DISASTERS

PREPAREDNESS AND MITIGATION IN THE AMERICAS

Pan American Health Organization
Regional Office of the
World Health Organization

Issue No. 89 News and Information for the International Disaster Community **October 2002**

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Editorial

Emergency Operations Center or Situation Room:
Which is best for the health sector?

The disaster management community at large has consistently promoted the concept of the Emergency Operations Center (EOC) as a mechanism to collect post-disaster data, analyze and interpret it in operational terms, and transform it into collective action for disaster response. The concept of an EOC, promoted by the U.N. and bilateral agencies alike, implies a physical space where information and data are displayed and operational decisions are made. The physical presence of the key disaster response actors is an essential ingredient of the EOC.

Photo: PAHO/WHO

Health situation rooms do a good job of collecting health data on a routine basis. However, for data to have an impact on life-saving decisions, health professionals must adapt collection and dissemination to the rapid and often chaotic pace of an emergency.

For some time, the health sector has realized that well-analyzed and interpreted information is critical for daily routine health management. They have come to rely on health situation rooms for the ongoing collection and analysis of up-to-date information on epidemiology, communicable diseases and other public health risks. Unlike the EOC, a health situation room need not occupy any physical space for that matter, it can simply be virtual. Health situation rooms do not necessarily produce health interventions their role also can be as a "think tank," helping the health sector to anticipate health risks caused by disasters and avoid strategic surprises.

However, when a major disaster occurs, Ministries of Health often clamor for a "disaster situation room" as a solution to the chaotic information environment that exists and the lack of coordination. Are EOCs and situation rooms the same? Or are we confusing concepts and tools required for information dissemination and coordination? Perhaps what Ministries of Health really want is a blend of the two: a health EOC.

(cont. on page 7)

LEADERS

The first English-language LEADERS course will be held in Jamaica in February 2003. See page 2 for details.

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News from PAHO/WHO

Photo: PAHO/WHO, A.Waak

Dr. Mirta Roses Elected as Next Director of PAHO Term Begins in 2003

Dr. Mirta Roses, currently PAHO s Assistant Director, was elected as Director of the Pan American Health Organization at its 26th Pan American Sanitary Conference in September. Dr. Roses becomes the first woman to lead PAHO, the world s oldest international health organization. She will serve a five-year term, taking office February 1, 2003.

Dr. Roses is well known to the disaster community, both within and outside the Americas. Since 1995, in her capacity as Assistant Director, she has been responsible for PAHO s Program on Emergency Preparedness and Disaster Relief and an unwavering supporter of disaster preparedness and mitigation efforts regionwide.

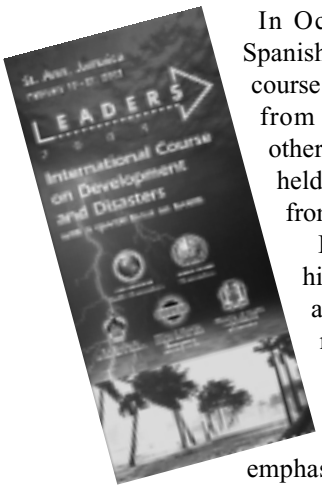
Dr. Roses, a native of Argentina, first entered international service as head of the Surveillance Unit in PAHO s Caribbean Epidemiology Center (CAREC) in Trinidad and Tobago. She served as a PAHO epidemiologist in the Dominican Republic, and later became the PAHO/WHO Representative from 1988-92. She was also the PAHO/WHO Representative to Bolivia before assuming her current position as Assistant Director.

We wish Dr. Roses great success as she assumes this important position so critical to public health in the Americas.

"I had just arrived on my first international assignment in Trinidad and Tobago in 1984 when I received a call from PAHO Headquarters inviting me to participate in a disaster preparedness training session in Canada. Looking back, I was fortunate to have been a part of these early disaster initiatives in the Region. They fostered a great interest in the topic that continues today and an appreciation of how far the countries of the Region have come in the last 20 years."

