

Disasters

Preparedness and Mitigation in the Americas



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July 2004

World Conference on Disaster Reduction - Kobe, Japan Safe Hospitals: what better indicator of overall disaster vulnerability reduction?

Thousands of lives were lost in the January 2001 earthquake in Gujarat, India; close to 200,000 injured persons required medical care. In Bam, Iran last December, another devastating earthquake killed 26,271 people and seriously injured thousands. In both of these locations, health infrastructure was virtually destroyed or knocked out of commission.

By comparison, Mexico City may have been more fortunate in the 1985 earthquake, because not all the nation's hospitals were damaged or destroyed. Yet, in the affected hospitals, devastation was tremendous. Images of the collapse of a 12-story tower of the Juarez Hospital left nothing to the imagination. In the city's public sector hospitals alone, 4,400 hospital beds were lost. The 900 lives lost at these sites included a substantial number of medical and health personnel, many of whom had participated in mass casualty management training. This tragedy is often cited in Latin America as the tipping point—a point at which a critical mass came to acknowledge that it was no longer acceptable to continue investing in disaster preparedness training if the infrastructure in which health personnel worked was not safe from disasters.



Levels of Protection

Reducing the vulnerability to disasters of any construction involves distinct levels of protection: Protecting *lives*, the most basic level, ensures that occupants can evacuate a building in time and is applicable to any construction. Hospitals, however, present a singular challenge. Unlike many other buildings, they are occupied 24

hours a day, and in disaster situations, this round-the-clock population is difficult to evacuate.

Protecting the *investment* preserves a higher level of physical protection and is directed to costly infrastructure and equipment. Again, hospitals rank among the highest on the scale of expensive investments.

Operational protection, the most stringent level, is reserved for those facilities that must—at any cost—remain not only standing but functioning: power stations, water systems, security facilities and hospitals are among the limited number of facilities that must

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**Pan American
Health
Organization**



Regional Office of the
World Health Organization

Partnerships to Strengthen Disaster Reduction Activities in the Americas

PAHO/WHO has forged partnerships with three organizations—CARE, UNICEF, and the University of Geneva—for collaborative activities related to disaster reduction in the health sector. A Letter of Agreement with the NGO CARE calls for incorporating health topics related to risk management and emergency response into CARE's training of trainers programs in municipalities in Guatemala, Nicaragua, Honduras and El Salvador. Participants will form local training teams to replicate the training at the local level with community leaders and health volunteers. A Memo of Understanding with UNICEF's Regional Office for the Americas and the Caribbean outlines areas for collaboration including: combined training; joint rapid assessment missions; the development and utilization of the Logistic Support System and SUMA and the preparation of mutual contingency plans. The principal objective of a Letter of Understanding signed with the University of Geneva is to improve professional development needs. PAHO and the University will cooperate in identifying

candidates for the master's degree in humanitarian action offered by the University of Geneva and will work to create a network of professionals to maintain contact between graduates from the master's program and participants of disaster-related PAHO/WHO courses.



“Water and Disasters” October 2 to Mark Inter-American Water Day

Each October since 1992, Latin America and the Caribbean have celebrated the Inter-American Water Day. This year, on October 2, the Region will borrow from the 2004 World Water Day, celebrated in March, with the theme “Water and Disasters.” In the Americas, emphasis will be placed on the importance of water when it comes to protecting health in disaster situations and the need for water service providers, as well as health service providers, to incorporate risk management into their day-to-day administrative tasks.

The burden of disease associated with inadequate or poorly-managed water resources is increased in disaster situations. WHO states that “almost two billion people – one-third of humanity – were affected by natural disasters in the last decade of the 20th century, 86% of them by floods and drought. There are high rates of suffering and death in populations affected by natural and manmade disasters, mainly due to common illnesses made life-threatening by crisis conditions.”

All countries are invited to begin preparing to mark this day, which will be celebrated close to the UN World Disaster Reduction Day (October 13). Several regional organizations are sponsoring events. More information is available on the web site of the Pan American Center for Sanitary Engineering and Environmental Sciences

www.cepis.ops-oms.org/cepis/e/bvsadiaa.php or from WHO at www.who.int/ (search on “water and disasters.”)

Other Organizations

Other Organizations

What's New at CRID?



