The Federation’s mission is to improve the lives of vulnerable people by mobilizing the power of humanity. It is the world’s largest humanitarian organization and its millions of volunteers are active in 185 countries.

**In Brief**

- This DREF Bulletin is being issued based on the situation described below reflecting the information available at this time.
- A total CHF 68,000 (USD 54,530 or EUR 42,060) was released from the Federation’s Disaster Relief Emergency Fund (DREF) to respond to the needs in this operation, or to replenish disaster preparedness stocks distributed to the affected population, as follows:
  - An initial CHF 50,000 (USD 41,000 or EUR 31,104) was released on 29 January 2007
  - A second amount of CHF 18,000 (USD 14,430 or EUR 11,130) was granted on 2 February.
- This operation is expected to be implemented over 3 months, and will be completed by April 2007; a Final Report will be made available three months after the end of the operation (by July 2007).
- Unearmarked funds to repay DREF are encouraged.

This operation is aligned with the International Federation's Global Agenda, which sets out four broad goals to meet the Federation's mission to "improve the lives of vulnerable people by mobilizing the power of humanity".

Global Agenda Goals:
- Reduce the numbers of deaths, injuries and impact from disasters.
- Reduce the number of deaths, illnesses and impact from diseases and public health emergencies.
- Increase local community, civil society and Red Cross Red Crescent capacity to address the most urgent situations of vulnerability.
- Reduce intolerance, discrimination and social exclusion and promote respect for diversity and human dignity.

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Background and current situation

Paraguay is currently undergoing an epidemiological emergency due to the presence of the Aedes Aegypti mosquito, which carries the dengue virus. Dengue is a viral disease spread by the bite of infected mosquitoes; it is particularly prevalent in South America during the rainy season and symptoms include bleeding of the nose, mouth and gums, accompanied by high fever. Hemorrhagic dengue fever can be fatal.

Dengue in Paraguay is a recent phenomenon, given that it was first detected in 1988-1989 in the capital city of Asunción and the departments of Alto Paraná, Amambay and the Central Region. From the beginning of 2006 to date, 1,976 suspected cases have been reported by the Ministry of Public Health and Social Welfare (MoH). By the end of December 2006, 366 cases were confirmed, and within a month figures indicate a rapid increase in the spread of the disease with 1,873 cases confirmed by laboratory.1

Asunción, with 78 percent of confirmed cases, still has the highest density of infections; however, 50 percent of the country’s sanitary regions are now also affected.2 To date, three people have died of hemorrhagic dengue.

The resurgence of the disease as a serious public health problem is due to a complex mix of factors which are closely linked to social and demographic changes over the last 50 years. The unprecedented growth of the global population has led to high rates of unplanned urbanization and its associated problems, including inappropriate housing and water and sanitation conditions. This is of special importance in tropical developing countries; where optimum conditions are prevail for the spread of diseases transmitted by mosquitoes. An additional important factor is the lack of effective methods to control the spread of vectors in areas where dengue is endemic. Insecticidal fumigation of adult mosquitoes has not proven effective, and has furthermore only served to provide a false sense of security in the fight against the disease.

Measures taken to prevent and control the spread of the virus have included: the elimination of larvae and adult mosquitoes, education of the population on sanitation, and fumigation both inside and around residences. Faced with the possibility of an epidemic outbreak of the fatal hemorrhagic strain of the virus, the MoH through Resolution S.G N°26, declared a nation-wide epidemiological alert on 12 January 2007. This alert was issued due to the rapid circulation of the serotype of the dengue virus, the high percentage of the population susceptible to contracting a second bout of the disease, and the high density of the transmitter mosquito. These facts have jointly urged strict adherence to the measures outlined in the manual of clinical and diagnostic aspects of dengue fever and hemorrhagic dengue.

1 Consultations with local communities and physicians indicate that many self-medicate for symptoms of the disease and are therefore not included in official figures. The number of possible cases may therefore be far greater than confirmed cases.
Red Cross action

The Paraguayan Red Cross (PRC) is undertaking a plan to mobilize volunteers in order to support the work of the MoH to combat the disease. The PRC’s regional and sub-regional branches have been mobilized to undertake specific coordination tasks and to work on the sensitization of local communities. In addition, the Reina Sofia Mother-Child Hospital of the PRC has opened a medical-attention centre for the treatment of both children and adults.

The PRC’s ha developed a Plan of Action that is focused on three key interventions. Firstly, a national sensitization campaign on the prevention of the disease and on the donation of safe blood and awareness-raising at community level. Secondly, in coordination with local authorities and health centres, provision of impregnated mosquito nets to 14 health care centres in Asunción, the Central Department, Alto Paraná, Itapúa, Ñeembucú, Concepción and Amambay. Finally, donation of medical supplies, including blood bags and test-kits, to the medical attention centre of the Mother-Child Hospital.

General criteria for the selection of beneficiaries includes: communities that are directly, and most seriously, affected by the disease and that are the most vulnerable.

The beneficiaries for each intervention are indicated below.

Relief

Objectives planned to carry out relief activities:

Objective 1: Distribution of 1000 impregnated mosquito nets to 14 MoH health centres to protect hospitalized patients.

