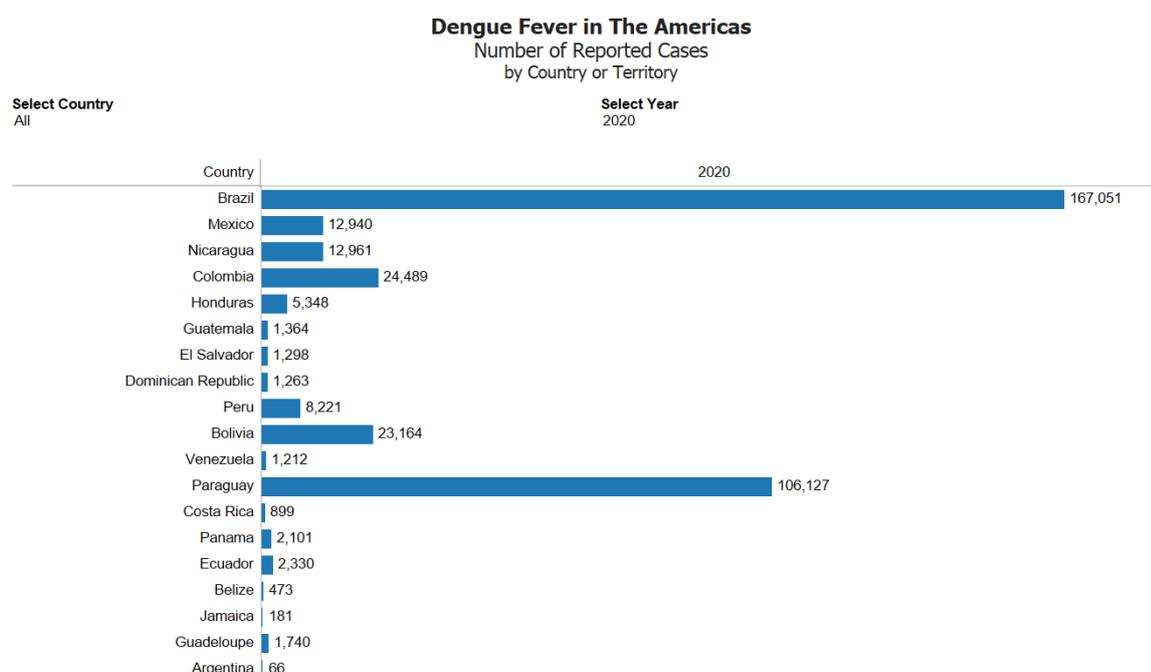
Paraguayan Red Cross volunteers carrying out assessments and identifying breeding sites in one of the Dengue-affected communities. Source: PRC 2020.

¹ PAHO Plisa – Dengue cases.

The Ministry of Health and Social Welfare has been implementing a National Emergency Plan, together with other organizations such as SEN (National Emergency Secretariat) and SENEPA (National Malaria Service), for the prevention and containment of dengue fever in the country. Promotion, prevention, and surveillance activities need to be strengthened in communities, schools, and health services to prevent the mortality caused by the disease.



Trend graph of dengue cases in Paraguay. Source PAHO Epidemiological Week 7.



According to PAHO, in the first four weeks of 2020 in the Region of the Americas, 125,514 dengue cases were reported (12.86 cases per 100,000 population), including 27 deaths, 12,891 laboratory-confirmed cases, and 498 cases classified as severe dengue (0.4%). Countries such as Bolivia, Honduras, Mexico, and Paraguay have reported an increase of two to three times more dengue cases in 2020 compared to the same period in 2019.

Summary of the current response

Overview of Host National Society Response Action

PRC has carried out actions to reduce vector-borne diseases caused by the *Aedes aegypti* mosquito in circulation in the territory that also carries the vector of dengue, zika and chikungunya. Ñeembucú, San Pedro, Limpio, Capiata, Mariano Roque Alonso and Asunción PRC branches have been active since the increase in the number of cases, mobilizing about 50 volunteers and accompanying the departments with highest incidence to carry out prevention actions, such as community surveillance, promotion of hygiene habits, elimination of breeding sites and fumigation.