If you haven't visited the Regional Disaster Information Center (CRID) lately, some new features are waiting for you.

CRID has developed a series of InfoPacks on frequently requested topics. Currently, there are InfoPacks on earthquakes, floods, hurricanes and drought. The InfoPacks bundle together different types of information about each topic. For example, click on the earthquake InfoPack and here is what you will find: an overview fact sheet on earthquakes with a list of safety measures; a section containing examples of public information pamphlets on dealing with earthquakes; online access to the full text of many interesting documents on earthquakes from CRID's collection (grouped by themes such as health care, lessons learned reports, emergency plans and more); contact information for institutions and agencies deal-

ing with earthquakes in the Americas; and links to global web sites with some of the best earthquake information.

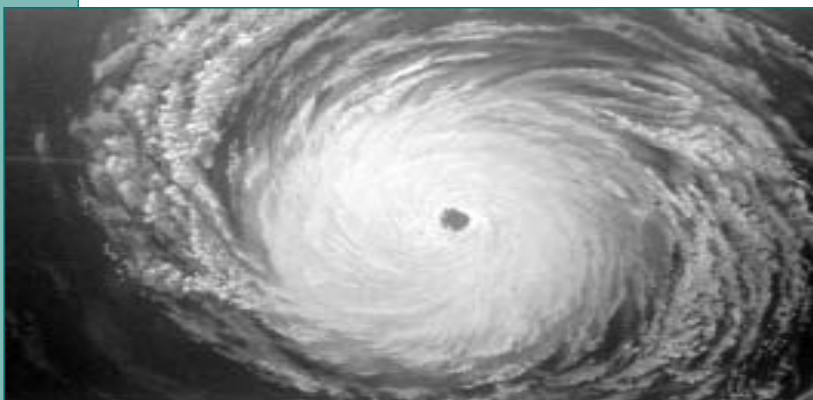
Did you know that now more than 3,000 documents and publications have been converted to digital format? Previously, a search of the CRID database would turn up a reference (or sometimes a short summary) of documents matching the search query. Users then had to request that CRID send a hard copy by mail. Now, those who want instant access to the full text of articles and publications can search through the "electronic documents" collection (see Information Services on the CRID home page).

Visit the CRID home page at www.crid.or.cr (and click on the "English" button) to learn about all of CRID's bibliographic tools and information services.



You have a choice!

How would you like to receive your disaster news? You can cut down on paper and opt to read this newsletter in HTML or PDF format (we'll let you know when it's up on the web). Or you can continue to receive your print copy and be notified when the electronic version is up. Let us know which you prefer. Write to disaster-newsletter@paho.org. Check out the HTML version of this newsletter at www.paho.org/disasters (click on Newsletter in the right hand column).



2004 Hurricane Season is Here

The Atlantic Hurricane season officially started on 1 June. Some experts have predicted a season of above-average activity. This year's hurricanes will be named: Alex, Bonnie, Charley, Danielle, Earl, Frances, Gaston, Hermine, Ivan, Jeanne, Karl, Lisa, Matthew, Nicole, Otto, Paula, Richard, Sharey, Tomas, Virginie and Walter.

Member Countries

University Commission for Disasters Sets Two-year Work Plan

The Central American University Commission for Disaster Education is made up of representatives from universities in all Central American countries. This group has been working for many years to strengthen the disaster curriculum of faculties of health-related disciplines and has been supported by PAHO in this process. However, the Commission itself called for and financed their most recent meeting in Costa Rica, where they met to approve the Commission's regulations which call for curriculum standardization and common goals for education in risk management and disaster response in Central America. To step up the focus on risk management, the Commission designed a work plan for the next two years. The principal areas in which they will concentrate efforts include: research, education, project preparation, coordination and communications. For more information contact Carlos Roberto Garzon at garzonca@cor.ops-oms.org.



Peru Approves Health Disaster Plan

The President of Peru has enacted into law a national Emergency Preparedness and Disaster Response Plan for the Health Sector, which establishes policies, strategic objectives and activities that the Ministry of Health, the Social Security System, the Armed Forces, the police and others must incorporate into their institutional plans. The preparation of the plan was based on a risk assessment that identified emerging and reemerging hazards and evaluated the capacities and vulnerabilities of the health sector. This Plan provides a detailed diagnosis of natural and manmade hazards that pose a threat to the health of Peruvians. The Plan is on the Ministry of Health web site at www.minsa.gob.pe/ogdn. For more information contact Dr. Celso Bambaren: cbambarena@minsa.gov.pe.