Disaster Training Course, 1984, Canada.

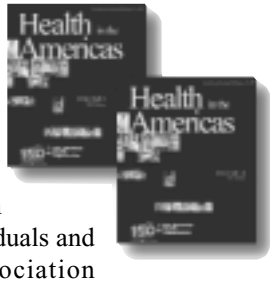
LEADERS Course to be Held in English



In October, PAHO/WHO held the fourth Spanish-language LŒDERES course. Now the course has been adapted to a different audience from Caribbean States and Territories and other regions of the world. LEADERS will be held in English for the first time in Jamaica from February 10-21, 2003.

LEADERS is a management course for high-level professionals charged with disaster preparedness, mitigation and response. The course is designed to build the capacity of participants to establish and manage disaster reduction (from prevention to response), with special emphasis on the health and social sector. The deadline for applying for the LEADERS course in Jamaica is 23 December 2002. For more information or to complete the online registration form, visit www.disaster-info.net/LIDERES.

Health in the Americas, 2002 Edition



Health in the Americas is considered the most important and most consulted work of all the publications produced by PAHO. Volume I describes the health situation from a regional perspective and contains a series of chapters that identify and analyze the most important general, demographic, and mortality trends of the period; major determinants of health as seen from a variety of standpoints; the role of individuals and communities in promoting health; the association between the physical environment and human living conditions; principal diseases and health problems; the extent of human and technological resources available to address health issues today; and the status and achievements of international and bilateral cooperation within the context of the growing tendency toward trade globalization. Volume II consists of a breakdown of these same topics by country and covers the 45 nations and territories of the Americas.

For orders: http://publications.paho.org; e-mail: paho@pmds.com; Fax: (301) 209-9789.

Other Organizations

New Disaster Preparedness Center at U. of Texas

Scott R. Lillibridge, M.D., has been appointed head of a new disaster preparedness center at The University of Texas Health Science Center in Houston, Texas. With the creation of the new Center for Biosecurity and Disaster Preparedness, the University hopes to become a leader in bioterrorism preparedness. Lillibridge has expertise in field epidemiology, field investigation and outbreaks and was formerly with U.S. Department of Health and Human Services. He also worked at the Centers for Disease Control and Prevention (CDC) as director of the CDC's Bioterrorism Preparedness and Response Program.

First World Forum "Children In Complex Emergencies"

The First World Forum "Children in Complex Emergencies" will be held April 26-29, 2003 in Moscow. The forum will discuss problems of legal, social, psychological and health protection of children in emergencies. Particular attention will be paid to children who are the victims of wars, terrorism, natural and technological disasters which play a leading role in children's mortality. The goal of this forum is to discuss and adopt a model of national and regional plans of actions to assist children in emergencies through the year 2010, as requested by the 27th UN Special Session Resolution of May 2002, A World Fit for Children." For more information, contact the Organizing Committee at roshal@lamport.ru or visit the web site at www.childrendisasters.org.

New Internet-Based Courses on Disaster Risk Management

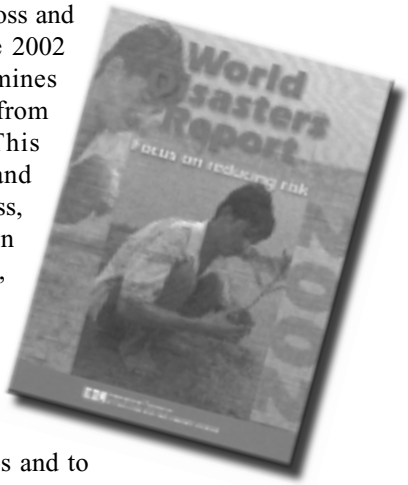
Two graduate-level courses (in Spanish) on the Integrated Management of Disasters and Risk are now being offered over the Internet from the Polytechnic University of Catalu a (Spain). The courses, which can be taken individually or concurrently, are multidisciplinary in nature and open to a wide variety of professionals. The courses will begin November 5, 2002. At a later date, additional courses will be developed and offered on specific areas of risk management (disaster prevention or civil protection, for example) and on specific risks (earthquakes, floods, volcanic eruptions, hurricanes, technological disasters, etc.). For more information, visit: www.structuralia.com/cdl1/cvdata/curso70/info/.

