

# DISASTERS



## PREPAREDNESS AND MITIGATION IN THE AMERICAS



Issue No. 73

News and Information for the International Disaster Community

July 1998

### Less Paper and More Bytes? Let the Reader Decide!

*You normally won't read about PAHO on page 1, but just this once we'll use this editorial to talk about the newsletter, its readers and the future.*

**T**he Pan American Health Organization is quickly approaching the century mark—in just four years the Organization will mark its 100th anniversary. Founded in 1902 primarily to stem the spread of communicable diseases among travelers, today PAHO is made up of 35 Member Countries in the Western Hemisphere and addresses virtually all aspects of public health.

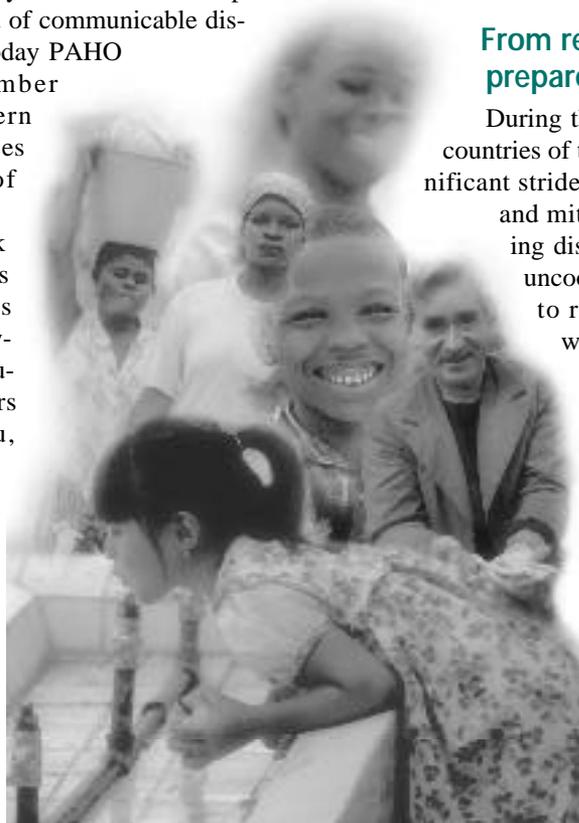
Within this framework of public health, PAHO's Emergency Preparedness Program is a relative newcomer. A series of particularly destructive disasters in the Americas (Peru, 1970; Nicaragua, 1972; Guatemala, 1976) prompted PAHO's Ministers of Health to pass a resolution in 1976 creating the Program. The following year it was launched, and this year celebrates its 21st anniversary. Despite having just reached the "age of maturity," the Program is sure to continue in one form or another as long as PAHO continues to serve the Region's

public health needs. Its strength and success are due, in part, to a clear understanding of who it serves: national counterparts in Latin America and the Caribbean.

#### From response to preparedness to mitigation

During these past two decades, the countries of this Region have made significant strides in disaster preparedness and mitigation. Early on, managing disasters meant launching an uncoordinated, ad-hoc response to rescue victims. This task was usually left to civil defense or similar agencies. By the early 1980s, countries began embracing disaster preparedness—preparing, incorporating and testing plans for different situations—and investing in training their human resources. By the time the Mexico City earthquake occurred in 1985, disaster preparedness was the norm in most countries, and especially within the Ministries of Health.

But the Mexico earthquake also marked a turning point in disaster man-



PAHO's Emergency Preparedness Program has a clear sense of who it serves: the preparedness and mitigation community in its member countries. This constituency's needs will help determine how news and information will be circulated.

*Photos: PAHO/WHO*

*(cont. on pg. 7)*

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# News from PAHO/WHO

## PAHO/WHO Staff on the Move

Several staff members and offices outside of headquarters have recently moved. PAHO/WHO's Emergency Preparedness offices are at your service at the following addresses:

### BARBADOS (all of the Caribbean except as noted below)

Dr. Dana van Alphen, PAHO/WHO Emergency Preparedness Program, P. O. Box 508, Bridgetown, Barbados; Phone: (246) 436-6448; (Fax) 436-6447; e-mail: dvanalphen@pahocpc.org.