Serious Flooding Impacts Haiti and the Dominican Republic

Haiti

Beginning in late May, heavy rains and flooding affected an estimated 25,000 people in southeastern Haiti who were already living in dire conditions following the recent political crisis. The village of Fonds Verrettes was almost completely washed away by the floods and the lower part of Mapou disappeared under four meters of water. Although roads were destroyed and there was no communication with the affected area, assessment teams managed to arrive fairly quickly, thanks to logistical and helicopter support from the Multinational Interim Force (MIF).

Joint teams from Médecins sans Frontières, Médecins du Monde, the International Committee for the Red Cross and the Federation of Red Cross Societies quickly launched medical and psychosocial interventions, while NGOs such as OXFAM prepared water and sanitation programs. Although the acute emergency phase has now passed, many rehabilitation needs remain.



Health centers, homes and schools need to be repaired or even rebuilt in a safer area, while the population needs assistance to restore their lives and livelihoods.

The disaster revealed weak points in terms of the response: the dependence on the logistics of the MIF; the weak national infrastructure; and the late positioning/deployment of UN and humanitarian actors in the field.

Flooding in Nicaragua

During the last week of June, a tropical wave produced heavy rains in Nicaragua, causing floods and extensive damage, particularly in the Autonomous



Departments of the North and South along the country's eastern Atlantic coast and in the Department of Matagalpa, all of which were declared to be in a state of emergency. At least 25 people died and more than 3,000 families were affected. A PAHO health team in Nicaragua carried out three assessment missions to the affected areas

with the Ministry of Health to evaluate the impact of the floods. Among the greatest needs in the health sector were: medicines and medical supplies to meet needs for a three-month period; basic sanitation and potable water (portable chlorine generating equipment, plastic containers to store drinking water, multifamily latrines and household water filters); vector control and the ability to mobilize health brigades to meet the needs of the affected population.



Mobile Emergency Care Service in Brazil

The president of Brazil has signed a decree creating a Mobile Emergency Care Service, known as SAMU/192. SAMU/192 is a Ministry of Health service that forms part of the Brazilian government's Emergency Care National Policy. The system was created to

reduce deaths, the length of hospital stays and the consequences of a delayed response. By the end of 2004, this service is expected to reach 118 million people in 1,700 municipalities. To achieve this goal the Ministry of Health of Brazil will invest US\$100 million to set up 132 SAMU/192 Centers and purchase 1,480 basic ambulances and intensive care mobile units. More information on SAMU/192 at: <http://dtr2001.saude.gov.br/samu/index.htm>

In June, representatives of the Ministries of Health of the Dominican Republic and Haiti, PAHO/WHO and the Red Cross Societies from both countries held a meeting along the border. This was followed by a workshop to improve joint strategies for future interventions in the border region. The UN system is currently looking into ways to improve inter-agency and inter-country information sharing, analyze logistics capacity on both sides and reinforce prevention and early warning systems.

Dominican Republic

The same heavy rains that affected Haiti raised the water level of the Jimaní River; homes were swept away, utility lines cut and rescuers prevented from reaching the hardest-hit regions. Civil defense officials helped to evacuate families to higher ground. The hospital in Jimaní was flooded and patients were transferred to another facility. A few of the potential public health risks from this disaster included changes in existing patterns of morbidity, changes in the ecosystem due to vectors, population displacement and deterioration in drinking water and basic sanitation systems and health infrastructure. The most pressing tasks involved strengthening the capacity of the provincial health authorities and health centers to deal with potential disease outbreaks common to this type of disaster and implementing health promotion, information, education and communication initiatives directed at the population in temporary shelters and those living in affected areas.



Publications and Multimedia

P u b l i c a t i o n s a n d M u l t i m e d i a



Return to Happiness: Psychoaffective Recovery of Children Affected by Disasters and Armed Conflict

This manual, produced by UNICEF Colombia, provides a methodology for the psychosocial recovery of boys and girls who are or have been the victim of displacement due to violence. This methodology is part of a UNICEF project called “The Return to Happiness,” and outlines ways to identify psychological problems, suggests recommendations on how to talk with children and provides guidelines for instructors and trainers to plan weekly activities and keep files to monitor each boy and girl’s recovery.



