DISASTERS





PREPAREDNESS AND MITIGATION IN THE AMERICAS

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April 1999

Editorial

Emergency Response and Disaster Reduction: Can One Single Agency Handle Both?

re the same institutions that have been created to provide an immediate response to disasters also suited to the task of promoting disaster reduction? The experience in Latin America and the Caribbean seems to suggest that this is not the case, and that distinct mechanisms are necessary for disaster prevention and mitigation (disaster reduction) on the one hand, and disaster preparedness and response on

Emergency response to disasters requires logistical skills, speed, decisive action and a disciplined structure. It is essential that the responsible agency has operational expertise and can deliver rapidly-needed services under adverse conditions. In most Latin American countries these skills and

assets are found in the armed forces, and traditionally, the Ministry of Defense provides the resources, the personnel and the leadership in national civil defense systems. As an extension of their role, the same institutions responsible for response often become responsible for preparedness both at community and national levels, and rightly so, as disaster preparedness and response are, indeed, mutually dependent.

Risk reduction, or disaster prevention and mitigation, present quite a different challenge. Any

Earthquake in Bolivia, 1998

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A Look Back on 1998

ew times in recent history have such a variety of severe natural hazards caused so many large-scale disasters in the Americas as was the case in 1998. In spite of the grave damages these disasters inflicted, the response of the affected countries was exceptional. The health sector was a major player in each case, and PAHO's technical cooperation in the aftermath of these events would not have been possible were it not for the fact that national health authorities in the affected countries were on the front lines in each case.

In its 1998 annual report, PAHO's Disaster Program revisits four of these disasters: the El Niño phenomenon; the earthquake in Aiquile and



Totora, Bolivia; and Hurricanes Georges and Mitch, outlining the impact of the disasters on the affected populations and PAHO's organizational response. This report, Disasters and Health in 1998, can be downloaded in HTML or PDF format from our web site http://www.paho.org/ english/ped/pedhome.htm (click on What's New).

ews from PAHO/WHO

New Biblio-des on Hurricanes



Hurricanes Georges and Mitch have left profound mark on Central America, and fortunately, the

CRID has been, or is, in the process of collecting the experiences of the affected countries. In an effort to see that this information reaches those who need it, CRID has dedicated the latest issue of Biblio-des (No. 27) to hurricanes. The new Bibliodes is comprised of hundreds of scientific documents on these and other hurricanes, documents which form part of the database DESASTRES. Request print or electronic versions of this new bibliography from CRID (see p. 8).

Report of the Meeting of Documentation Centers



The conclusions, summary of presentations, reports of the working groups and list of participants at this inter-

national meeting, which took place last November in Costa Rica, form part of this new document published by PAHO and WHO. Download an electronic copy of this report from PAHO's Web site http://www.paho.org/english/ped/pedhome.htm (Click on What's New) or request a print copy from CRID (see p. 8).

What's New with the Collaborating Centers

Earthquake Evaluation Carried Out in Colombia

The WHO/PAHO Collaborating Center for Disaster Preparedness at the University of Antioquia carried out an on-site evaluation of hospital preparedness and response plans in the states of Risaralda and Quindio the day after the January 25 earthquake in Armenia, Colombia. Within a week of the impact, staff from the Center and University staff and public health students coordinated an evaluation of the epidemiological and environmental health effects. Based on their evaluation, PAHO is preparing a technical report on the impact of this earthquake on the health system of the affected areas of Colombia.

This Center is also working with the Dominican Republic and Panama to incorporate disaster preparedness teaching at the undergraduate and post-graduate levels in both Catholic University and the University of Panama. For more information on the Center's activities, e-mail: irendon@epm.net.co.

Assistance to Nepal

Last March, the WHO/PAHO Collaborating Center for Hospital Disaster Mitigation in Chile provided guidance and training on vulnerability analysis to the Ministry of Health in Nepal. This initial cooperation has increased awareness of hospital staff of their hospital's structural vulnerability.

A second visit is scheduled for this summer. Caribbean experts in prehospital care and mass casualty management in developing countries will share experience with the same health authorities to strengthen their disaster response capacity by taking into account the structural vulnerability of Nepalese health facilities.

It is expected that at the end of both missions the Nepalese health authorities will have gained from the Latin American and Caribbean experience and vice versa. For more information, e-mail: larusd@who.ernet.in.