### DOMINICAN REPUBLIC (also covers Cuba and Haiti)

Dr. Fabien Asselin de Williencourt, PAHO/WHO Emergency Preparedness Program, Apartado 1464, Santo Domingo, Dominican Republic; Phone: (809) 562-1519; Fax: 544-0322; e-mail: fabien@dor.ops\_oms.org.

### MEXICO (special initiatives, universities, municipalities)

Dr. Luis Jorge Perez, Regional Adviser, PAHO/WHO Emergency Preparedness Program, Apartado Postal 10-880, 11000 Mexico City, Mexico; Phone: (525) 202-8200; Fax 520-8868; e-mail: lperez@infoabc.com.

### COSTA RICA (covers all of Central America)

PAHO/WHO Emergency Preparedness Program, Apartado Postal 3745, San José 1000, Costa Rica; Phone: (506) 257-2141; Fax: 257-2139; e-mail: pedcor@sol.racsa.co.cr.

### ECUADOR (covers all of South America)

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### Washington, D.C. (headquarters)

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20037, USA; Phone:  
(202) 974-3520; Fax:  
775-4578; e-mail:  
disaster@paho.org.

## WHO Centre Offers Health Risk Management Diploma

The WHO Mediterranean Centre for Vulnerability Reduction offers an international diploma course in health risk management for health emergency/risk managers at national and local levels, health professionals from NGOs, bilateral agencies, and international organizations working in community-based capacity building for risk/emergency management. The four-week course begins October 25, 1998 in Tunisia. An inter-university Diploma in Health Risk Management will be awarded by Coventry University and Linköping University, Sweden upon completion of the course. For a detailed brochure and application form, email: OMS.tunisie@rms.tn or fax: (216-1) 741-170. □

## Thousand Hills Country

Rwanda, the "land of a thousand hills," could also be called the "land of a thousand disasters." Throughout its history, Rwanda has endured many natural and human-made disasters such as wars, disease outbreaks, earthquakes and droughts, meaning that receiving and handling relief supplies is nothing new. Nevertheless, problems

related to managing massive quantities of supplies and donations still persist.

As part of the WHO initiative for disaster preparedness and strengthening the response capability of countries, SUMA was offered in Rwanda as a tool to help improve local skills in dealing with international aid. For one week in June, national participants from local and international NGOs, the Red Cross and governmental agencies were trained to use the SUMA software. The training was very successful—credited to the enthusiasm and quality of the participants.

The Ministry of Health and the WHO Representative will follow up this initiative by forming a committee to review the current situation, establish emergency supply management procedures, and improve cooperation and coordination among the actors involved in disaster response.

This training session was made possible by joint collaboration between WHO, PAHO and FUNDESUMA. WHO is now interested in continuing this initiative in other African countries, asking participants in the course to join the instructor's team, and eventually building a regional SUMA team in Africa. For more information contact Dr. Edgardo Acosta by e-mail at funsuma@sol.racsa.co.cr or fax at (506) 257-2139. □



# Other Organizations

## IDNDR Sees End to El Niño, Warns that Without Prevention Disasters Will Continue

At the IDNDR'S Scientific and Technical Committee (STC) meeting in Washington D.C. in June, officials from the WMO stated that most forecasting models show the current El Niño to be in its final stages. The World Bank, which hosted the STC meeting, estimates losses from the current El Niño to exceed US\$8 billion worldwide. The Vice President of Ecuador, Pedro Aguayo Cubillo, indicated that his country's losses have been five times worse than the previous El Niño of 1982-83. Damage to the road system and the agriculture sector alone exceed US\$2.5 billion. Some forecasters are now predicting another severe El Niño within five years, when the reconstruction phase in Ecuador will not yet be completed. "A lack of prevention is the debt of development, and disasters are the unpaid bills," said one of the health experts at the meeting, reconfirming the need for improved proactive disaster prevention for the future and for an active international platform into next century.