Request copies of this publication from Gladys Hauck at ghauck@unicef.org.

El Salvador Recovers — Health Sector Actions After Hurricane Mitch

El Salvador was one of the Central American countries affected by Hurricane Mitch and over the last four years, has undertaken a significant number and

variety of activities to reduce the health sector’s vulnerability to disasters. This publication chronicles El Salvador’s journey in community preparedness, mental health, institutional strengthening, risk maps, safe hospitals and water

supply systems and much more. This book includes lessons learned that can be applied to the management of any type of disaster. For copies of the publication (Spanish only) write to jjenkins@els.ops-oms.org. Download copies at http://desastres.ops.org/sv/tc/el_salvador_se_levanta/index.pdf



Manual on Risk Management System for Chemical Emergencies



CETESB, Brazil’s Institute for Science and Technology for Environmental Health and a WHO Collaborating Center, has prepared organizational development guidelines, including the structure necessary to design strategies to prevent, prepare and respond to chemical emergencies. This guide, available in Spanish and Portuguese, is directed to public and private agencies and is the result of CETESB’s experience over a 25-year period in chemical emergencies and the development of contingency plans.

The manual is divided into three parts: section one provides the context for establishing a system, providing an overview of major chemical accidents worldwide that caused a serious environmental impact; part two discusses planning for the system, including an analysis of existing legislation and an analysis of public and private sector agencies involved in producing, storing, handling and disposing of chemicals; part three contains references and the annexes. Contact CETESB at edsonh@cetesb.sp.gov.br to order print copies of the manual or download a copy at www.cetesb.sp.gov.br/emergency/emergencia.asp.



Safe Hospitals: what better indicator of overall disaster vulnerability reduction?

(from page 1)

remain operational immediately after a disaster. Emergency lifesaving treatment simply cannot wait. If a hospital collapses or is rendered useless, many lives can and will be lost. Hospitals may be the only social facility with high marks in all categories.

The most recent earthquakes in Turkey, India, Algeria, Iran and Morocco are eliciting a groundswell of support for disaster mitigation—calling on countries to pay as much attention to preserving the structural and functional integrity of their infrastructure as to preparing human resources to deal with the aftermath of disasters. The UN General Assembly has called on the International Strategy for Disaster Reduction (ISDR) to organize a World Conference on Disaster Reduction. The Conference, which will be held in Kobe Japan in January 2005, will review the past decade's progress on the Yokohama Strategy and Plan of Action for a Safer World (1994) and define remaining challenges, critical needs and opportunities.

The time is at hand for countries worldwide to demonstrate their commitment to a concrete topic, and no topic is more appealing to both the social and economic sectors than hospital vulnerability reduction.

Reducing Vulnerability in Hospitals: lessons learned

Latin America and the Caribbean have advanced significantly in reducing their overall vulnerability to disasters. The contribution of the health sector to this multisectoral effort has been acknowledged by all. Efforts to reduce structural, non-structural and functional vulnerability in health facilities have served as a model and a catalyst for other sectors. They are also case studies in terms of success and limitations in protecting critical facilities:

- Protecting the functionality of complex structures requires a proven methodology and techniques. Tools, such as the methodology promoted by the World Bank and the WHO Collaborating Center on Disaster Mitigation, have been



tested and are available to all (see page 2 of the Supplement).

- Low and middle-income countries have demonstrated, through pilot projects, that it is possible to significantly reduce the vulnerability of existing health infrastructure to disasters with technical and financial resources already at hand. However, this is not the most economical route, as retrofitting existing facilities can cost 15-30% (or more) of the cost of the construction.
- Surprisingly, including disaster reduction as criteria at the earliest stage of site selection, design and construction of new facilities—the most economical route—has not been as readily accepted by key decision makers as would have been expected.

In brief, the challenge is not a lack of health or engineering knowledge, but one of political commitment at the multisectoral level; in other words, a perfect candidate for the attention of the world leaders at the Kobe World Conference (WCDR).

