Paraguay: Dengue and Yellow Fever Outbreak

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

**Period covered by this update:** 12 February to 19 March, 2008.

**Summary:** CHF 78,000 (USD 72,222 or EUR 48,447) has been allocated from the Federation’s Disaster Relief Emergency Fund (DREF) to support the Paraguayan Red Cross (PRC) in a nation-wide dengue and yellow fever prevention and awareness campaign to reach 38,100 families. Unearmarked funds to repay DREF are encouraged.

Due to the present dengue and yellow fever outbreak, the government declared a national state of emergency on 15 February, for the term of 90 days. The PRC has been working arduously in order to assess the immediate needs of the affected people. The PRC has focused the operation on increasing awareness and prevention by performing home visits and educational talks in several vulnerable communities. The PRC has also started to perform vaccination activities and has thus far reached 16,280 families (81,400 people) with the awareness campaign.

This operation is expected to be implemented over three months, and will therefore be completed by 11 May, 2008; a Final Report will be made available three months after the end of the operation (by 11 August, 2008).

**<click here to view contact details>**

Situation

In January of 2008, there was a dengue and yellow fever outbreak reported in Paraguay; exactly one year ago, a similar outbreak left 17 people dead. At this time 550 cases of dengue have been detected, along with 57 suspected cases of yellow fever, according to the General Direction of Vigilance of Health (Dirección

Up until 13 March, the DGVS examined a total of 57 patients with signs of yellow fever. 22 cases of yellow fever were confirmed (11 in the department of San Pedro, ten in the Central department and one in the department of Caaguazu). 23 cases were discarded and the remaining 12 suspected cases are currently under investigation. To date, eight people have died as a result of yellow fever.

On 6 March, the department of Ñeembucu informed the Centre of Inter-institutional Operations (Centro de Operaciones Interinstitucionales - COI), that there were various febrile cases under study with four suspected cases confirmed to date. It was then decided to form a team in order to vaccinate, promote hygiene and sanitation and to destroy the breeding grounds of the mosquitoes Aedes aegypti and haemagogus. House visits are still ongoing, as well as community awareness activities for the prevention of the disease.

The Minister of Health has changed certain yellow fever vaccination campaign strategies, indicating that they will only be administered to adults and children from 1 to 60 years of age and that the vaccinations in high, medium and low risk areas will be done according to the guidelines established by the COI. The Extended Immunization Program (Programa Ampliado de Inmunizaciones – PAI) has delivered 2,399,000 yellow fever vaccines in different regions of the country and has stored an additional 1,045,000. At this time PAI reports to have vaccinated 1,750,000 people since the onset of the outbreak.

According to immunologic studies the yellow fever vaccine (LD17YF) is safe, but two percent of every two million people vaccinated develop the serious side effect described as Acute Viscerotropisc Disease. The Ministry of Public Health and Social Welfare informed there were 192 cases of adverse reactions to the vaccine of which 157 are minor cases, 19 are being studied, seven have been discarded, five are moderate and four are serious.

The dengue epidemic maintains a steady rate of decline since no new cases have arisen in the last few weeks. The general director of the Ministry of Public Health and Social Welfare for the dengue and yellow fever campaign stated that the campaign will continue especially to raise awareness to the communities. There have been 5,636 cases of suspected Dengue reported. However, since people often self-medicate and do not seek medical attention, it is estimated that there are approximately 150,000 unreported cases of Dengue. This confirms the need to continue to increase awareness among the population.

Coordination and Partnerships
The PRC, with support from the International Federation, participated in meetings and community activities in order to coordinate actions to reduce the breeding grounds of the mosquito, to provide vaccines and to organize community cleaning activities. The PRC is part of the COI for the fight against yellow fever. This system was established to respond to emergencies by coordinating all the institutions involved and assuring that all actions are centralized within the national response system. Weekly meetings are held by COI where several government agencies, international agencies such as the United Nations and other public and private institutions gather to coordinate activities.

Communication material with information about prevention, vaccination and early awareness were provided by the Ministry of Public Health and Social Welfare and the Pan American Health Organization (PAHO). This alliance not only provides technical support, but also assures high visibility to all the organizations involved due to the high volume of materials produced and distributed.
Red Cross and Red Crescent action

Since the outbreak alert was issued by the government, the PRC has been working arduously through its local branches: Itapua, Alto Parana, Concepcion, San Pedro Ñeembucu, Ita, Mariano Roque Alonso, San Lorenzo and Nemby. The PRC have started clean-up operations in order to destroy all Aedes Aegyptis and Haemagogus breeding places.

Vaccination activities in the department of San Pedro.
Source: The Paraguayan Red Cross

The PRC local branches have coordinated prevention and awareness activities since the onset of the outbreak. So far they have completed eight yellow fever awareness educational talks in which 195 volunteers from all the local branches participated. From 7 to 9 March, an Emergency Health workshop took place to train facilitators on basic concepts of emergency health management during a disaster.