U.S. Universities Partner to Offer Humanitarian Studies

Three U.S. universities Harvard, M.I.T and Tufts now offer graduate students who are currently enrolled in a master s degree program at one of these institutions to incorporate additional courses in the field of humanitarian studies. An integral and required element of the program is the completion of a supervised, three-month field placement in which students gain practical experience in humanitarian response. For more information visit www.humanitarianstudies.org/ or write to estrella.alves@ tufts.edu.

World Disasters Report

The International Federation of Red Cross and Red Crescent Societies has published the 2002 World Disaster Report. The report examines preparedness and mitigation initiatives from disaster-prone countries worldwide. This year s report focuses on reducing risk and includes a chapter on disaster preparedness, including success stories from Latin America. In addition to a chapter on data, which is updated annually, the report presents a methodology to assess vulnerabilities and capacities. Visit www.ifrc.org (click on Publications) to read a summary of each chapter, take a virtual tour of many of the report s photos and to learn how to order this publication.



Visit *www.disaster-info.net*
the re-designed multiagency website
(formerly www.disaster.info.desastres.net)

Member Countries

Evaluating the Socioeconomic Impact of Disasters on the Health Sector

PAHO and the Economic Commission for Latin America and the Caribbean (ECLAC) held a workshop in July in Quito to review a methodology to evaluate the socioeconomic impact of disasters on the health sector. The methodology is proposed by ECLAC in its manual *Manual para la evaluaci n del impacto socioecon mico y ambiental de los desastres,* and will be made available to institutions and professionals working in the health and environment sectors in this Region.

As a result of the workshop, ECLAC has been able to incorporate priority areas for post-disaster monitoring in environmental health, preventive health measures and how essential health services were affected.

ECLAC is organizing a follow-up workshop in Central America on the use of this methodology, in conjunction with the Center for the Prevention of Natural Disasters in Central America (CEPREDENAC), the Central American Bank for Economic Integration (BCIE) and PAHO.

Visit ECLAC's web site at www.eclac.org/mexico to review the draft manual.

Conclusions of the Hemispheric Conference on Risk Reduction

Last December, more than 400 persons met at the Hemispheric Conference on Disaster Risk Reduction in San Jose, Costa Rica. The meeting was held in follow-up to the Third Summit of the Americas in April 2001, in which Heads of State of Western Hemisphere countries committed to reducing their vulnerability to natural disasters (see Issue 85 of this newsletter for more information).

One of the innovative features of the Hemispheric Conference was the organization of work groups by sector (food safety/agriculture, education, health and lifeline services). These groups, in turn, organized their discussions around a series of crosscutting issues (finance, civil society, information technology and land use management). The results were deliberations that spanned disciplines and sectors and touched on virtually all aspects of disaster risk reduction. The overarching conclusion was that risk management, and in particular risk reduction, has now evolved from simply a topic into a strategy — one that no longer can be the sole purview of disaster management institutions, but rather one that society at large must adopt as a priority.

Now, the Office of U.S. Foreign Disaster Assistance, the principal organizer of the Hemispheric Conference, has undertaken the ambitious task of presenting the conclusions of this important meeting. Prepared initially in Spanish, the complete report can be read or downloaded from the web at www.ofdalac.org/conferencia. The English translation should be ready by December (check the website). In addition to this advance copy in electronic format, OFDA/USAID will publish the print version in early 2003.

Belize: Ministry of Health Completes Repairs Following Hurricane Iris

New and improved latrines.

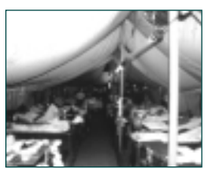
Water tanks at rural primary school.