Safe Hospitals: a WCDR goal and indicator of success

Recently, WHO, through its regional office for the Americas, organized intercountry meetings to review where the Region stands in terms of disaster vulnerability in the health sector. Based on this status report, a forward-looking strategy was proposed to guide regional efforts through 2015.

Vulnerability reduction depends on many factors and sectors. Although completely reducing a country's overall vulnerability is not feasible by 2015, efforts and funds should be directed to improving critical social facilities where some degree of progress has been made since the Yokohama World Conference in 1994 and further success is within reach. The degree of protection built into the design of new health facilities is a sensitive indicator of political commitment to overall disaster reduction across sectors.

Recommending that hospitals safe from disasters be designated as a target and a global indicator for measuring multisectoral disaster reduction is an opportunity for all—not just for the health sector.

Selected Bibliography



S e l e c t e d B i b l i o g r a p h y

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New Publications and Instructional Material on Emergencies and Disasters

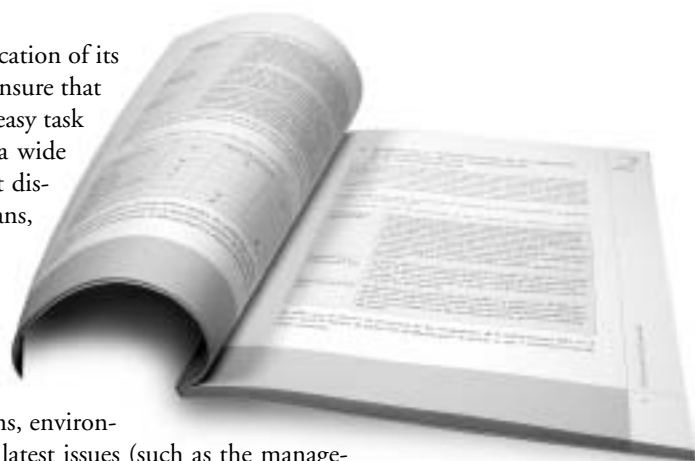
Special Supplement to the Newsletter **Disasters: Preparedness and Mitigation in the Americas**
Quarterly Newsletter of PAHO/WHO

July 2004

Introduction

For more than two decades, PAHO has coupled the production and publication of its print and audiovisual material on disasters with an ongoing campaign to ensure that this material is widely distributed, used and easy to obtain. This is not an easy task in Latin America and the Caribbean, where our public is spread across a wide geographical area, speaks four languages and is involved in many different disaster-related disciplines. To bolster our efforts, we also rely on other means, such as this Newsletter, to reach an even greater audience.

This special supplement renews our commitment to increasing the availability of this material. In it you will find a brief summary of the most important books, CD-ROMs and information products produced over the last two years. In addition to familiar topics related to disaster preparedness (manuals and guidelines on damage assessment, hospital plans, environmental health and mental health), you will also find publications on the latest issues (such as the management of cadavers, the deployment of field hospitals in disaster situations or risks to public health from chemical and biological weapons). Electronic and multimedia formats are increasingly used and the Internet has become a key vehicle for publication and dissemination.



There are several ways to consult and obtain these materials. We recommend visiting the Health Library for Disasters (www.helid.desastres.net), which contains the full-text version of more than 500 publications on many aspects of disasters. In PAHO's electronic Disaster Publications Catalog, which is available on our web site, you will also find the full-text version of all new material mentioned in this Supplement. Visit www.paho.org/disasters and click on Publication Catalog or write to disaster-publications@paho.org to order any of this material. Readers in the Caribbean may visit the Documentation Center in the PAHO/WHO Office in their country.

DISASTER MANUALS AND GUIDELINES SERIES

Manual de evaluación de daños y necesidades en salud para situaciones de desastre

(Damage and Needs Assessment in the Health Sector in Disaster Situations)

NEW



Disaster Manuals and Guidelines Series, No. 4

2004 Edition, Spanish only, US\$ 15

This manual provides a tool to assess damage and needs in the health sector following disasters. The methodology can be adjusted to local conditions and to different types of emergency situations. The main topics addressed include basic concepts of disaster management and the assessment of the situation in terms of epidemiological surveillance, basic sanitation and health infrastructure.