Request the complete press release from this meeting from Helena Molin Valdes, IDNDR Unit for Latin America and the Caribbean, fax (506) 257-2139; e-mail [hmolin@undpcos.nu.or.cr](mailto:hmolin@undpcos.nu.or.cr). □

## Humanitarian Assistance Standards

The IFRC Sphere Project's consortium of humanitarian organizations has drafted a document on minimum standards in core areas of humanitarian assistance. The document can be found online at <http://www.ifrc.org/issues/sphere>. You can read about the project, then read the chapters on water/sanitation, nutrition, food, shelter/site and health. IFRC would like to receive input on this draft. Please visit the site for further information and to register your comments. □

## Earthquake Information Service

The MCEER Information Service, formerly the National Center for Earthquake Engineering Research, is a comprehensive source for information on earthquake engineering, earthquake hazards mitigation, disaster preparedness, and related

topics. The MCEER Information Service also provides a variety of reference services to local and international users including: computerized literature searching; interlibrary lending and borrowing; microfiche printing and photoduplication; acquisition of books, periodicals, reports, slide sets and videocassettes. Nominal fees are assessed for loan or photocopy and delivery of materials. More information online at <http://nceer.eng.buffalo.edu> or fax: (716) 645-3379. □

## Conference on Emergency Telecommunications

The Intergovernmental Conference on Emergency Telecommunications (ICET-98) was held in Tampere, Finland this year to finalize a new, legally binding international convention. The Tampere Agreement facilitates the use of communications equipment by humanitarian agencies and disaster response units in emergency situations. The convention empowers countries to request that normal licensing and importation fees covering communications equipment be waived following disasters. For humanitarian organizations, it represents a breakthrough which will permit the latest communications equipment to be deployed at the scene of a disaster without complicated legal constraints and lengthy delays. Thirty-three countries have, so far, signed the Tampere Agreement including Chile, Haiti, Jamaica and Nicaragua. The text of the agreement is available online at: <http://www.itu.int/newsroom/projects/ICET/tampereconvention.html>. □

## Earthquake Hazard Centre

The Earthquake Hazard Centre is an information network and dissemination center for earthquake-resistant construction in developing countries. The idea to form the Centre emerged during the Workshop on Seismic Hazard Mitigation of Non-engineered Structures (1996) where it became apparent that basic earthquake engineering technology was not being disseminated or applied to the extent possible. The Earthquake Hazard Centre Newsletter is published quarterly both in the printed form and on the Internet at <http://www.ehc.arch.vuw.ac.nz>. For more information on the Centre please visit their website or email: [quake@arch.vuw.ac.nz](mailto:quake@arch.vuw.ac.nz). □

## Disaster Management Training List Online

The U.S. Federal Emergency Management Agency (FEMA) and the Natural Hazards Center maintain lists of institutions offering higher education courses in emergency and disaster management.

<http://www.fema.gov/EMI/edu/>

<http://www.colorado.edu/hazards/colleges/colleges.html>.

## Prehospital and Disaster Medicine

This journal is available online at <http://pdm.medicine.wisc.edu> (see previous issue of this newsletter for journal description).



