



PAN AMERICAN HEALTH ORGANIZATION

Pan American Sanitary Bureau, Regional Office of the

WORLD HEALTH ORGANIZATION

525 TWENTY-THIRD STREET, N.W., WASHINGTON, D.C. 20037-2895, U.S.A.

TELEPHONE (202) 974-3520

FAX (202) 775-4578

EMAIL: disaster@paho.org

<http://www.paho.org/disasters>

SECOND Earthquake in El Salvador

Updated PAHO/WHO Request for Humanitarian Assistance

14 February 2001

Amount: US\$ 5,000,000

On 17 January, following the **first** earthquake in El Salvador, PAHO/WHO issued an appeal for US\$1,750,000 for emergency health measures. These included maintaining and strengthening immunization, the restoration of the cold chain, and an assessment of necessary emergency rehabilitation measures in health facilities.

Subsequently, PAHO/WHO joined in the formulation and launching of the **UN Flash Appeal**. Responsibilities for overall technical coordination (PAHO/WHO) and operational implementation (PAHO/WHO, UNICEF, UNFPA...) were defined.

On 13 February a **second** earthquake caused 255 deaths, 2,300 injuries, and, contrary to the January seismic event, led to severe damages to rural water systems.

This new appeal in the amount of US\$5,000,000 reflects the current **new emergency** situation. It also **includes** medium-term needs identified in the flash appeal such as ensuring the rehabilitation of water systems and health facilities. The most substantive change is the expansion of the component on water/sanitation reflecting the particular impact of the second earthquake. These activities will be carried out in cooperation with and as a complement to UNICEF efforts.

PAHO/WHO has intensified its country field presence in El Salvador to provide technical advice and support and ensure the timely execution of these activities by the health services and water authorities.

BACKGROUND

On Saturday, 13 January 2001, a strong earthquake measuring 7.6 on the Richter scale struck El Salvador with such magnitude that it was felt in neighboring Honduras and Guatemala and as far north as Mexico City. More than 800 persons lost their lives in the quake and approximately 600,000 were left homeless.

Exactly one month later, on 13 February, another earthquake struck El Salvador. This caused an even greater displacement of a population, whose health situation was already vulnerable, significantly increasing the risk of further deteriorating the already precarious health situation. Another 255 persons lost their lives, 2,300 were injured, 83,000 left homeless and 21 public sector buildings were severely damaged. The health infrastructure already damaged in the first quake was crippled in the resulting quake. The San Vicente Hospital lost all functional capacity during 13 February quake. In contrast to the first earthquake, there was significant damage to water supply systems and in rural areas.

The earthquake occurred slightly more than two years after Hurricane Mitch left a deep impact on Central America, including El Salvador. In addition, serious (but unrelated to Mitch) outbreaks of communicable diseases have and continue to strain the country's health resources. All together, the vulnerability of the country and its health institutions is high.

The cumulative impact of the earthquakes on the health sector is seen in terms of damages to important health infrastructure and in difficulties involved in providing adequate health services and safe drinking water and sanitation to the large number of displaced persons in shelters. The impact of the first quake had severe consequences in the area of mental health, particularly among the most vulnerable segments of the population such as children. This has been magnified by the occurrence of the second—and entirely unexpected—earthquake.

Vector control mechanisms were in place in affected communities that were at risk prior to the earthquake(s) as well as in shelters. These targeted diseases such as dengue, malaria, cholera and diarrheal diseases, as well as those that could emerge due to the high concentration of people in shelters.

El Salvador's disaster response capacity requires strengthening not only at the local level but also in terms of its national management capacity. In this regard, it is imperative to strengthen the national disaster management structure, heighten the country's technical capacity and improve community organization to respond to disasters as early as possible in the rehabilitation phase.

OBJECTIVES

The objective of health cooperation outlined in this appeal in the initial phase of rehabilitation of the health sector is to recover the functionality and ensure that adequate and hazard-resistant health facilities exist. In addition, it addresses the provision of potable water, excreta disposal and solid waste management.

To achieve these objectives, PAHO/WHO will work in the following areas:

- ❑ **Disease control and epidemiological surveillance:** PAHO/WHO will intensify its routine and ongoing surveillance of diarrheal diseases (cholera and rotavirus) and other communicable diseases transmitted by vectors and carriers (leptospirosis) including dengue and dengue hemorrhagic fever by strengthening clinical diagnosis and laboratory capacity. It will ensure a high-quality laboratory network, step up the training of human resources, reinforce control in blood banks, provide laboratory reagents, diagnostic equipment and replace stocks, and particularly provide medicines to prevent and treat diseases.
- ❑ **Rehabilitation of health infrastructure:** following the first earthquake, PAHO/WHO experts in structural and non-structural vulnerability of health facilities joined an ECLAC assessment mission. It will be necessary to assess further the structural (reassess) damages in order to make operational or repair damaged facilities where possible (incorporating disaster mitigation measures) or rebuild others. It is estimated that the cost of making operational 50% of the country's health facilities is US\$2,000,000.
- ❑ **Food safety:** Considering that the majority of the affected population is presently housed in shelters, it is necessary to a) ensure food safety by public education efforts aimed at the household level and b) strengthen the Ministry of Health's laboratory services to guarantee a safe food supply for the affected population, and c) ensure the adequate nutritional value of the food supply in shelters.
- ❑ **Water and sanitation:** Preliminary information indicates that rural water systems have been severely affected by the second earthquake. Activities will include drilling of temporary wells, local production of chlorine, replacement of pipes and pumps and overall water quality control. These activities will be carried out through local water authorities and municipalities and in coordination with complimentary efforts by UNICEF. In addition, the activities of waste control and general sanitation proposed in the initial project will need to be expanded to reach a broader and more rural target population.
- ❑ **Vector control:** El Salvador had been experiencing a dengue outbreak prior to the earthquake. Inadequate solid waste management in earthquake-affected areas could contribute to the proliferation of the vectors responsible for the epidemic.
- ❑ **Mental health:** in addition to the psychosocial effects caused by the first earthquake, this most recent earthquake has only exacerbated the situation. This will require intense efforts working with the population already housed in temporary shelters and those who have lost loved ones or their homes in the following areas: training for mental health workers; mental health services for the

affected population; and technical advice at the national and local level in the development of appropriate educational and informational materials to prevent high-risk behaviors and long-term psychological effects and create healthy living spaces.

- Because El Salvador is highly vulnerable to a variety of disasters, the rehabilitation activities must also include strengthening the existing structure in the Ministry of Health in disaster preparedness, prevention, mitigation and response at both the national and local level and incorporating lessons learned.

**APPEAL FOR INTERNATIONAL ASSISTANCE
FOR THE SECOND EARTHQUAKE**

14 FEBRUARY 2001

Budget Category	Amount in US\$ ** (revised)
Equipment and medical/surgical supplies	300,000
Epidemiological Surveillance and Disease Control	700,000
Rehabilitation of Health Infrastructure	2,200,000
Food Safety	200,000
Rehabilitation of Clinical Laboratories	300,000
Water quality control and environmental health	650,000
Vector Control	400,000
Mental Health	350,000
Disaster Preparedness	500,000
Total	\$5,600,000