Management of Cadavers in Disaster Situations

Disaster Manuals and Guidelines Series, No.5
2004 Edition, US\$ 18

NEW



Large-scale, devastating disasters, regardless of when or where they occur, often claim a large death toll. This new manual provides guidance on managing a large number of dead bodies in the aftermath of disasters. It intends to debunk myths or misconceptions regarding the handling, identification and final disposal of cadavers. It also argues against burial in common graves and mass cremation, emphasizing the need to preserve the identity of the dead and the importance of providing support to family members and relatives.

See page 4 for other titles in this series.

Guidelines for Vulnerability Reduction in the Design of New Health Facilities



2004, 106 p. ISBN 92 75 32500 6
US\$ 18

This joint publication of PAHO/WHO, the WHO Collaborating Center on Disaster Mitigation at the University of Chile and the World Bank's ProVention Consortium provides technical criteria for incorporating disaster mitigation into the planning and development stage of construction of new health facilities. The publication sets forth three levels of protection: life protection, infrastructure protection and operational or functional protection. It recommends that key or essential areas of a hospital be built with third-level protection in mind; as a whole, all new facilities should be built to meet the first level protection. International experience has shown that incorporating disaster mitigation measures to achieve the third level of protection in new hospitals does not raise the cost of construction more than 4%. This technical publication provides guidance for health managers, professionals and technical advisers who have to manage, design, build and inspect projects involving new hospitals, laboratories and blood banks.

NEW

Protecting New Health Facilities from Natural Disasters: Guidelines for the Promotion of Disaster Mitigation



2003, 52 p. ISBN 92 75 32484 0
US\$ 10

This publication is a companion piece to the *Guidelines for Vulnerability Reduction in the Design of New Health Facilities*. It provides an overview of the more comprehensive technical publication and includes recommendations on how to promote the adoption of disaster mitigation guidelines by national authorities, health planners and financing agencies. It also emphasizes the substantial social and economic benefits of applying mitigation measures to the design, planning and construction of health facilities to safeguard lives, infrastructure and the operations of critical services.

NEW

Material de capacitación para el Curso de Planeamiento Hospitalario para Desastres y el Taller de Formación de Instructores

(Hospital Planning for Disasters)

2004 Edition
Spanish only, US\$ 25

2^o Edition

This new CD-ROM

contains the training material to deliver the course on *Hospital Planning for Disasters* and the material needed to conduct workshops to train trainers for the course. The Hospital Planning for Disasters Course outlines the methodology for developing and the content of a hospital disaster plan, which includes identifying risks, taking steps to reduce them and coping with internal and external disasters and emergency situations, taking into account both the hospital's response capacity and its vulnerability to the risks identified.

The revised and updated version of the Hospital Planning for Disasters Course includes technical comments, recommendations and suggestions made by facilitators and participants in earlier courses in Latin America.

DISASTERS AND ENVIRONMENT

Gestión de residuos sólidos en situaciones de desastre



(Solid Waste Management in Disasters)
Environmental Health and Disasters Series, No. 1

2003, 102 p. ISBN 92 75 32467 0
Spanish only, US\$ 15

This manual suggests criteria and basic actions for the proper management of solid waste in disaster situations. It was written for technical personnel in the sanitation sector, health professionals and other specialized experts who, in emergencies, work to restore basic community services and deal with health needs in shelters and temporary settlements. It includes case studies of solid waste management in disasters in Latin America.

NEW

Reducción del daño sísmico.

Guía para las empresas de agua

(Reducing Seismic Damage. Guidelines for Water Companies)

Environmental Health and Disasters Series, No. 2

2003, 107 p. ISBN 92 75 32488 3
Spanish only, US\$ 15

This publication offers valuable information for preventing potential earthquake damage to the components of a drinking water supply system. It includes a description of technical solutions that have been implemented when rebuilding damaged systems or to prevent damage in new infrastructure.

Both publications were developed in collaboration with the Pan-American Center for Sanitary Engineering and Environmental Sciences (CEPIS).



NEW

The Role of Laboratories and Blood Banks in Disaster Situations,



Instructional Material

2003 Edition

Technical training material that describes the role of laboratories and blood banks in disasters as well as measures to be taken to improve preparedness.

The CD includes audiovisual instructional material for use in training courses and seminars and an annotated script to accompany the presentation.