# Member Countries

## PAHO's Governing Body to Consider Impact of El Niño

The 1998 Pan American Sanitary Conference will consider a report summarizing existing knowledge on the effect of El Niño on health at its meeting this September. The report notes that El Niño events are notable for their wide geographic influence and their long duration. The fact that they are extended climatic events with large-scale effects makes them extremely important to the public health sector. The ability to project future El Niño events also gives the public health sector the opportunity to prepare for a better control of the transmission of disease. There is a need to

develop a scientific agenda that will examine the impact of extreme events such as El Niño/Southern Oscillation (ENSO) on human health and health infrastructure and services. Attention should be paid to the vulnerability of ecosystems, to how disease incidence will respond to extreme climatic events, and how health programs will adjust to changes in morbidity and mortality. Readers can download a copy of this document (using Adobe Acrobat Reader) from [http://www.paho.org/english/ags/eng\\_indx.htm](http://www.paho.org/english/ags/eng_indx.htm) (look for CE122/10). The text in a MS-Word document can also be requested by e-mail from [disaster@paho.org](mailto:disaster@paho.org) □

## Colombia: Internally Displaced Population Faces Health Emergency

The number of people internally displaced by violence in Colombia has increased in the last year. Confrontations between various armed groups have created a situation of such insecurity among the civilian population that hundreds of families have abandoned their homes and sought protection and safety in other areas of the country. In spite of diligent efforts by the Ministry of Health and other national authorities, the health effects of this displacement are significant: a lack of basic sanitation, drinking water supply, control of communicable diseases, and lack of access to primary health care are all common.

With the financial support of the governments of Canada and Sweden, PAHO is coordinating a project in Colombia to respond to the health needs of this displaced population. The project has three main objectives: a) to improve mechanisms to capture information for decision making in critical and complex situations; b) to cooperate in training human resources so as to develop common standards for dealing with these situations; and c) among UN agencies in Colombia, to help establish an interagency platform to support national authorities in the area of health. Four disaster professionals are coordinating with national authorities, international agencies and NGOs who are collaborating in this project. Coordination points have been set up in the departments of Cundinamarca, Meta and in Barranquilla.

In the information component of this project, WHO's HINAP Project (Health Intelligence Network for Advanced Contingency Planning) will play a central role. HINAP's main

objective is to consolidate, edit, organize and redistribute existing baseline data and background information to the right people at the right time in an easy-to-use format.

Existing data on displaced and potentially displaced populations, such as epidemic risks, incidence and prevalence of communicable diseases and vaccination, is often scattered among many different agencies in formats that are difficult to use and access. HINAP would serve as a centralized source where information on items such as population demographics, health infrastructure, medical and health data would be quickly and easily available to planners and managers of humanitarian aid programs.

HINAP staff and the Colombian Ministry of Health agreed that one of the highest priorities of the health sector should be the development of a consolidated information system or database to improve overall preparedness and coordination between government agencies, NGOs, and intergovernmental and UN organizations.

On a related note, three Colombian health professionals participated in the HELP98 course that focuses on managing health emergencies in large populations, with a view toward applying this knowledge to the current situation in Colombia.

For project information, contact Dr. Hernan Malaga, PAHO/WHO Representative in Colombia, fax: (57-1) 336-7306; e-mail: [opscolom@openway.com.co](mailto:opscolom@openway.com.co)

For information on HINAP contact Dr. Eric Noji at WHO/EHA by fax (4122) 791-4844 or e-mail: [nojie@who.ch](mailto:nojie@who.ch).



### Airport Simulation Exercises Underway in the Caribbean

In keeping with the broad-based interest of Caribbean countries in updating aircraft accident plans and ensuring safer airports in the region, a number of simulation exercises are being conducted at various airports in the Caribbean. These exercises promote multisectoral coordination in the planning, staging and evaluation of simulations of aircraft crashes in the vicinity of airports.

The ministries of health and first response agencies are collaborating with the airport authorities, airlines, the private sector and voluntary agencies to clarify and establish relationships and responsibilities. In addition to mass casualty management, the legal and diplomatic aspects of an aircraft accident are also addressed as part of the simulations.

