

# DISASTERS

## PREPAREDNESS AND MITIGATION IN THE AMERICAS



Issue No. 70

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July 1997

### Medical equipment donations: who sets the standards?

#### Editorial

**T**hose working in the international health field are witnessing increasing donations of medical equipment to developing countries. Sometimes the equipment is new, but more often it is surplus, no longer manufactured, or due for replacement by the latest technology.

Often, the donations are quality items that can be put to good use and meet basic requirements. For example: they are designed to operate on the electrical current of the recipient country; they come with maintenance manuals and the most critical replacement parts; manufacturers' representatives in the recipient country can provide specialized service; local personnel are trained to operate the equipment.

Unfortunately, a large portion of the donated equipment does not meet these standards, but falls into a broad range of categories—from excellent to unusable. In the case of the latter, costs incurred can exceed the original price of the donated equipment. Transportation is expensive; time is wasted by attempting to make the equipment serviceable; and the item will likely end up in a junk pile in a hospital courtyard or have to be placed in a storage facility.

There are various actors in the donation chain, but they can generally be grouped as either direct or intermediary donors. The "direct" donors manufacture items and usually donate new equipment directly to service agencies in a country, as in the case of ambulances sent to hospitals, the Red Cross or similar entities. Another example of a direct donor is a hospital undergoing renovation that makes a direct donation of used equipment to hospitals in the receiving country.

"Intermediary" donors form a much larger group. They are usually non-governmental or voluntary organizations that salvage discarded hospital equipment. In some cases, the organization reconditions the equipment; in other cases it is sent "as is" to the recipient. There are also national institutions that make direct contacts in donor countries to request equipment.

The relationships in the donation chain can be complex, and tools are needed to improve the way donations are made and received. While some donor countries have established criteria to ensure higher quality in their donations, few recipient

(cont. on pg. 7)



Guidelines are helpful, but daily working relationships can also improve donation practices.

Photo: PAHO/WHO

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# News from PAHO/WHO



**An International Meeting on Harnessing the Internet for Disasters and Epidemics** will take place 18-21 November in Santa Fe de Bogota, Colombia. Organized by the World Health Organization, the Pan American Health Organization and the Ministry of Health of Colombia, the three-day meeting will be followed by one day of optional hands-on workshops on practical uses of the Internet. The meeting will feature best practices from a variety of sectors and offer participants the chance to discuss and make recommendations on improving the way the Internet is used to manage crisis situations. Up-to-date information will be placed on the Meeting Web site: <http://www.paho.org/english/disaster.htm> which offers on-line registration and allows you to sign up for updates by e-mail. Questions? Contact [crisis-internet@paho.org](mailto:crisis-internet@paho.org)

## New Issue of Hospital Newsletter Published

*Safer Hospitals for the 21st Century* is a periodic bulletin of news, publications and articles on disaster mitigation strategies for health care facilities in Latin America and the Caribbean. Begun in 1996, it promotes the efforts of countries in the Americas to safeguard these critical facilities, primarily against the impact of sudden-onset disasters such as earthquakes and hurricanes. To receive a copy of the latest issue and be put on the mailing list, write to PAHO (see page 8). □

## International Advisory Group on Hospital Safety Meets in Mexico

A renowned group of six international experts met in Mexico City in July to form an advisory group on disaster mitigation for health facilities. The group's aim was to promote the recommendations and goals adopted at the International Conference on Disaster Mitigation in Health Facilities (Mexico, February 1996; complete text available on the Web at <http://www.paho.org/english/ped/pedcm1en.htm>) and to establish work-

## New Disaster Office in the Dominican Republic

PAHO/WHO, with support of the Government of France, has assigned a disaster preparedness expert to its country office in the Dominican Republic. Dr. Fabien Asselin de Willier will oversee activities in this country, Haiti and Cuba. He can be reached at OPS/OMS, Apartado 1464, Santo Domingo, Dominican Republic; Fax: (809) 544-0322; e-mail: [asselienf@paho.org](mailto:asselienf@paho.org). □



ing guidelines to orient hospitals and other health facilities on mitigation measures such as vulnerability or risk analyses. The group also reviewed new disaster mitigation training material and made recommendations on future training strategies, including curriculum content, target audience and duration of courses. Three observers—an architect, a physician and a public works engineer—also attended the meeting. □

## Discover What's New from CRID on the Internet

Have you visited CRID's new Web site yet? If you haven't, you're missing out on important information resources available to any user with Internet access. Among the most frequently used:

### • New on-line search function

DESASTRES is the database used to index all documents that reach the Center. Today, it contains more than 10,500 technical documents, 60% of which are in Spanish. Now you can locate the latest information available in the CRID on a certain topic using a simple search engine on the World Wide Web. For expert and enthusiastic explorers, an advanced option is available for more complex searches. No longer do you have to write to ask what documents are available on hurricanes, the El Niño phenomenon or earthquakes in Colombia. Now you can find out for yourself.