Conclusions from the Hurricanes Evaluation Meeting Now Available Online

The Conclusions and Recommendations of the meeting "Evaluation of the Preparedness and Response to Hurricanes Georges and Mitch," February 16-19, 1999 in Santo Domingo, Dominican Republic are now available online at http://www.paho.org/english/ped/pedeval.htm in PDF format. A limited number of hard copies is also available. Contact e-mail: disaster-publications@paho.org. \square

In the Next Issue!

Discover the VDL

The most complete collection of technical information on disasters and emergencies in Latin America and the Caribbean.

More than 250 technical publications and more than 25,000

pages of experiences, ideas and solutions to go forward in disaster reduction. A powerful and simple search engine helps you quickly find the information you need.

- The VDL "speaks" English and Spanish!
- The VDL is on a CD-Rom.
- The VDL is on the Internet free of charge, available at anytime from anywhere.



Other Organizations

CENAPRED Offers Real-Time Surveillance of Volcano Activity

Scientists in Mexico and around the world are closely watching activity at the Popocatepetl Volcano in Mexico, some 65 km southeast of Mexico City. Mexico's CENAPRED, the National Center for Disaster Prevention offers real-time visual monitoring of the Popocatepetl Volcano through its excellent and well-organized web site. This site offers much more information, including an historical chronology of Popocatepetl's volcanic activity, scientific reports, a photo gallery of the volcano and a bibliography. Visit this site at: http://www.cenapred.unam.mx/mvolcan.html.

GDIN Experts Meet in Mexico

An international meeting of disaster experts interested in the Global Disaster Information Network (GDIN) met in May in Mexico City. GDIN originated from the growing potential of systems such as the Internet to deliver information rapidly throughout much of the globe. The objective of GDIN is to improve the effectiveness of

global systems for sharing natural disaster information, to provide better early warning and to promote more informed and effective preparedness, response, and mitigation.

The primary functions of GDIN are to:

- enable disaster managers, relief workers and others to systematically and rapidly access existing information;
 - serve as a mechanism whereby, in the absence of sufficient relevant existing information, disaster managers and relief workers can promptly communicate with reliable sources to request needed information in a usable form;
- foster and improve the sharing of disaster information among governments, international organizations, NGOs and other entities;
- promote standardization and integration of disaster information. □



El Popo, as the volcano is commonly known, has a mind of its own. It could continue the present level of activity for some time before becoming dormant once again, or it could suddenly become more active. Mexican authorities are taking no chances, keeping all civilians at a prudent disPAHO/WHO, P. Bittner

Universities Promote Studies in Disaster Management

Columbia University will host a training course on critical public health issues in complex emergencies in universities around the world. The course is geared toward health workers and authorities with field experience in complex emergencies. Visit http://www.cpmcnet.columbia.edu/dept/sph/popfam/refugee; e-mail: ssk19@columbia.edu or fax: (212) 305-7024.

The first Latin American diploma in Planning and Management of Human Settlements is being offered by the **Universidad Nacional de Colombia**, Medellin, with the support of the OAS, the Colombian Institute of Foreign Studies (ICETEX) and organized by the Center of Population Habitat Studies (CEHAP). Contact fax: (57-4)230-9630; or e-mail: cehap@perseus.unalmed.edu.co.

Johns Hopkins University School of Hygiene and Public Health, Center for Refugee Health and Disaster Studies offers short courses via distance education. Objectives of the program include conducting operational research in meeting health needs of persons displaced by conflict, ecological changes and natural and technological disaster and disseminating knowledge through publications and training programs. Contact gburnham@jhsph.edu; fax: (410) 614-1419.

The UCLA School of Public Health Center for Public Health and Disaster is developing a curricular focus on how disasters affect public health. Courses include an introduction to public health and disasters, program planning and evaluation of disaster preparedness programs and interagency disaster management from a public health perspective. Contact fax: (310) 794-1805; e-mail: rottman@ucla.edu.

The Tulane Program in Complex Emergencies addresses accessing population needs in nutrition, health, water and sanitation, psycho-social trauma, reproductive health as well as in logistics, the review of warning and monitoring systems, and relief programs. Contact: rrabala@majestic.tes.tulane.edu.

The Columbia School of Public Health, Program on Forced Migration and Health addresses the need for a technically sound response to the health problems affecting displaced people, the communities that host them and the communities from which they move. The Center conducts research and works with the humanitarian assistance community to improve health services to displaced persons. Contact fax: (212) 305-7024; refugee-health@columbia.edu.