The British Virgin Islands and Grenada conducted their airport simulation exercises. For further information contact Dr. Dana Van Alphen, fax: (246) 346-6448, e-mail: [dvanalphen@pahocpc.org](mailto:dvanalphen@pahocpc.org). □

### Panama: Action Plan for el Niño

Panama's Ministry of Health formulated an Action Plan to mitigate the effects of El Niño in the area of Arco Seco, located along the Pacific coast and including the provinces of Cocle, Herrea, Los Santos, Panama and Veraguas.

El Niño has significantly altered the number of surface and underground sources of water, and had effects on certain illnesses. Such occurrences have given rise to the publication of "Strategies for Epidemiological Alertness" and the establishment of monitoring posts in the most vulnerable areas of each region. The Action Plan is made up of the following components: Health Promotion and Prevention; Safe Water Supply to the Population; Medical Equipment to Hospitals and Health Centers; an increase for the Food Assistance Program; Monitoring the Quality of Water and Carrying out Surveys at Monitoring posts, and Evaluation and Follow-up of the Action Plan. For more information, contact Dra. Adria Lopez. Fax: (507) 227-2296; e-mail: [msalud@pananet.com](mailto:msalud@pananet.com). □

As one step in a plan to set up a virtual health library in the Americas, several organizations collaborated to carry out a Spanish-language course on the Methodology for Implementing and Operating Databases on the World Wide Web. Twenty-four people from Central America and the Dominican Republic—professionals in informatics and library sciences with experience in managing bibliographic databases—attended the course. PAHO's Director calls the concept of a virtual health library "an expansion of the present model of technical cooperation, one which produces information sources in multiple mediums, connected through networks, and with direct and universal access." For more information, contact the Latin American and Caribbean Center on Health Sciences Information, BIREME, at [bireme@bireme.br](mailto:bireme@bireme.br) or by fax at (55-11) 571-1919. □

### Red Cross Launches Caribbean Website

The Caribbean Red Cross Society is pleased to announce their new web site: <http://www.caribredcross.org>. The site is designed to inform the Caribbean community of the humanitarian role of the Red Cross in the region and share practical information for families and individuals on preventing, preparing for, and coping with emergencies of all sizes. Visitors to the site can read the latest disaster and humanitarian news from the Caribbean and beyond, learn lifesaving safety and disaster tips, browse other Red Cross sites on the web, read about Red Cross activities in individual Caribbean countries, and even send an electronic "HelpGram" pledging support to the Red Cross. For more information e-mail: [ifrcsd@codetel.net.do](mailto:ifrcsd@codetel.net.do) or fax: (809) 686-9495. □

### Update: SUMA in Honduras

Recently forest fires wreaked havoc with a great deal of Central America, Mexico and parts of the southern United States. In response to forest fires in Honduras, the national SUMA team traveled throughout the country during June and July to register donations that consisted of radio communications and fire fighting equipment. The team worked closely with the Comisión Permanente de Contingencias de Honduras (COPECO). Forty members of the SUMA team will attend a training course on the new SUMA software (5.1) in August. National instructors will give a second training at a later date for the rest of the SUMA team. □

### New Website for Hurricane Season

The Department of Civil Defense in the Dominican Republic has a new Website located at <http://www.civila.com/defensa> that contains interesting information for hurricane season.



# Review of Publications

## Rural Drinking Water Systems

Drinking water systems are lifeline services, and in the aftermath of disasters, they become even more critical. Rural drinking water systems differ from their urban counterparts, and are the focus of a new publication from PAHO/WHO entitled “Manual para la mitigación de desastres naturales en sistemas rurales de agua potable.” The effects of natural disasters on water systems—physical damages, disorganization, interruption in services and economic losses—constitute real threats to the health and development of the affected population. Mitigation measures are not only necessary, but in many cases, a development opportunity.