### • Frequently Asked Questions

This section answers the 14 most common questions that users pose to the CRID. It also explains how to obtain information, the cost of ser-

vices, how to search for what you need, and how to receive copies of the BIBLIODES series or the DESINDEX.

### • Important News

New meetings, publications, electronic discussion groups—all of interest to those working in the field of information as it relates to disasters and emergencies in Latin America and the Caribbean—is found in this section on News and Happenings. Users are invited to contribute to this section by sending news of regional interest.

### • Full-text Documents

Little by little, more technical publications are being made available in their full-text version. CRID will support this type of access, because it is easier and quicker for users and substantially reduces costs. Users are encouraged to download and print these books, articles, congress proceedings, manuals, etc. and photocopy and distribute them locally. Visit this section of CRID's Web site to consult documents from the International Conference on Hospital Mitigation in Health Facilities,

the International Seminar on Preparedness for Chemical Accidents and others. A manual on MicroIsis (the UN-standard software used to classify documentation) and a Guide for Creating Documentation Centers are also waiting for you.

### • Links to other Web sites of interest

Besides providing access to the home pages of CRID's partner agencies, you can use this site to learn about and visit an wide range of World Wide Web sites related to disasters and emergencies in Latin America and the Caribbean and worldwide.

These are just a few of the reasons to visit CRID's new Web site and add it to your list of bookmarks. □

# Other Organizations

## IDNDR Announces Theme of Next World Day

*Water: Too much . . . too little . . . Leading cause of natural disasters* is the theme of the International Decade for Natural Disaster Reduction's upcoming World Disaster Reduction Campaign. The high point will be celebrated on 8 October—World Disaster Reduction Day. Reducing the social and economic impact of floods and drought is possible, and the key to reducing vulnerability to disasters is to link natural disaster issues to sustainable development. The IDNDR will help organizations and agencies to promote this campaign in several ways:

- *Internet Conference*: a forum for debating the social and economic impact of water-related disasters, beginning 15 September and running through 15 October
- *Local exhibits*: a series of posters is being developed and will be available from the Secretariat
- *Media*: complementary materials for national press kits
- *Events*: guidelines and ideas for local celebrations

For more information, to learn the electronic address of the Internet Conference or to request materials, contact IDNDR Secretariat, Palais des Nations, CH-1211, Geneva 10, Switzerland, fax: (4122)733-8695; e-mail: [idndr@dha.unicc.org](mailto:idndr@dha.unicc.org). In the Caribbean, contact Helena Molin Valdes, IDNDR Regional Representative, Apartado 3745-1000, San Jose, Costa Rica, fax: (506) 257-2139; e-mail: [hmolin@undpcos.nu.or.cr](mailto:hmolin@undpcos.nu.or.cr) □

## FEMA Announces Resident Courses

The U.S. Federal Emergency Management Agency's Emergency Management Institute has published a brochure of Resident Courses offered between October 1997-September 1998. Courses are divided into curriculum tracks which include disaster mitigation, response and recovery, preparedness, and simulation and exercises, among others. Contact: National Emergency Training Center, 16825 S. Seton Avenue, Emmitsburg, Md. 21727; fax: (301) 447-1598; e-mail: [emi@fema.gov](mailto:emi@fema.gov) □

CRID, the Regional Disaster Information Center, is a multiagency project whose purpose is to facilitate access to disseminate technical and scientific information on disasters.





# Member Countries



Looking for information about the El Niño

phenomenon? This web page has links to many sites:

<http://www4.salud.org.ec/Pedecu/nino.htm>

Includes contingency plans from the Ministries of Health of the member countries of the Convenio Hipólito Unanue.



Would you like to keep up to date with the SUMA (Supply Management) Project?