The PRC is still performing home visits in all the departments mentioned. A total of 2,013 families (10,065 people) have been visited in the Central and metropolitan areas. A total of 11,678 families (58,390) have been visited.

Ever since the beginning of the outbreak, the PRC has mobilized and trained 195 volunteers to support the operation. The Pan American Disaster Response Unit (PADRU) coordinated and mobilized a RIT in order to support the PRC in public health and emergencies activities.

Progress towards objectives

Emergency Health

Objective: Increased awareness and prevention of dengue and yellow fever through the description of the symptoms to the most vulnerable through a country-wide media campaign.

Community awareness (Home Visits, Educational Talks)

The PRC plans to accomplish the following:

<table>
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<tr>
<th>AREA</th>
<th>TARGET</th>
<th>INDICATORS</th>
<th>ACTIVITIES</th>
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</table>
| Health promotion in communities           | 38,100 families (190,500 people) of the 53 communities will benefit by health promotion and orientation. | 38.100 families (190,500 people) will be sensitized on hygiene promotion, dengue and yellow fever prevention and environmental sanitation. | • Coordination and agreements with government and non-governmental authorities.  
• Training of volunteers.  
• Elaboration of visibility material.  
• Coordination of workshops and community activities.  
• Monitoring and evaluation of activities |
**Progress:** Home visits started on 25 February and at approximately three weeks into the operation, 16,280 families (81,400 people) have been reached registering a 43 percent progress rate. The PRC has mobilized and trained 195 volunteers of the 350 originally planned.

The following table shows the results obtained to date:

<table>
<thead>
<tr>
<th>Departments</th>
<th>Projected Families (3 months)</th>
<th>Reached families 25 February – 10 March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dpto. Central y Asunción</td>
<td>18,400</td>
<td>4,602</td>
</tr>
<tr>
<td>Neembucu</td>
<td>N/A</td>
<td>185</td>
</tr>
<tr>
<td>Itapua</td>
<td>5,100</td>
<td>1,690</td>
</tr>
<tr>
<td>Alto Paraná</td>
<td>1,500</td>
<td>192</td>
</tr>
<tr>
<td>San Pedro</td>
<td>11,900</td>
<td>9,411</td>
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<tr>
<td>Concepción</td>
<td>1,200</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38,100</strong></td>
<td><strong>16,280</strong></td>
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</table>

**Impact:** At the beginning of the outbreak, there was a sense of panic among the people since they were not aware of the dangers of yellow fever. The eight yellow fever educational talks clarified many doubts and myths about the disease and the communities understood the importance of being vaccinated. The PRC will monitor and schedule checkups during the following weeks in order to measure and analyze the impact of these actions.

The Disaster Emergency Health Workshop proved to be informative and valuable due to the high frequency of outbreaks during the past few years. With this workshop, the PRC has 19 prepared facilitators to respond to future emergencies.

**Challenges:** The PRC has only a few vehicles for the transportation of volunteers and equipment to the affected areas.

The PRC faced the fact that many experienced volunteers were not available to be immediately dispatched to the field since they have to solicit permission from their employers or centres of study.

**Radio and Newspaper Nationwide campaign awareness on the prevention of dengue and yellow fever**

At the moment, the PRC is developing a nationwide radio and press campaign to raise awareness through key messages to be disseminated through key national radio and newspaper spots and at the community level. They are scheduled to air shortly.

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</tr>
</thead>
<tbody>
<tr>
<td>Community Communication</td>
<td>The entire country, rural and urban areas included, will receive</td>
<td>• Air the radio spot in three radio channels: AM and FM.</td>
<td>• Elaboration of radio spots.</td>
</tr>
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<td></td>
<td>information on health promotion in Spanish and Guarani.</td>
<td>• Radio interviews by doctors and PRC volunteers</td>
<td>• Agreements and alliances with radio stations in Asunción, Central and the</td>
</tr>
<tr>
<td>National radio</td>
<td></td>
<td>• Graphic publication in</td>
<td>rest of the departments.</td>
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<tr>
<td>awareness campaign</td>
<td></td>
<td></td>
<td>• Set guidelines for the media.</td>
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<tr>
<td>on the prevention of</td>
<td></td>
<td></td>
<td>• Monitoring and evaluation of</td>
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<tr>
<td>diseases</td>
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How we work

All International Federation assistance seeks to adhere to the Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations (NGO’s) in Disaster Relief and is committed to the Humanitarian Charter and Minimum Standards in Disaster Response (Sphere) in delivering assistance to the most vulnerable.

The International Federation’s activities are aligned with its Global Agenda, which sets out four broad goals to meet the Federation's mission to "improve the lives of vulnerable people by mobilizing the power of humanity".

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.

Contact information

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