This publication has been written especially for technical and administrative personnel who are in charge of drinking water systems. It describes not only the particular characteristics of rural drinking water systems but also offers examples of how to apply a methodology to determine their vulnerability. A limited number of copies, in Spanish only, is available to institutions and professionals working in the field from the Regional Disaster Information Center (CRID) or from PAHO (see page 8 for ordering information). □

## Health in the Americas, 1998 Edition

Health in the Americas (formerly Health Conditions in the Americas), the authoritative reference for health indicators and trends in the Americas, is published every four years by PAHO. Volume I of the publication examines public health trends, the health status of various population groups, major diseases/health problems, the health sector's response, and the status of external technical and financial cooperation. Volume II presents the most current data on the Region's 45 countries and territories from a socioeconomic and demographic context, and sketches health prospects for the future.



PAHO is offering newsletter subscribers in Latin America and the Caribbean a discounted pre-publication price of US\$ 44.00 (regular price US\$60.00) for advance orders of Health in the Americas. To order, e-mail [sales@paho.org](mailto:sales@paho.org) or fax: (202 ) 338-0869 mentioning the appropriate sales code (English: SP569; Spanish: PC569). □

## Upcoming Meetings

### Radiological Post-Emergency Response Issues Conference

Topics of this conference include post-emergency management; regulatory issues; agriculture and land-use issues; clean-up levels; protective action guidance; public health issues. September 9-11, Washington DC. E-mail [EPAConference@scicomm.com](mailto:EPAConference@scicomm.com) or fax: (301) 652-7001. □

### Regional Water Agencies to Discuss El Niño

Considering the devastating effects of the 1997-98 El Niño on drinking water and sewage systems in the region, several major regional organizations are co-organizing a major meeting, El Niño and Drinking Water Systems: An Unresolved Problem, to take place in Quito, Ecuador, September 14-15. The meeting will provide a forum to collect information on damages to Latin American water sys-

tems, exchange experiences on effective disaster mitigation experiences, and share policies that have been implemented to ensure the quality and continuity of the water supply. Strategies and recommendations will also be prepared to reduce the future impact of this type of phenomenon. A Report on the conclusions of this meeting will be published in the next issue of this newsletter. For more information contact Claudio Osorio at [pedcor@sol.racsaco.cr](mailto:pedcor@sol.racsaco.cr) or fax: (506) 257-2139. □

## Less Paper and More Bytes? Let the Reader Decide!

(from pg. 1)

agement. Preparedness was no longer enough. If the overall management was to be effective, it had to be coupled with mitigation efforts. After all, what good were well-crafted hospital emergency plans, or highly-trained health sector personnel if the physical structures in which they worked could not withstand the impact of a disaster? This was the case in the Juarez Hospital in Mexico, where more than 560 medical staff and patients lost their lives when the building collapsed. Today, disaster mitigation efforts, which look to reduce the impact of disasters on physical infrastructure, extend beyond hospitals and health facilities to water supply and sewerage agencies, which are equally as important to public health in the aftermath of disasters. (The story of this remarkable journey is chronicled in the publication *A World Safe from Natural Disasters: The Journey of Latin America and the Caribbean*; (contact the Editor for information on how to get this publication.)

### The Future: Will Disasters Go Electronic?

This newsletter has been a constant companion throughout this journey, recording the achievements of the countries in their pursuit of disaster reduction, and promoting a horizontal dialogue among disaster managers and across sectors. First published in 1979, the Newsletter now has a read-

ership of more than 25,000 worldwide. For a look at this readership, see the sidebar.

In the last several years, the Internet has colored many aspects of disaster management—from the way we communicate with colleagues (either from or to the most remote locations) to how we research and access documentation that was previously only available in hard copy or by mail. As private and government institutions move steadily toward adopting the Internet as *the* communication standard, those who do not have Internet access or fail to develop the skills or motivation to use this tool may find themselves missing information or feeling that they are on the outside looking in. The handwriting's on the wall—traditional means of communication are being uprooted and replaced by faster, more powerful and reliable systems that require we keep pace.