The National Society had the experience of dealing with dengue fever in previous emergency operations and with the Zika prevention project from 2016 to 2017. In addition to these activities from 2018 to the present, Arbovirus prevention activities have been carried out through the elimination of breeding sites and raising awareness about the risk of illness and death caused by complications of this disease by involving communities, students, community organizations and health systems.

The National Society participates in coordination platforms at the Central and Capital levels, together with the Ministry of Health and Social Welfare (MSPyBS), the SEN, as well as other organizations present in the country. PRC, through its branches, has partnerships with municipal and district organizations, as well as health services that usually manage and mobilize resources to support actions.

Overview of Red Cross and Red Crescent Movement actions in the country

The Regional Coordinator for Disaster Management - South America has been mobilized to Paraguay to support the National Society in the evaluation, planning and coordination of the emergency.

The mobilization of surge capacity with experience in operations management to support the National Society in the coordination of the operation is being considered.

Overview of other humanitarian actors in country

The following partners are carrying out actions:

- The National Emergency Secretariat (SEN): Response through assistance tents in the district hospitals, due to the saturation of health services.
- Ministry of Health: Throughout the health system, in conjunction with SENEPA, report the identification of populations with a high incidence of dengue, and coordinate activities such as cleaning campaigns and epidemiological surveillance through hospitals and community centers.
- National Malaria Service (SENEPA): Fumigation in schools in Asuncion, one time only, before the beginning of classes (early February), cleaning of urban areas and neighborhoods of Asuncion.
- Mayor's Office and Government: have implemented an intersectoral coordination table to carry out actions to prevent and contain dengue.
- Pan American Health Organization: has provided the Ministry of Health with advice and technical support.

Needs analysis, targeting, scenario planning and risk assessment

Needs analysis

Health: As of February 15, there have been 106,127 suspected cases of dengue fever and 20 deaths from dengue. 57.07% of the dengue cases recorded were female, of which 41.04% were in the 20-39 age group, followed by the 5-14 age group with 15.09%. 75% of the notifications were from Asuncion and Central. 91% of the districts in the country have suspected and/or confirmed cases of dengue fever.

In the capital, Asuncion, 100% of the neighbourhoods registered cases. Dengue circulation is identified in the 17 departments, outside Asuncion, with circulation of serotypes DEN-2 and DEN4, predominance of serotype DEN-4 at the country level.

Cases have exceeded 200 notifications per day in the Central Department and Asuncion. Most of the cases come from communities that do not have services such as sanitation and do not have buying capacity to provide themselves with sanitation materials, cleaning, and waste collection. This is also caused by the geographical location (near the river), the living conditions lacking sanitation habits, and the limited access of state organizations to the most affected communities. Another factor influencing the increase of cases is the low levels of community organization and the absence of complementarity with health systems for the early detection of dengue cases.

Water, Sanitation and Hygiene promotion: During the initial assessments, it was observed deficiencies in essential sanitary services, poor environmental sanitation, the absence of drainage systems, and little or no knowledge of waste management by the peri-urban communities.

It was also observed communities settled in urban areas with difficulties for the collection of water, as well as lack of periodicity in waste collection and with it, the proliferation of vectors. This situation is even worse in the peri-urban area, where there are limitations in the drainage network. In other cases, there are latrines or wastewater connections that are evacuated to the open air, further complicating the risk of breeding sites.

In the educational institutions located in the urban and peri-urban zones, the provision of essential services of drinking water and sanitation has an adequate disposition of excreta. Still, there is accumulated solid waste and possible breeding sites in areas surrounding schools.

Environmental sanitation activities will be carried out, including health promotion activities, focusing on the areas with the highest larval reproduction rate. Brigades will be formed to strengthen community capacities so that they can respond to similar situations. Training will be provided on adequate waste management and distribution of family, community, and school cleaning kits.

Targeting

The action plan will cover the departments of Asunción and Central for the care of 11,500 people through prevention and containment of dengue, aiming to reach at least 1280 families, 11 schools and 20 hospitals to reduce the impact of the disease.