Inauguration ceremonies in a number of villages in southern Belize marked the completion of an ambitious project, conceived in the immediate aftermath of Hurricane Iris in October 2001. Iris, a powerful category IV storm, left a path of destruction across much of southern Belize. Immediately after the storm, the Ministry of Health deployed emergency health teams to provide essential health services and to carry out a rapid needs assessment. As a result, the European Commission s Humanitarian Aid Office (ECHO), U.K. Department for International Development (DFID) and the U.S. Office of Foreign Disaster Assistance (OFDA) funded an emergency health project. Through this project, water tanks were installed in primary schools in more than 20 villages in southern Belize. They will serve the needs of the students in normal times and provide an emergency source of safe drinking water during disasters. Fifty-six latrines were also constructed at village schools and ten health centers, which were damaged in the hurricane, were rehabilitated. The construction of four chlorine generation centers, designed to provide a cheap and reliable source of chlorine to treat potable water, was also completed. For the people of southern Belize who were so severely affected by Hurricane Iris, these works constitute an essential element in restoring access to public health services, and in many cases represent a marked improvement in the quality of facilities that existed before the hurricane.

The Bloom Hospital

Disaster mitigation and preparedness yield valuable lessons

In October 1986, an earthquake measuring 7.5 on the Richter scale struck El Salvador, killing more than 1,000 persons, injuring or displacing many thousands more and causing millions of dollars in damage. The Benjamin Bloom Children s Hospital suffered structural damage to the 12-story hospital tower and three floors that offered outpatient services were destroyed. The damage caused the complete evacuation of the hospital. Health care for patients and victims was provided in tents.



Health services provided in tents following the 1986 earthquake.

As a result of the 1986 earthquake, disaster mitigation measures were incorporated into the reconstruction of the damaged facilities. The tower was retrofitted and the exterior walls surrounding the structure were strengthened. Outpatient facilities were also rebuilt. The reconstruction took several years, and during this time a temporary facility was conditioned to provide hospital services.

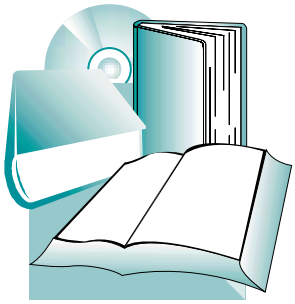
In 1993, all services were transferred back to the retrofitted and rebuilt Benjamin Bloom Hospital. Over the next several years, the Hospital stepped up disaster preparedness efforts, reorganizing the hospital emergency committee and reviewing and modifying the hospital s emergency manual, based on experience from the 1986 quake. Simulation exercises were also conducted to review evacuation and mass casualty management procedures.

Temporary facilities, 1987-1993.

Fast forward to January 2001. Another major earthquake strikes, seriously affecting health infrastructure in El Salvador. However the Bloom Hospital suffered no apparent damage. As a precautionary measure, patients and personnel were evacuated from the tower, but all returned 15 days later when it was determined that the earthquake had not compromised the safety of the building. When a second earthquake occurred in February 2001, patients were again evacuated according to hospital plans, but services were restored in just hours this time.

Current view of the Benjamin Bloom Hospital.

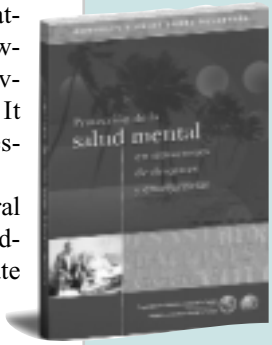
El Salvador s valuable experience over a 15-year period clearly demonstrates the effectiveness of disaster mitigation measures and hospital preparedness both of which help ensure that natural disasters need not cripple a country s health services.



Publications and Multimedia

A limited number of print copies of the Mental Health Manual and the Chemical Accidents CD-ROM is available from the Regional Disaster Information Center (CRID). See page 8 for information on how to order.