Will *Disasters* go electronic? It already has, and the electronic version is on PAHO's web site. Does this mean the end of the print version is in sight? Not necessarily. The newsletter as we know it is tangible and proactive, and it is unlikely that one medium will completely phase out the other. But as technology continues to provide new ways to circulate information, it is foreseeable that virtual libraries and on-line newsletters will coexist with their paper counterparts. In the future, it will be up to the user to determine which offers the greatest utility. □

52% of the Newsletter's 25,000 readers are from Latin America; by contrast, only 8% are from the Caribbean (readers in the English and Spanish-speaking Caribbean are encouraged to invite colleagues to subscribe). 24% of the readership is from North America (Canada, Mexico and the U.S.). The newsletter is published in Spanish (60% of the readership) and English (40%). Readers describe themselves most frequently as having the following affiliations: Health Ministry (21%); other health professions (23%); scientists and universities (19%); Civil Defense or Protection (12%). Which country in the Americas (excluding the U.S.) has the largest readership? The answer is Costa Rica (1493); followed by Peru (1284) and Colombia (1230). In fact, 165 countries worldwide are represented among our readership.

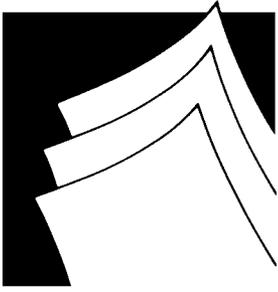
### Tell us Something We Don't Know!

Our thanks to all who responded to our request in the January newsletter, asking for our readers' e-mail addresses. The response was very encouraging and this information has been used to create two electronic distribution lists—one in English and one in Spanish—through which short news items are periodically circulated.



If you sent us your e-mail address and have not yet received a message from the list DisasterInfo, your address may have been incorrectly entered into our database. Please re-send your message electronically to **disaster@paho.org** (be sure to tell us if you have replaced someone still in our database.

If you haven't yet sent us your e-mail address, and would like to be on this electronic distribution list, please do so now, by e-mail, giving us your complete name, city and country so we can correctly locate your record. □



# 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.

- W.2** Angel Gomez, Miguel and Neira, Jorge. "Atención prehospitalaria del paciente traumatizado," *Atención inicial de pacientes traumatizados*, 2nd. ed., chap. 1, pp. 13-27, 1996.
- W.3** M. de Freitas, Carlos, F. de S. Porte, Marcelo and Gomez, Carlos M. "Accidentes químicos ampliados: um desafio para a saúde pública," *Rev. Saude Pública*, 29 (6): 503-14, 1995.
- W.4** Heath, Sebastian E. et al. "Integration of veterinarians into the official response to disasters," *JAVMA*, Vol. 210, No.3, February 1, 1997.
- W.5** Alexander, David. "The study of natural disasters, 1977-1997: Some reflections on a changing field of knowledge," *Disasters*, 1997, 21(4): 284-304.
- W.6** Noji, Eric and Toole, Michael J. "The historical development of public health responses to disasters," *Disasters*, 1997, 21(4): 366-376.
- W.7** Cespedes, Roxana et al. "Estudio de síntomas respiratorios en escolares de las zonas aledañas al volcán Poas," Costa Rica, 1994.

*Disasters: Preparedness and Mitigation in the Americas* is the Newsletter of the Emergency Preparedness and Disaster Relief Coordination Program of the Pan American Health Organization, Regional Office for the Americas of the World Health Organization. The reported events, activities and programs do not imply endorsement by PAHO/WHO, nor do the statements made necessarily represent the policy of the Organization. The publication of this *Newsletter* has been made possible through the financial support of the International Humanitarian Assistance Division of the Canadian International Development Agency (IHA/CIDA), the Office of Foreign Disaster Assistance of the U.S. Agency for International Development (OFDA/AID), and the Department for International Development of the U.K.

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<http://www.disaster.info.desastres.net/crid/eng/index.htm>

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