Vember Countries

Mexico Heightens Preparedness Measures

Last year, many forecasts placed Hurricane Mitch on a direct collision course with Mexico's Yucatan peninsula. Fortunately, the area was spared, but this year they may not be as lucky. In March, the Social Security Institute (IMSS) organized a workshop on hospital preparedness in Merida, Yucatan to prepare for the next hurricane season. The workshop served as an opportunity to discuss, update and integrate emergency and dis-

aster institutional plans and determine the necessary local, state and federal resources required for the 1999 hurricane season. The IMSS will repeat this workshop in the four other hurricane-vulnerable areas of Mexico.

Mexico is also vulnerable to other hazards, including volcanoes. Local authorities from the most vulnerable communities surrounding the Colima volcano in the state of Jalisco held a workshop to discuss the draft Guidelines for Municipal

(cont. on pg. 5)

Latin America and the Caribbean Review the Achievements of the IDNDR

uring the International Decade for Natural Disaster Reduction, the region of Latin America and the Caribbean has been particularly active, building on a solid foundation of disaster preparedness, mitigation and prevention expertise that is present in virtually every country in the hemisphere. To review the achievements of this Decade and

prepare a collective disaster reduction agenda for the 21st century, more than 650 persons—official delegates, national, regional and international agencies, NGOs, scientists, community leaders, mayors, and others—met at the Hemispheric Meeting of the IDNDR in San Jose, Costa Rica in early June. The concerns, discussions and recommendations of this region's disaster community will be brought to the IDNDR Global Forum in Geneva in July.

The Declaration of San Jose, approved by the participants at this meeting, acknowledges that the IDNDR has brought about qualitative improvements in the region by increasing awareness of the importance of reducing vulnerability and mitigating the effects of natural disasters. However, despite the resolutions adopted by the UN during the last ten years, the reports and strategies derived from international-level conferences, and regional cooperation agreements on natural disasters among countries of the Region, the Declaration recognizes that a significant amount of work

remains to be accomplished if we are to reduce the impact of natural hazards.

Within this framework, the participants made the following recommendations:

• To include disaster reduction measures in national legal and institutional frameworks. Governments must strengthen institu-

tions in charge of disaster management, guaranteeing functional continuity by assigning permanent human resources.

- To include local communities and their organizations, with an equal participation of men and women, in the process of planning, social control and policy aspects.
- That governments adopt common regional and subregional strategies to optimize the use of national and international resources.
- To strengthen international



IDNDR Director Philippe Boulle opens Hemispheric Conference in San Jose.

cooperation with a focus on the modernization of monitoring and measurement networks for disasters of all kinds, as well as real time communication systems for the exchange of this information.

The complete text of the Declaration of San Jose is available on the IDNDR Web site at: http://www.disaster.info.desastres.net/idndr/idndr.htm. For an e-mail copy of the Declaration contact Helena Molin, IDNDR Regional Adviser at https://mwndpcos.nu.or.cr or fax (506) 257-2139.

Between Violence and Uncertainty: The Displaced Population in Colombia

ach day, under the shadow of armed conflict, hundreds of people flee their homes in Colombia, victims of violence. The population in this new state of uncertainty is faced with numerous health concerns including nutritional deficiency and the absence of basic services such as drinking water, electricity and access to health facilities. The total displaced

population is estimated at 1.5 million and rising amid sensitive and slow peace negotiations.

In February 1998, PAHO's Office in Colombia established a Medical Services Project, financed through the cooperation agencies of the governments of Sweden and Canada, for populations displaced by violence. The project's objective is to provide technical advice on health management, and its activities include:

- preparing policies on the management of displaced populations;
- providing technical advice to the Ministry of Health's team on emergencies and disasters;
- conducting courses, workshops, and in-country seminars to support health worksers;

- training government staff and NGOs in emergency supply management;
- designing an interactive website to promote discussion and participation by different national and international organizations, and increase transparency in the approach to the problem;



• participating in technical meetings with governmental agencies and NGOs, universities and research centers.