NEW

Slide Series Now in Electronic Format



Instructional Material

US\$ 25

For more than 20 years, PAHO produced slide sets for use as training aids in courses and workshops on disaster-related issues. Now, information that is deemed to be still relevant and of contemporary interest has been

transferred to electronic format and is presented on CD-ROMs, which are easier to distribute and reproduce. The CDs contain images in high resolution .jpg format, appropriate for publications or for printing purposes, and in low resolution for presentations or web pages. A fact sheet is included in PDF format with the detailed description of the content.

Titles available on CD include: Management of Cadavers in Disasters; Hospital Drills for Disaster Situations; Mental Health Care in Disaster Situations; Hospital Security; Preparing Risk and Resource Maps; Bacteriological Analysis of Natural Water Supply Sources in Disaster Situations; the Earthquake in Mexico (1985).

Mitigación de desastres en sistemas de agua y saneamiento (*Disaster Mitigation in Water Supply and Sanitation Systems*)



Training Material

2003 Edition

Spanish only, US\$ 25

Developed with the PAHO/WHO Pan-American Center for Sanitary Engineering and Environmental Sciences (CEPIS), the CD contains training materials

on disaster mitigation in water supply and sanitation systems. The training material offers both theoretical and practical elements on risk assessment of these systems and presents the principal mitigation actions that can be taken to reduce the effects of the most frequently occurring types of disasters in Latin America and the Caribbean.

NEW

Health Library for Disasters (available in CDROM and on the Internet)

2003 Edition

(English, French and Spanish documents) US\$ 30



The most comprehensive collection of information resources on public health and disasters and complex emergencies. The Library contains more than 500 full-text scientific and technical documents in English, Spanish and French and the principal

disaster and emergency publications of a variety of agencies including PAHO, WHO, UNHCR, ISDR, IFRC, ICRC, and several international NGOs. The CD and Internet versions both feature a user-friendly yet powerful search engine that helps locate information by subject, country, specific description, title, publishing organization, or any other key word. Documents are available in HTML format and some in PDF format as well. Visit this collection on the Internet at: www.helid.desastres.net or www.paho.org/disasters (click on Virtual Library).

NEW

Coming

soon:

- **Mental Health Protection in disasters and emergency situations, (Protección de la salud mental en situaciones de desastres y emergencias). Training material for courses and seminars. Available on CD and the Internet.**
- **Los desastres naturales y la protección de la salud. Multimedia training material available on CD and the Internet.**

OTHER PUBLICATIONS

Public Health Response to Biological and Chemical



NEW

Weapons World Health Organization, Second Edition

2003, 303 p.
ISBN 92 75 32485 9

This publication was written to guide countries on preparedness for and response to the deliberate use of biological and chemical weapons. The current publication updates a 1970 report that considered biological and chemical weapons at the technical and policy levels. It was intended not only for public health and medical authorities but also for those concerned with emergency response to the suspected or actual use of such weapons. This second edition is intended for much the same readership: government policymakers, public health authorities. On the web at www.who.int/ (click on Publications).

Logros en salud en Centroamérica: 5 años después de Mitch (*Success Stories in Health in Central America Five Years after Hurricane Mitch*)



NEW

2003, 40 p. ISBN 92 75
32489 1

Spanish only, US\$ 10

This publication documents the experiences, achievements and lessons learned during the implementation of a technical cooperation project to reduce vulnerability to disasters in the countries affected by Hurricane Mitch. The project was carried out by the health sector, many municipalities and a host of other actors in Honduras, Nicaragua, El Salvador and Guatemala and the publication illustrates how action and experience can be applied to improving health services and living conditions of populations at risk.

WHO-PAHO Guidelines for the Use of Foreign Field Hospitals in the Aftermath of Sudden-Impact



NEW

Disasters

*Results of an International Meeting
2003, 20 p.*

US\$ 10

At the WHO/PAHO-sponsored meeting, the pros and cons of the use of foreign field hospitals in the aftermath of natural disasters were discussed and draft Guidelines were examined and approved. The guidelines propose conditions that field hospitals and their staff should meet according to the length of time they will remain in a disaster-stricken country. They also outline issues that authorities in donor countries should consider before mobilizing a field hospital. A summary brochure, *Field Hospitals in the Aftermath of Sudden-Impact Disasters. A Help or Hindrance?*, was developed to promote their use by decision-makers.



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