Protecting Mental Health in Disaster Situations (Spanish Only)

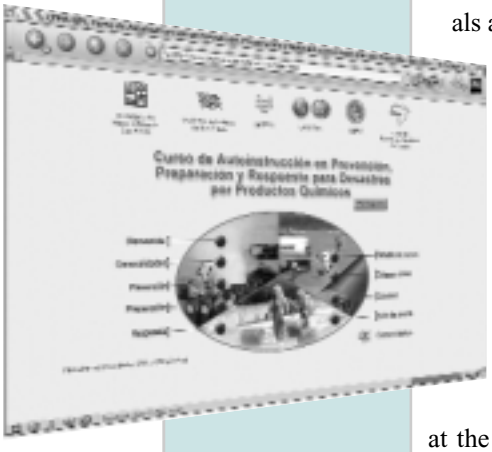


The health effects of disasters can be physical, mental or social in nature. However, in most cases, the greatest effort has been devoted to treating the physical or social aspects. This manual responds to the growing concern of governments and the international community about improving how the mental health consequences of disasters are dealt with. It attempts to dispel stigmas that still persist including among health professionals regarding mental illness and other human behavior problems.

The manual looks at mental health not only in the aftermath of natural disasters but also in complex emergencies. It is written as a practical handbook to help authorities plan for mental health interventions in the acute emergency period and does not deal with psychosocial problems that can manifest themselves in the medium to long-term (usually after the second or third month), because routine health services should and usually do deal with these. Its particular focus is on the community and on improving coordination among the many agencies and organizations that provide mental health services.

Read or download this book from PAHO s web site at www.paho.org/spanish/ped/saludm.htm.

Self-study Course on Prevention, Preparedness and Response to Chemical Accidents Now Available



Latin American and Caribbean countries are frequently the site of accidents involving hazardous materials. This requires targeted measures to control their occurrence and reduce their impact. Well-trained professionals are key to developing and implementing effective strategies.

To help facilitate training activities regionwide, PAHO has developed a bilingual (Spanish/Portuguese) self-study training package. The course and supporting materials, which are available on CD-ROM and over the Internet, are organized into five sections: general aspects, prevention, preparedness, response and case studies. Each section includes several presentations and a section of questions and answers which allows students to evaluate their progress and understanding of the material.

The course also includes a section that provides links to key Internet resources on the topic and a chat room where participants can get in touch with the course coordinator at CEPIS, the Pan American Center on Sanitary Engineering and Environment. The chat room is available only through the online version of the course. This material will be used at the International Course on Chemical Accidents to be held in November in Brazil (see the last issue of this newsletter or write to eero@cetesb.sp.gov.br).

Preview the course on the Internet at www.cepis.org.pe/tutorial1/e/index.html. For more information about the topic or the course, contact cepis@cepis.ops-oms.org.

EOC or Situation Room?

(from page 1)

Following a large-scale disaster, particularly a sudden-impact disaster that occurs with little or no warning, the health sector needs a place where managers and all stakeholders can interact and make decisions using the latest information on needs, available resources and priorities. It requires a place for coordination, not merely a place to display information. This is an EOC.

Following recent disasters, it was common to see colorful maps of the affected area and data in the form of pie charts and graphs displayed in an improvised "situation room," posted on the web or incorporated into briefings for the press and others. No doubt this visual material impressed visitors and VIPs. However, it was less clear whether it had an impact when it came to making life-saving decisions. The underlying reason for this is that traditional epidemiologists and other health managers, while excellent professionals in their field, often are unable to adjust to the rapid and sometimes chaotic pace of an emergency. This, in turn, makes it difficult to provide timely guidance to donors and humanitarian agencies on what to do and what not to do, and ultimately affects how resources are channeled to respond to public health needs. Weekly statistics based on traditional notification systems have proven to have little relevance when it comes to carrying out a humanitarian health response.

What is needed to establish a health EOC?