The criteria established were the following:

At the community level

- Families in communities with a high incidence of dengue cases.
- Limited preventive actions by the authorities.
- Communities with a low socio-economic level.
- People in vulnerable situations: single parent households, older adults, children and people with disabilities.
- Families with infants sleeping during the day
- Families where member get sick and is necessary to implement contentions to avoid the spread
- Basic community organization

At the hospital level

- Hospitals that provide care for dengue cases.
- Location in high incidence areas.
- Expansion of service and areas for the attention of dengue cases.
- Limited resource capacities for care.

At the level of educational centres:

- Schools located in areas with a high incidence of dengue cases.
- Low community organization.
- Limited preventive measures at the educational level.

Community and school outreach

Department	Municipalities	Schools	Communities	Families	People	Men	Women	Volunteers
								PRC
Asuncion	Asuncion	4	5	400	2000	860	1140	20
Central	Limpio	3	4	320	1600	688	912	10
	Maria Roque Alon	3	4	320	1600	688	912	10
	Capiata	2	3	240	1200	516	684	10
Total		11	16	1280	6400	2752	3648	50

Hospital Level Outreach

Department	People	Men	Women
Asuncion	1250	538	712
Central	3750	1613	2138
Total	5000	2150	2850

Scenario Planning

Some risk situations, which may possibly occur during operations, are described below.

RISK	HUMANITARIAN IMPACT	POTENTIAL RESPONSE

Security issues at the field entrance.	There could be a limitation in the mobilization due to climate factors affecting mobilization to the field. There could also be difficulty in accessing the communities, due to the absence of all-weather roads.	Evaluation and assessment with community leaders and operation coordinators of the different security situations for the field team, operational security, safer access, stay safe, adequate uniformity, means of transport and visibility, prior to entry into the community.
Increase in the number of cases and capacity would be outstripped by the demand.	The possibility of developing severe dengue fever is another latent possibility. Increased morbidity and mortality in people with chronic or immunosuppressive diseases.	The number of cases will influence the planned actions and revision of the plan will be considered depending on the achievements. Increased coordination with governmental and non-governmental agencies to enhance the level of response.
Sustained rains foster the proliferation of breeding sites.	Forecasts could influence the levels of current case values. People continue to get sick, including vulnerable groups.	The plan will be reviewed in case of a sustained increase despite the actions. Additional funds could be requested.

Operation Risk Assessment

Risks considered include:

- Increased seasonal rainfall and conditions for vector proliferation.
- There is an increase of mosquito breeding in communities, putting people and volunteers at risk.
- Health capacities are exceeded.
- Appearance of other diseases transmitted by the same vector
- Limitations of health information at the local level.

To address these potential risks, the PRC will maintain permanent communication with the Ministry of Health, the National Emergency Secretariat, local authorities and the community, to reinforce actions and have a better impact on case reduction. Communities, families and volunteers will also be provided with materials to protect themselves and reduce the risk, as well as intensify waste disposal.

B. Operational strategy

Overall Operational objective:

Contribute to the reduction of the spread of dengue in 16 communities in the departments of Asuncion and Central through health prevention, hygiene promotion, and the implementation of the community mobilization strategy.

Operational Strategy

The PRC has considered the following actions to support 6,400 vulnerable people in the departments of Asuncion and Central and 5,000 hospitalized people. The operational strategy follows the PAHO recommendation, includes risk communication, integrated vector management, and personal prevention measures.

Health

- 1,280 families have information and knowledge about vector control and dengue prevention, including Community Engagement and Accountability (CEA) approach.
- 16 community health brigades trained and equipped.
- 3,840 Long-Lasting Insecticidal Nets distributed to 1280 families.
- 5,000 mosquito nets distributed in 20 hospitals.

Water, Sanitation and Hygiene

- 1,280 families have information and knowledge about waste management and hatchery disposal, including the CEA approach.
- 16 community cleaning kits.
- 11 school cleaning kits.
- 1,280 family cleaning kits.
- 11 school protection kits

The activities will be coordinated jointly with the communities and local authorities. The PRC will provide support in social and community mobilization and the provision of relief items, while local authorities services for waste management.