To date, the project has:

- trained close to 1,200 officers in nearly 20 of the country's departments;
- participated in more than 15 major health care missions to meet the needs of the displaced population;
- prepared five technical management guidelines on Health and Displaced Population;
- pepared a directory of organizations involved in this issue. For more information on this initiative, contact Dr. Hernan Malaga, PAHO/WHO Representative at e-mail: hernan@opsoms.org or fax: (571) 336-7306. □

Phato: PAHO/WHO, H. Prado

(from pg. 4)

Leaders in Case of Disasters, prepared by PAHO. State health authorities applied the lessons of this workshop in five different communities and plan to eventually disseminate the information learned throughout the entire state. For further information on these initiatives contact Dr. Luis Jorge Perez, fax: (525) 520-8868; e-mail: perezl@mex.ops-oms.org.

Contingency Planning Courses in the Caribbean

PAHO developed a new course on contingency planning for the health sector. Procedures and blueprints for plans have been drafted to assist countries in the Caribbean to prepare comprehensive health sector emergency plans to respond to mass casualty incidents, environmental threats and epidemic control in case of natural disasters.

Three-day workshops have been conducted already in the British Virgin Islands, Belize and St. Kitts and Nevis.

For more information contact Dr. Dana van Alphen, fax: (246) 436-6447 or email: vanalphd@cpc.paho.org.

Building Codes and Economic Development

The Caribbean/Central American Forum on Building Codes and Economic Development held in Puerto Rico last September brought together representatives from the public and private sector (including banks and insurance companies involved in mortgage financing). Participants agreed to support cooperative actions to:

- Increase effectiveness of building regulations in support of disaster reduction and sustainable development;
- Promote affordable disaster-resistant housing;
- Facilitate and expand cooperative efforts toward cost-effective construction which promotes human and public safety, as well as education and training.

For more information, contact Bob Kelly: <u>bkelly@ncsbcs.org</u>; fax: (703)481-3596. □

Nursing Schools Hold Disaster Workshop

National Federation Association of Nursing Schools of Mexico City and the Central States recently held a workshop on Nursing and Disasters in Puebla, Mexico. Professors of nursing from 25 schools, colleges and universities attended the workshop to discuss introducing disaster topics into the nursing curricula at the undergraduate level. These institutions have set a 12month timetable to revise their curriculum to introduce this material. For further information, contact Lic. Enf. Marina Bello Perez, tel./fax: (525) 542-2408; email: mabello@servidor.unam.mx.



Review of Publications



PAHO has published the latest in its Disaster Chronicles Series on the Cariaco, Venezuela earthquake. It analyses the magnitud of the impact of this disaster on the health sector, focusing on relief and response operations, and the coordination required at local, national and international levels in providing effective aid. Lessons learned are particularly relevant to health workers that play a role in mitigating and responding to disasters. The publication is presently in Spanish only and may be downloaded in PDF format at http://www.paho.org/spanish/ped/pedsres.htm. A limited number of print copies are also available through CRID (see page 8). □

WHO Updates Water Quality Guidelines

Access to and the safety of drinking water can be one of the most serious and long-lasting effects of a natural disaster. The World Health Organization has published the second edition of the three-volume series "Guidelines for Drinking-Water Quality." Volume I, Recommendations, sets guideline values for a large number of water contaminants relevant to the quality of drinking water. Volume II, Health Criteria and other Supporting Information, expands upon volume one, providing the scientific rationale for individual recommendations. Volume III, Surveillance

and Control of Community Water Supplies, is a comprehensive guide to all practical procedures and technical measures required to ensure the safety of drinking water supplies. For information on cost and how to order, consult the WHO Web site at http://www.who.ch/dsa/cat98/water8.htm or send an e-mail message to publications@who.ch.

Disaster Prevention Begins with Information

The theme of the 1998 World Disaster Reduction Day was "Disaster Prevention Begins with Information," and in follow-up to an October 1998 meeting in Latin America, the IDNDR has published a Guide for Social Communication and Prevention (Spanish only). This publication provides an indepth analysis of the previous for

depth analysis of the various forms of social communication, comparing strengths and weaknesses, and introduces new communication mechanisms for reaching the target populations, taking into account available technologies and existing information networks.