Visit the web page on Internet at:

<http://www.netsalud.sa.cr/ops/suma>

and you will find news on recent courses in addition to all the information and documentation located in this site.

## Caribbean: Summit Recognizes Disaster Preparedness and Response

Disaster preparedness and response was an agenda item at the Caribbean/United States Summit Partnership for Prosperity and Security in the Caribbean, held in Barbados in May. Attendees “recognized the important role of preparedness and mitigation in reducing the vulnerability to natural disasters . . . pledged to continue to coordinate our efforts and improve our ability to detect, monitor and respond to natural disasters . . . and affirmed the priority of investment in planning, preparedness and mitigation initiatives, to strengthen the capacity of countries in the region to protect themselves from disasters and to decrease the need for emergency response resources in the future.” Among the agreements reached at the Summit:

- Caribbean nations will encourage effective building design and construction standards through promotion of the Caribbean Uniform Building Code (CUBIC);
- the Caribbean and the United States will develop and promote common search and rescue protocols to govern medical evacuations and support logistics for humanitarian supplies;
- the development of mechanisms and procedures for civil-military, public and multi-country cooperation in planning joint exercises and mutual assistance for response to natural and technological disasters. □

## Dominican Republic: News from the National Mitigation Committee

Under the auspices of the Caribbean Disaster Mitigation Project (funded by the OAS and USAID), the Disaster Mitigation Committee of the Dominican Republic is publishing a bimonthly newsletter (available by fax) of their activities. To subscribe, contact Comité Dominicano de Mitigación de Desastres, Calle Ramón Santana No. 43, Zona Universitaria, Santo Domingo, Dominican Republic, fax: (809) 687-6806; e-mail: [m.desastre@codetel.net.do](mailto:m.desastre@codetel.net.do). □

## Central America: CEPREDENAC Publishes E-Mail Newsletter

CEPREDENAC, the Center for Prevention and Coordination of Disasters in Central America is publishing a weekly, Spanish-language e-mail bulletin of happenings—meetings, studies in progress, news throughout the region—in the Central American disaster community. An excellent, inexpensive initiative. To subscribe, send an e-mail to [cepreden@sinfo.net](mailto:cepreden@sinfo.net). □

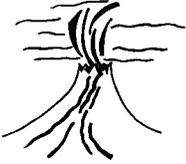
## Panama: Interagency Disaster Team Officially Formed

The U.N. Disaster Management Team (DMT) is made up of the following U.N. agencies in Panama: UNDP, PAHO, UNESCO, UNICEF, UNFPA, the U.N. Information Center, and the WFP. The Team’s purpose is to strengthen interagency coordination mechanisms and create an effective joint response capacity. The DMT is appointing focal points and will coordinate not only among themselves but with national and regional disaster agencies. For more information contact Sra. Alba Villarreal, UNDP Resident Representative, Apartado 6314, Panama 5, Panama; fax: (507) 263-1461; e-mail: [pan@undp.org](mailto:pan@undp.org). □

## Venezuela: Seminar Revisits Caracas Earthquake 30 Years Later

A three-day seminar was held in Caracas in late July to discuss the lessons learned from the 1967 earthquake and analyze the present and future situation of disaster preparedness, mitigation and response in this capital of 3.4 million people. The seminar also dealt with international technical cooperation policies regarding research and its application to studies of the reduction of seismic risk and strategies for reducing risk in the 21st century. For information on the outcome of the seminar, contact: Teresa Guevara at fax: (58-2) 793-9853, e-mail: [tguevara@reacciun.ve](mailto:tguevara@reacciun.ve). □

## Recent Disasters in the Region



**MONTSERRAT** The present volcanic activity on the island of Montserrat started in July 1995. The volcano is located in the south of this tiny island and so is the capital, Plymouth. The volcanic activity has forced the evacuation of the capital where most of the island's infrastructure is located; the island's only hospital has had to be abandoned along with many of the schools, government offices, businesses, groceries, commercial banks and most places of employment for the population. The main fuel storage depot is also located in the capital.

In addition to Plymouth, most of the southern half of the pear-shaped island had to be evacuated also. The conditions which exist are very difficult because evacuated persons must be housed in the smaller north of the island where there is a severe lack of infrastructure and housing. Many persons have been housed in temporary overcrowded shelters for almost two years. At present, there are approximately 1,500 persons living in shelters. Life on Montserrat has been completely disrupted. Before the volcanic activity started two years ago, the population of the island was approximately 12,000 persons. This figure now stands at less than 6,000.