Operational Support

Human Resources

The operation will have the following basic structure for the development of activities at the national and departmental levels:

- National Headquarters: will be staffed with an Operation Coordinator who will be a General RIT mobilized for three months, an emergency health RIT for three months, a health coordinator, field coordinator, financial-administrative and driver, all of them full-time for three months for the operation.
- PRC branches: will be staffed with the support of the five branches of Asuncion, Ñemby, Limpio, Fernando de la Mora, Mariano Roque Alonso, who will carry out their activities according to the National Regulation of Volunteering of the PRC.

Logistics and supply chain

The operation includes international purchases of Long-Lasting Insecticidal Nets, which will be coordinated with the IFRC Regional Logistics Unit in Panama. Major procurement processes will be managed at the national level by the IFRC to support the PRC. Purchases will comply with standard IFRC procedures. The following kits will be procured:

COMMUNITY WASTE CLEANING KIT		
COMPONENTS / ACTIVITIES	UNIT	QUANTITY
Waste bags (packs of 10)	Unt.	10
Metal trolley, inflatable wheel, 50L	Unt.	5
Garden Broom, metal reinforced with handle	Unt.	10
Half-moon spade	Unt.	10
Bleach 5L	Unt.	10
Machete	Unt.	10

SCHOOL CLEANING KIT		
COMPONENTS / ACTIVITIES	UNIT	QUANTITY

Waste bags (pack of 10)	Unt.	10
Metal trolley, inflatable wheel, 50L	Unt.	2
Plastic bin, pedal, 25L	Unt.	2
Garden broom, metal reinforced with handle	Unt.	1
Bleach, 5L	Unt.	1
Brooms, wooden handle	Unt.	2

FAMILY CLEANING KIT		
COMPONENTS / ACTIVITIES	UNIT	QUANTITY
Bleach, 5L	Unt.	2
Garden Broom, metal reinforced with handle	Unt.	1
Waste collector, plastic, long handle	Unt.	1

COMMUNITY BRIGADE KIT		
COMPONENTS / ACTIVITIES	UNIT	QUANTITY
Hats	Unt.	1
Repellent	Unt.	1
General purpose glove, long leather	Unt.	1
Industrial Mask	Unt.	1
Protective eyewear, adjustable, transparent	Unt.	1
Sunscreen, FP50	Unt.	1
Flashlight	Unt.	1

VOLUNTEER PERSONAL PROTECTION KIT		
COMPONENTS / ACTIVITIES	UNIT	QUANTITY
T-shirts with collar, long sleeves, cotton fabric	Unt.	1
Repellents	Unt.	1
Sunscreen, FP50	Unt.	1
Long leather gloves	Unt.	1
Industrial Mask	Unt.	1
Protective Goggles	Unt.	1
Hats	Unt.	1
Fanny pack 32 cm wide x 15 cm high	Unt.	1
Flashlight	Unt.	1

Communication

The communications department of the PRC will carry out a communication strategy to strengthen its reach at the community level. The material will be adapted for the promotion of healthy habits, prevention and the monitoring of symptoms.

The operation will include the following activities:

- Ensure visibility of the Red Cross
- Support in reviewing communications materials and guidelines
- Identify and develop content to address misinformation and rumours related to the medical care aspects of dengue symptoms, considering community involvement.

- Raise awareness and develop communication materials to mobilize community's through CEA approach
- Public and institutional media coverage

The materials will be reviewed and adapted considering a CEA approach.

Security

As the dengue outbreak expands in the country, it is necessary to review the National Society's security plan, taking into account that protocols used when working at the field should be in place and socialized to protect staff and volunteers in the humanitarian activities. This protection of staff and volunteers is also provided through the acquisition of tools for constant and conscious analysis of security risks when a dengue outbreak occurs and how to act in case a critical incident needs to be managed (Critical Incident Management), through operational security education and training. Insurance and protective equipment will be provided to the personnel and volunteer involved with the operation.

Information Technology

PRC has Open Data Kits (ODK) equipment, which will be used in the complementary field assessments, monitoring and satisfaction survey.