The publication is available online, in Spanish at http://www.disaster.info.desastres.net/idndr/dirdn.htm. For more information please contact email: hmolin@undpcos.or.cr or fax:(506) 257-2139. ">l

Upcoming Veetings

4th LACDE International Conference to be Held in Iceland

The Local Authorities Confronting Disasters and Emergencies (LACDE) is hosting its 4th International Conferencein Reykjavik, Iceland August 28th-31st, 1999. For more information please contact the organization at e-mail: ulais@netvision.net.il or fax: (972-3) 691-6821. ulais@netvision.net.il or fax: (972-3)

World Conference on Injury Prevention and Control

The 5th World Conference on Injury Prevention and Control will be held 5-8 March 2000 in Delhi, India. This interdisciplinary meeting will focus on sharing experience and blending perspectives in the field of injury prevention and safety promo-

(cont. on pg. 7)

Emergency Response and Disaster Reduction

(from pg. 1)

development action that society undertakes can either reduce or increase its vulnerability to natural disasters. Deforestation, for example, was a leading factor in the devastating impact of Hurricane Mitch in Central America. Poor construction standards in schools, hospitals or housing (or a lack of enforcement) have been a major cause of fatalities in earthquakes. Proper land use and urban planning, particularly with respect to the location of lifeline facilities such as hospitals in less vulnerable areas, have the potential to save many more lives than an effective relief effort.

Achieving a culture of disaster reduction, that is, introducing the factor of vulnerability to natural hazards into the decision making process at all levels, requires an approach and skills that are different from organizing search and rescue, distributing emergency rations or setting up a temporary field hospital. The actors in the field of disaster reduction include financial and governmental institutions such as banks and ministries who have the financial leverage and the ability to affect policy. It is with politicians, long-term planners, architects or engineers that a dialogue on disaster prevention is maintained, whereas with disaster response and preparedness, communication is with 'first responders', armed forces, police, firefighters, health services, Red Cross and other relief groups.

Oversimplifying the problem at the political level by lumping everything related to disasters

and emergencies—from prevention to preparedness-into one single response-oriented mechanism is, in our view, a major contributing factor to the low level of awareness and interest in disaster reduction on the part of the development sector. Prevention can no longer be equated with simply maintaining a stockpile of emergency supplies! The participation of the banking system, the insurance sector, and trade and manufacturing industries can best be mobilized by an institution chaired by their peers rather than one staffed by professional planners, architects and engineers. To be sure, those best suited to issues of disaster reduction are definitely not the most appropriate to lead search and rescue teams and coordinate unruly humanitarian organizations. In these cases, the experience of the armed forces remains unchallenged.

If the countries of the Latin America and the Caribbean are to reduce their structural vulnerability to major hazards, they must equip themselves with the right legislation and the appropriate institutions for disaster prevention and mitigation on one side, and strenghten the existing mechanisms for traditional preparedness and response on the other. Failure to do so will only ensure that the countries' civil defense system or emergency committee will be increasingly busy responding to disasters that never should have occurred in the first place. \square

Upcoming Meetings

(from pg. 6)

tion, including: transportation injury, work place injury, emergency and pre-hospital care. For more information and a call for papers brochure, please e-mail awconfer@del2.vsnl.net.in or fax: (91-11) 684-8343.

5th International Symposium on Environmental Geotechnology and Global Sustainable Development

The 5th International Symposium on Environmental Geotechnology and Global

Sustainable Development will take place August 17-21, 2000 in Belo Horizonte, Minas Gerais, Brazil. This symposium is scheduled to address relevant technical and policy issues, to provide a forum for discussion and to exchange information. Representatives from mining companies, government agencies and universities have collaborated to plan this symposium. For further information contact: e-mail: cassia@etg.ufmg.br or fax: (55-31) 238-1793. Cassia@etg.ufmg.br or fax: (55-

Hurricane Season is Here!

Hurricane season starts 1 June of each year. Some experts predict that the 1999 hurricane season may be as bad or worse than last year.

The World Meteorological Organization (WMO) selects the names for upcoming storms and retires those names of particularly devastating hurricanes. Names for the 1999 season will be: Arlene, Bret, Cindy, Dennis, Emily, Floyd, Gert, Harvey, Irene, Jose, Katrina, Lenny, Maria, Nate, Ophelia, Philippe, Rita, Stan, Tammy, Vince and Wilma.

The process of naming hurricanes has evolved over the years. During World War II, U.S. Navy meteorologists who monitored and forecasted tropical cyclones in the Pacific informally gave the storms women's names (after girlfriends or wives). From 1950 to 1952, tropical cyclones in the North Atlantic were identified by the phonetic alphabet (Able-Baker-Charlie-etc.), but in 1953 the U.S. Weather Bureau switched to women's names. In 1979, the WMO and the U.S. National Weather Service (NWS) began naming hurricanes and tropical storms after both men and women.



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.

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