The most serious eruption to date occurred on June 25, 1997, when, for the first time, there were injuries and deaths. This eruption resulted in widespread destruction of property, livestock and crops, and forced the closure of the island's only airport which still remains inoperable today. This eruption resulted in 6 casualties and 10 deaths as well as a difficult search and rescue operation for more than 20 missing persons.

The health services have been seriously disrupted: make-shift facilities not designed for provision of health care have been converted for this use and health staff, like everyone else, have been subject to the difficult conditions on Montserrat. Some health staff have left the island and others have lost their property and homes. Most Caribbean Countries have been making health personnel and hospital-bed space available to Montserrat to fill the needs in health care. PAHO and CDERA have been coordinating the temporary staff replacements coming from other islands. Available health services have been scaled down to suit the facilities in use at present as well as the limited staffing available for these facilities.

Over the period August 3-5, 1997 further pyroclastic eruptions occurred causing some injuries and loss of property requiring the evacuation of more persons.



**XICO** The latest major activity of the Popocatepetl volcano, 40 miles east of Mexico City, occurred on 30 June when the volcano threw ash 12 km into the air, interrupting national and international air traffic into and out of Mexico City for 12 hours. Intermittent episodes continue and local communities have stepped up disaster preparedness measures: improving access roads and escape routes and installing a satellite telephone network in communities closest to the volcano should cable phone service be interrupted.

Mexico's National Disaster Prevention Center (CENAPRED) has mounted a network of remote stations to measure seismic activity, deformations occurring on the flanks of the volcano and to serve as a central data collection point. Activity is being monitored round the clock and a "code yellow" alert is in effect, which involves intense surveillance and preparation of evacuation procedures. "Code red" alert signifies imminent risk and evacuation.

An estimated 150,000 inhabitants live in a 15 to 20 km perimeter around the volcano. Despite this, the population in communities closest to the volcano continue their normal routines.



**VENEZUELA** Northeastern Venezuela was struck by an Ms 6.8 earthquake on July 9th, 1997. This earthquake, which was felt as far away as Caracas, some 450 west of the epicenter, was located close to the town of Casanay. However, Cariaco, 15 km west of Casanay, suffered more damage, and the collapse of two 2-3 story school buildings was responsible for most of the casualties. The number of casualties is unofficially reported to be 80. For complete scientific and technical information on the geological characteristics of this earthquake, contact Earth Sciences Department, FUNVISIS, by fax: (58-2) 257-9977 or e-mail: faudem@funvisis.internet.ve.

One interesting aspect of the post-disaster activities was the mobilization of the SUMA Team (SUMA is the computerized relief supply management program). The team left for Cumana on 12 July, taking with them only the SUMA diskettes, some blankets and caps and the SUMA labeling tapes. The SUMA system was up and running in 12 hours and all material support that was sent to the affected area passed through the central SUMA staging area located at sports stadium. The community was mobilized and played an important role. In less than a week, 150 tons of food and water and 200 tons of clothing transmitted through SUMA in Cumana, and a similar amount went through the SUMA system in Cariaco. For more information contact: Dr. Edgardo Acosta, SUMA Project Manager, fax: (506) 257-2139; e-mail: suma@paho.org or Dr. Ali Gil Gonzalez, Director of Civil Defense of the Ministry of Health in Venezuela, fax: (58-2) 484-3705; e-mail: agil@razetti.mh.gov.ve.



# Review of Publications

## Disaster Mitigation in Health Facilities: New Training Material

*Lessons Learned in Latin America on Disaster Mitigation in Health Facilities: Aspects of Cost-Effectiveness* is a joint publication of PAHO and the United Nations Department of Humanitarian Affairs/International Decade for Natural Disaster Reduction. The book analyzes the cost-effectiveness of disaster mitigation measures adopted in hospitals and focuses on geological disasters. An entire chapter is devoted to analyzing the advantage of using a cost-effectiveness model over a cost-benefit model to measure the impact of mitigation measures in hospitals. It also offers a wide variety of examples from Latin American countries where vulnerability studies and retrofitting projects have been carried out.