Planning, monitoring, evaluation and reporting

The Project will include the following monitoring, evaluation and reporting mechanisms:

- An internal operational update report 30 days after the start of the operation.
- A beneficiary satisfaction survey
- A portfolio of instruments for data validation and as sources of verification
- A digitized and evaluated database of verification sources
- A final report of the project

The Regional Delegate for Disaster Management and the finance department of the IFRC will make field visits to the project. Monitoring by the national headquarters will be ensured by Executive Directorate.

Administration and Finance

PRC from its Directorate of Administration will be responsible for the management of the funds in the country in compliance with the IFRC standard procedures defined in the Letter of Agreement that will be signed between PRC and the IFRC for the implementation of the project.

For its part, the IFRC through the Finance Department will provide the necessary support to the operation for the review, validation of budgets, bank transfers, technical advice to the national society on the IFRC financial procedures.

C. Detailed Operational Plan



Health

Target people: 11,400 people

Men: 4,902

Women: 6,498

Required (CHF): 88,917

Needs analysis: 106,127 suspected cases of dengue and 20 deaths from dengue have been recorded in the EW7. 57.07% of the recorded cases of dengue were female, affecting 41.04% of the age group 20-39, followed by the age group 5-14 with 15.09%.

Households in the targeted communities and schools will be reached with community-based measures to eliminate breeding sites, protect water tanks, and waste management. This operation aims to reach 1,280 vulnerable households. The PRC will identify the households with the highest level of vulnerability in the target areas.

For schools, cleaning kits will be distributed to reduce vector breeding areas. Public hospitals have been providing coverage for dengue cases; however, they have exceeded their capacity in terms of bed availability and had to set up extra tents and beds to attend to cases.

Dengue brigade training will help control the vectors in the community and may help identify early warning signs and symptoms. The latter could contribute to the timely referral of people to community health centers, thereby reducing the likelihood of severe dengue fever cases or death.

Volunteers and communities will be trained in community-based approaches to manage outbreaks and respond quickly to public health events. The project hopes to reach at least 150 trained volunteers with this activity through training workshops for facilitators in community methodologies (community-based health and first aid (CBHFA) approach), and improved vector control.

Risk analysis: Dengue cases are spreading to other areas and communities, requiring expanded patient care and containment measures.

Population to be assisted: PRC will provide support to 1,280 families (6,400 people) in 16 selected communities at risk in the departments of Asunción and Central to implement prevention and containment measures, and 20 hospitals will receive support with mosquito nets (for 5,000 people).

Programme standards and benchmarks: CBHFA guidelines and epidemic control for volunteers, PRC guidelines. In addition, the norms of the Ministry of Health and Social Welfare will be followed, together with SENEPA and SEN.

AP021	Distribution of Long-Lasting Insecticidal Nets to hospitals that have been attending cases.	
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Water, Sanitation and Hygiene

People targeted: 6,400 people

Men: 2,752

Women: 3,648

Required (CHF): 91,313

Needs analysis:

Inadequate waste management in the communities, the limitations in its collection and elimination, and the presence of rainfall in the country are facilitating the proliferation of the vector, especially in the most densely populated areas. Negative practices of outdoor recycling by families in rural communities promote the breeding sites of the vector. All these factors have generated conditions that are conducive to an increase in vectors.

This situation indicates that potential mortality levels could increase with the dengue outbreak. Actions are required to implement collective vector control actions, such as waste disposal activities, standing water, clean-up of waste management in coordination with local authorities, and supported by the PRC to optimize resources and join efforts to combat dengue.

At the same time, similar actions are required at the level of households and schools in the intervention areas. This can be achieved through the provision of cleaning kits, educational trainings that help change people's behaviour and the adoption of healthier practices based on the reality of people and the local environment.

Risk analysis: The occurrence of seasonal rains, coupled with inadequate waste management in the communities can extend or amplify the risk of dengue infection.

Population to be assisted: 1,280 families (6,400 people) in 16 communities and 11 selected schools at risk in the departments of Asunción and Central will receive support to implement hygiene promotion and solid waste management measures.