The first thing that is needed is access to health data. If the Ministry of Health already has a health situation room, this will be an asset as a source of background data and analytical expertise.

The second thing that is needed is a direct link to a variety of disaster authorities, as they are the ones who will actually have data on the impact. These authorities include national, bilateral and international rapid assessment teams deployed to assess needs and provide humanitarian aid.

A health emergency operations center also must offer easy access for all stakeholders. Donors, NGOs and other institutions with an interest in the health response to the disaster must feel a welcome part of and a contributor to the health sector EOC. Without the presence of these external actors, there will be little coordination or impact.

The health EOC must also have an adequate communications infrastructure and physical space in which to display information.

Where to locate a health EOC?

There are several alternatives when considering where to locate a health EOC.

In the national EOC: Managing the health response to a disaster requires access to and the display of a considerable amount of information that is generated outside the health sector. Examples of this type of information include the number of victims, damage to roads, bridges, power plants and other infrastructure, damage to housing, assistance received or pledged, etc. Many stakeholders, donors and humanitarian agencies are interested in a much broader range of information than what the health sector traditionally produces.

Photo: PAHO/WHO, A.Waak

The actual decision of where to locate a health emergency operations center is less important than the relevance of the information it provides.

Since the objectives are to influence decision-making and direct resources toward health priorities rather than to impress authorities and visitors, the health sector might benefit from having a solid physical presence in the national multisectoral EOC, where data and external resources naturally converge.

In the Ministry of Health: Should the former alternative not be feasible or convenient, the Ministry s health situation room, when one physically exists, may provide an alternative site. However, the health sector should not lose sight of the distinct operational function and broader coordinating role of the EOC.

In the PAHO/WHO office: In some special circumstances, PAHO/WHO offices in Latin America and the Caribbean may offer the best communications, meeting rooms and a neutral environment in which to house a health emergency operations center.

The decision regarding where to locate a health emergency operations center is not, in reality, an "either—or" choice. It is a matter of balancing the presence, visibility and therefore the influence of the health sector where it counts most. Some kind of operational coordination mechanism will be required at all three levels. Even if the health sector overlooks the advantage of having a strong decisional presence at the multisectoral level (within the national EOC), it will still be necessary to identify how and where to coordinate internal operations, both in the Ministry of Health and with PAHO, in accordance with the particular role in the emergency.

In summary, in disaster situations, the health sector should maintain its leadership by taking its health situation room to the next level, as an operational/coordination tool in the form of a health emergency operations center. The primary determinant of the success of the health EOC will not be where it is located but rather how inclusive its coordination efforts are, how well it projects across sectors and, most importantly, the relevance of the health information. This transformation from a health situation room into a health emergency operations center is unavoidable if we really mean to influence events rather than simply to display our knowledge of public health.

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.*

F.3 Macari, Emir Jose. "Evaluación de riesgos de derrumbes causados por lluvias torrenciales," *Revista Internacional de Desastres Naturales*, Vol. 1, No. 2, pp. 117-126, Dec. 2001.

F.4 Ramos, Ricardo, et al. "Observaciones post-terremoto del 13 de enero de 2001 en El Salvador," *Revista Internacional de Desastres Naturales*, Vol. 1, No. 2, pp. 189-199, Dec. 2001.

F.5 Baker, Keith A. "Creating your family disaster plan," *Disaster Recovery Journal*, Vol. 15, No. 1, pp. 78-80, Winter, 2002.

F.6 Damme, Wim Van, et al. "Primary health care vs. emergency medical assistance: A conceptual framework." Oxford Unversity Press, pp. 49-60, 2000.

F.7 Boroschek, Ruben, et al. "Aspectos básicos en la evaluación de la capacidad de respuesta a desastres naturales de un hospital." University of Chile, p. 8, 1994.

F.8 Feng, Wyatt. "Risk analysis: Tropical and temperate climates contrasted." *Windstorms: Coming to Terms with Mankind's Worst Natural Hazard*, pp. 27-33, 1995.

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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