*Non-Structural Seismic Vulnerability in Health Facilities.* How vulnerable are non-structural elements in hospitals (windows, shelves, lighting fixtures and others) to the effects of earthquakes? This is the topic of a new set of slides on the seismic vulnerability of non-structural elements in hospitals. Past experience in hospitals and other essential buildings in the aftermath of an

earthquake demonstrates that just because there is little damage or low structural vulnerability, this will not ensure that the health care facility will continue to function. It is also essential to consider non-structural elements (in addition to organizational aspects) in evaluating the performance of these critical buildings.

—Contact the CRID (see page 8) for information on ordering this new material (available in Spanish only). The publication can be downloaded from PAHO's web site. From the Spanish version, click on *Informes Especiales*.

## Internet, Telematics and Health

Sosa-Iudicissa, M. et al, Ed.

Presents a global view of the potential of the Internet and the role of informatics in health care. Offers a rigorous academic, political, and professional approach to the health-related impact of informatics, from first-hand experiences around the world to practical guidance on how to begin using the Internet or enhance its use in the health care field. Includes informatics and telematics applications available to medicine and examples of how people with a health concern are using the Internet in both industrialized and developing

(cont. on pg. 7)

## Upcoming Meetings

### October

**8-11** I Latin American Forum on Disaster Management, sponsored by the Center for Health Education in São Paulo, Brazil. During the forum, a meeting for voluntary agencies in disaster situations will be held, and a simulation exercise of an aviation emergency will also take place. Portuguese only. Contact Centro de Educação em Saúde do SENAC-SP, Av. Tiradentes 822, Luz/São Paulo, Brazil, fax: (011) 227-3431. □

**28-30** Prevention, Preparedness and Response '97 will take place in Toronto, organized by the Major Industrial

Accidents Council of Canada (MIACC), the UN Environment Program and the University of Waterloo. Contact MIACC at fax: (613) 232-4915 or e-mail: miacc@globalx.net □

### November

**12-14** The II International Seminar on Disasters, Health and Communities will be held concurrently with the I Iberoamerican Congress on Emergency Medical Services in Viña del Mar, Chile. Sponsored by national and international agencies, the meetings will cover multi-sectoral aspects including education, economic and social development, urban

planning, and psychological support. Contact: Dr. Pedro Olivares, Congress Director by fax: (56-32)916-626 or e-mail: polivare@ctc-mundo.net □

**19-21** The II Latin American Conference on Chemical Accidents will take place in Buenos Aires, Argentina, sponsored by the Center for Information on Chemical Emergencies (CIQUIME). Modules include prevention, mitigation, response and preparedness to reduce the destructive effects of these events. Contact CIQUIME, Av. San Pedrito 220, 1406 Buenos Aires, Argentina, fax: (54-1) 613-3707; e-mail: postmaster@cique.sld.ar □

## Medical Equipment Donations

(from pg. 1)

countries have their own standards for what they will accept. The guiding rule for beneficiaries is “never look a gift horse in the mouth.”

### How can standards be applied to the donation process?

The World Health Organization is proposing guidelines for donating medical equipment, based on the best practices developed by certain donor countries. They are grounded on four core principles:

- health care equipment donations should benefit the recipient to the maximum extent possible;
- a donation should be given with full respect for the wishes of the recipient and their authority within the health system, and be supportive of existing health policies and administrative arrangements;
- there should be no double standards in quality: if the quality of an item is unacceptable in the donor country, it is also unacceptable as a donation;
- there should be effective communication between the donor, the recipient authority and, whenever possible, the end-user, before, during and after the donation.

These principles stand for mutual respect between donors and recipients. However, when translated into guidelines, problems might arise that, at the time of donation, will make the principle of effective communication difficult.

### Are guidelines desirable?

The Pan American Health Organization and InterAction, a coalition of private voluntary organizations, recently hosted a workshop to examine issues concerning medical equipment donations and to offer suggestions to improve the proposed WHO guidelines. More than 20 representatives from NGOs and recipient countries in Latin America and the Caribbean attended. Concerns expressed during the workshop are outlined below.

Donors, and, in certain cases, recipients, viewed the guidelines as a potential hindrance to the donation process. In certain cases the guidelines might be interpreted so literally as to reinforce bureaucratic delays in the arrival of donated equipment, resulting in missed opportunities to meet needs of the final beneficiary. Workshop participants noted that such delays would discour-

age donors from sending equipment to certain countries.