Programme standards and benchmarks: Sphere Project. WASH (Water and Sanitation) activities will be carried out in accordance with the PRC guidelines, in its WASH in emergencies programmes; WASH in development and WASH in public health cross-cutting strategy; and Sphere standards.

Strategy for implementation

Requirement (CHF) 83,577

P&B Output Code	S1.1: National Society capacity building and organizational development objectives are facilitated to ensure that National Societies have the necessary legal, ethical and financial foundations, systems and structures, competences and capacities to plan and perform												
	Output S1.1.6: National Societies have the necessary corporate infrastructure and systems in place	<i># of PRC branches involved in this operation Target: 5</i> <i># of PRC volunteers mobilized Target: 75</i> <i>A lessons-learned workshop carried out</i> <i># volunteers are provided with personal protective equipment Target: 50</i> <i>150 volunteers are insured</i> <i>A Security Plan developed</i>											
	Planned activities <i>Weeks</i>	1	2	3	4	5	6	7	8	9	10	11	12
AP042	Recruitment of operational staff (health, field coordinator, financial-administrative-driver x 3 months)	■	■										
AP042	Supporting local branches implementation	■	■	■	■	■	■	■	■	■	■	■	■
AP042	Strengthening the capacity of volunteers through procedures and protocols to prevent risks associated with vector-borne disease	■	■	■	■	■	■	■	■	■	■	■	■
AP042	Follow-up activities	■	■	■	■	■	■	■	■	■	■	■	■
AP042	Lessons Learned Workshop											■	■
AP040	Protection and visibility materials for volunteers involved in emergency response	■	■	■									
AP040	Insurance for volunteers	■											
AP066	Develop a security plan	■											
P&B Output	Output S2.1 Effective and coordinated international disaster response is ensured	A monitoring and operational support mechanism											

Contact information

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

In the Paraguayan National Society

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At IFRC Geneva

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How we work

All IFRC assistance seeks to adhere to the **Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Relief and the Humanitarian Charter and Minimum Standards in Response (Sphere) in the** provision of assistance to the most vulnerable. The vision of the International Federation is to inspire, **encourage, facilitate and promote at all times all forms of humanitarian activities by** National Societies, with a view to preventing **and alleviating human suffering, and** thereby contributing to the maintenance and promotion of human dignity and peace in the world.

The IFRC's work is guided by Strategy 2020 which puts forward three strategic aims:



Save lives,
protect livelihoods,
and strengthen recovery
from disaster and crises.



Enable **healthy**
and **safe** living.



Promote social inclusion
and a culture of
non-violence and peace.

DREF OPERATION

MDRPY021 Paraguay Dengue Outbreak

02/03/2020

Budget by Resource

Budget Group	Budget
Clothing & Textiles	22,100
Medical & First Aid	3,900
Teaching Materials	43,520
Other Supplies & Services	65,020
Relief items, Construction, Supplies	134,540
Transport & Vehicles Costs	5,000
Logistics Services	23,690
Logistics, Transport & Storage	28,690
International Staff	42,000
National Society Staff	12,600
Volunteers	5,425
Personnel	60,025
Professional Fees	1,500
Consultants & Professional Fees	1,500
Workshops & Training	5,200
Workshops & Training	5,200
Travel	10,500
Information & Public Relations	4,000
Office Costs	1,400
Communications	1,350
Financial Charges	500
General Expenditure	17,750
DIRECT COSTS	247,705
INDIRECT COSTS	16,101
TOTAL BUDGET	263,806

Budget by Area of Intervention

AOF1	Disaster Risk Reduction	
AOF2	Shelter	
AOF3	Livelihoods and Basic Needs	
AOF4	Health	88,917
AOF5	Water, Sanitation and Hygiene	91,313
AOF6	Protection, Gender and Inclusion	
AOF7	Migration	
SFI1	Strengthen National Societies	21,407
SFI2	Effective International Disaster Management	58,522
SFI3	Influence others as leading strategic partners	
SFI4	Ensure a strong IFRC	3,648
TOTAL		263,806