The provision of impregnated mosquito nets will be made via 14 centres in Asunción, the Central Department, Alto Paraná, Itapúa, Ñeembucú, Concepción and Amambay, as designated by the MoH:

<table>
<thead>
<tr>
<th>Department</th>
<th>Sanitation Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asunción - low-lying flood zones which will attend to patients from four main centres</td>
<td>Zeballos Cué Health Center</td>
</tr>
<tr>
<td>Central</td>
<td>Neemby</td>
</tr>
<tr>
<td>Alto Paraná</td>
<td>10th Sanitary Region</td>
</tr>
<tr>
<td>Itapúa</td>
<td>7th Sanitary Region</td>
</tr>
<tr>
<td>Ñeembucú</td>
<td>12th Sanitary Region</td>
</tr>
<tr>
<td>Concepción</td>
<td>1st Sanitary Region</td>
</tr>
<tr>
<td>Amambay</td>
<td>13th Sanitary Region</td>
</tr>
</tbody>
</table>

The following activities will be carried out in order to achieve this objective:
1. Coordination with the MoH and health centre directors.
2. Storage and transportation of mosquito nets and identification of distribution points.
3. Distribution of mosquito nets by PRC volunteers.
4. Monitoring and evaluation by National Society personnel with the support of the Federation.

**Health**

Objectives planned to carry out health activities:

**Objective 1: Affected communities benefit and increase their knowledge through national public awareness campaigns and community activities on dengue prevention.**

Volunteers from the Paraguayan Red Cross will carry out awareness-raising talks in dengue prevention for the population of the affected communities/districts. Talks will be enhanced through distribution of posters and leaflets to participating families. Prior to the awareness-raising talks, volunteers carrying out this activity will take part in a training workshop that will enable them to replicate the knowledge in the communities. In order to prepare and organize the talks and the training workshops, a RIT member specialized in Health in emergencies will be deployed for a one month period.

Community sensitization will take place in 28 of the most vulnerable communities of the five afore-mentioned regional branches, and in 21 communities of Asunción and the Central Department:

<table>
<thead>
<tr>
<th>Department</th>
<th>No. of Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asunción</td>
<td>5</td>
</tr>
<tr>
<td>Central</td>
<td>16</td>
</tr>
<tr>
<td>Alto Paraná</td>
<td>2</td>
</tr>
<tr>
<td>Itapua</td>
<td>4</td>
</tr>
<tr>
<td>Neembucù</td>
<td>8</td>
</tr>
<tr>
<td>Concepción</td>
<td>8</td>
</tr>
<tr>
<td>Amambay</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>49</strong></td>
</tr>
</tbody>
</table>

The national sensitization campaign will aim to raise the general public’s awareness on dengue prevention and on the need for voluntary blood donation in combating and treating the disease by eliminating prevalent myths and fears due to a lack of sufficient information on the subject. The campaign is based on the premise that a worst-case scenario would involve a greater spread of the hemorrhagic strain of the virus and an acute necessity of blood to effectively treat the rising number of patients. The PRC therefore actively aims to support all preventative measures to combat the spread of the disease.

The national publicity campaign will utilize television, radio and printed press, will cover both rural and urban areas, will target all age groups, and will be transmitted in both of the country’s official languages (Spanish and Guarani) to reach a maximum number of beneficiaries.

The following activities will be carried out in order to achieve this objective:

1. Coordination with government authorities and non-government organizations (MoH, local authorities etc.)
2. Production of publicity materials for distribution in communities.
3. Identification of PRC volunteers to take part in training for trainers workshops on dengue prevention.
4. Development of a workshop on health in emergencies based on dengue prevention topics.
6. Deployment of a RIT member specialized in health in emergencies for a one month period.
7. Elaboration of a sensitization campaign aimed at the public at a national level.
8. Delivery of a national public sensitization campaign, including spots in the media and monitoring of their distribution at a national level.
9. Monitoring and evaluation.

Objective 2: The Paraguayan Red Cross’ medical attention centre opened to treat those affected by the virus benefits from the provision of medications and other supplies required to effectively treat the disease.

Medicine and other medical items (blood bags for extraction and transfusion, test kits, syringes etc.) will be provided to the PRC medical-attention centre in Asunción in order to assist the affected population. These items will be sufficient to treat 400 dengue patients, and to run a 100-person blood-donor programme to treat potential hemorrhagic patients.

Medical attention will be provided to children and adults, in particular from the most vulnerable sectors of society, in order of urgency and on a 24-hour basis.

The following activities will be carried out in order to achieve this objective:

1. Coordination with government authorities and non-government organizations (MoH, local authorities, the Pan American Health Organization {PAHO}, etc.)
2. Quotations and purchase of medicine and medical supplies.
3. Treatment of patients presenting symptoms related to the disease.
4. Referrals to supporting health centres.
5. Sending of samples to be analyzed for the presence of the dengue virus.
6. Monitoring and evaluation.

Coordination
The Paraguayan Red Cross is coordinating on a regular basis with the MoH and will share statistics on existing and potential dengue patients treated at the Mother-Child Hospital. Similarly, at the regional level each branch will closely coordinate with relevant regional assistance centres, as well as with local authorities.

Since the onset of the emergency, the PRC is coordinating with the Lima Regional Delegation, as well as with the Pan American Disaster Response Unit (PADRU), who jointly are providing technical support for the design, organization and implementation of the activities. A Disaster Management delegate from PADRU has been mobilized to Paraguay to support the PRC on the implementation of its Plan of Action and RIT member will be deployed in the coming days.

Communications
The National Society will establish a system of reporting via mass media channels.

A situation report has been issued through the Disaster Management Information System (DMIS) on the global Federation website. The communications plan has been developed to support the additional activities in response to the spread of the dengue virus and has five main target audiences: the media, the Red Cross Movement, beneficiaries, local authorities and donors. The different channels of communication include national media and the PRC and Federation regional and global websites. Special sections will be created on the Federation’s regional website – www.cruzroja.org – as well as on the PRC website. Furthermore, t-shirts and other items with the Red Cross logo will be designed and disseminated among Red Cross volunteers in order to increase visibility.