The guidelines generally assume an ideal situation that, in many cases, does not reflect the reality of the ongoing, daily work involved in the donation process or the contacts that can take years to establish. These working relationships, in the final analysis, result in improved donation practices.

It is critical that donors and recipients can consult a document that compiles the “best practices” for medical equipment donations. Workshop participants suggested that a term other than “guidelines” be used for this instrument. Despite the fine intentions behind the proposed guidelines, institutionalized standards that result in excessive centralization or inflexibility regarding quality controls could have adverse results.

By preparing the draft guidelines on standards for the donation of medical equipment, WHO deserves credit for having initiated communication among the various actors involved. Continued dialogue is essential for reaching feasible solutions and creating a climate of understanding about the donation process.

PAHO proposes that a follow-up, “virtual workshop” take place via the Internet. This dialogue would address topics such as: the quality and type of information to be produced about donations; the concepts of “appropriate technology” and “quality standards;” the use or reuse of abandoned equipment; official channels to be used for contacts; pros and cons of centralizing donations; and preparation of national guidelines for the receipt of donations. □

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## Review of Publications

(from pg. 6)

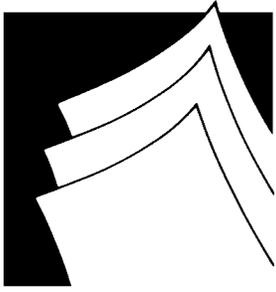
countries. A CD-ROM containing a directory of health-related sites on the World Wide Web is enclosed.

—US\$79.00 Send orders with payment to: PAHO Publications Sales and Distribution Center, P.O. Box 27, Annapolis Junction, Md. 20701-0027, fax:(301) 206-9789.

### Proceedings of the Regional Symposium on Emergency Preparedness and Chemical Disasters: A Challenge for the XXI Century

Pan American Health Organization. 1997, 261 pp.

Full-text version of all seven technical papers can be downloaded directly from PAHO’s World Wide Web site (available in WordPerfect 5.1 format only). Visit <http://www.paho.org/english/ped/ped-chem1.htm> □



# Selected Bibliography

The articles listed in this section may be of interest to health professionals and others responsible for disaster preparedness, mitigation and relief. They have been reproduced and recently added to the collection of articles available from the Editor of this Newsletter. A complete list of reprints is available upon request. Please quote the reference code listed to the left of the publication title when requesting articles.

- U.4** Swenson, Cynthia C. et al, "Impact of a natural disaster on preschool children: adjustment 14 months after a hurricane," *Am. Journal of Orthopsychiatry*, Vol. 66, No. 1, pp. 122-30, January 1996.
- U.5** Howard, Michael J. et al, "Infectious disease emergencies in disasters," *Emergency Medicine Clinics of North America*, Vol. 14, No. 2, pp. 413-28, May 1996.
- U.6** Quarantelli, E.L., "Ten criteria for evaluating the management of community disasters," *Disasters*, Vol. 21, No. 1, pp. 39-56, 1997.
- U.7** Levitin, Howard J. and Henry J. Siegelson, "Hazardous materials: Disaster medical planning and response," *Emergency Medicine Clinics of North America*, Vol. 14, No. 2, pp. 327-48, May 1996.
- U.8** Malilay, Josephine et al, "Public health surveillance after a volcanic eruption: Lessons from Cerro Negro, Nicaragua, 1992," *Bulletin of PAHO*, Vol. 30, No. 3, pp. 218-26, 1996.
- U.9** Cobo Plana, Juan A., "La respuesta de Jaca en la tragedia del 7 de agosto de 1996 en Biescas. Especial referencia al operativo relativo a los fallecidos y sus familiares," *Boletín de Información, Ministerio de Justicia de España*, Nos. 1784-85, pp. 5-38, November 1996.

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Correspondence and inquiries should be addressed to:

The Editor  
Disasters: Preparedness and Mitigation  
in the Americas  
Pan American Health Organization  
525 Twenty-third Street, N.W.  
Washington, D.C. 20037, U.S.A.  
Tel: 202-974-3525  
Fax: 202-775-4578  
E-mail: [disaster@paho.org](mailto:disaster@paho.org)  
<http://www.paho.org/english/disaster.htm>

## CRID

Regional Disaster Information Center  
Apdo. 3745-1000, San José, Costa Rica  
Fax: (506) 231-5973  
E-mail: [crid@netsalud.sa.cr](mailto:crid@netsalud.sa.cr)  
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