Disasters

Preparedness and Mitigation in the Americas

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Combining new and traditional methods for effective learning

For more than 25 years, the Pan American Health Organization has supported disaster preparedness and mitigation training initiatives throughout Latin America and the Caribbean. This support has taken many forms—from complete or partial sponsorship of selected events, to mobilizing trainers or content experts, to providing technical or training material. As countries have become increasingly self-reliant in meeting their own training needs, PAHO is exploring new ways to reach a broader audience with the "just-in-time" information it needs for decision making and performance enhancement.

E-learning, distance learning, self-paced learning—it has many names—is one option on the horizon, and one that is generating a great deal of enthusiasm. However, convincing the disaster community to step into an e-learning environment will require more than spending large sums on technological innovations and fancy graphics. To compete effectively with the vast amount of information that is already available in traditional learning formats, users must learn to recognize when and how e-learning represents true value added.

E-Learning: Value added or just a fad?

In the last five years, many disaster management e-learning initiatives have been trumpeted as the alternative to costly international courses directed to an elite. Donors, eager to ride the "dotcom" wave, generously funded these projects. Today, most have quietly faded away. A few e-courses are struggling to find paying students to meet their costs, but residential courses, a breed thought to be marked for extinction with the advent of e-learning, are more numerous than ever!

These difficulties have taught us a few things:

- Converting existing technical content into an electronic format does not automatically ensure that effective learning takes place. Just as with a traditional classroom course, it is important to develop good instructional objectives and

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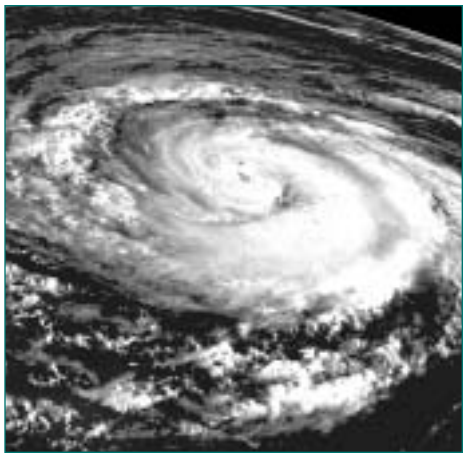

In May 2004, the U.S. National Hurricane Center called for a 50% probability of an above-normal hurricane season. Several of these storms battered the Caribbean and parts of the U.S, leaving a wake of devastation. Hurricanes Charley, Frances, Ivan and Jeanne proved to be most deadly, reminding us that disaster preparedness efforts cannot cease.

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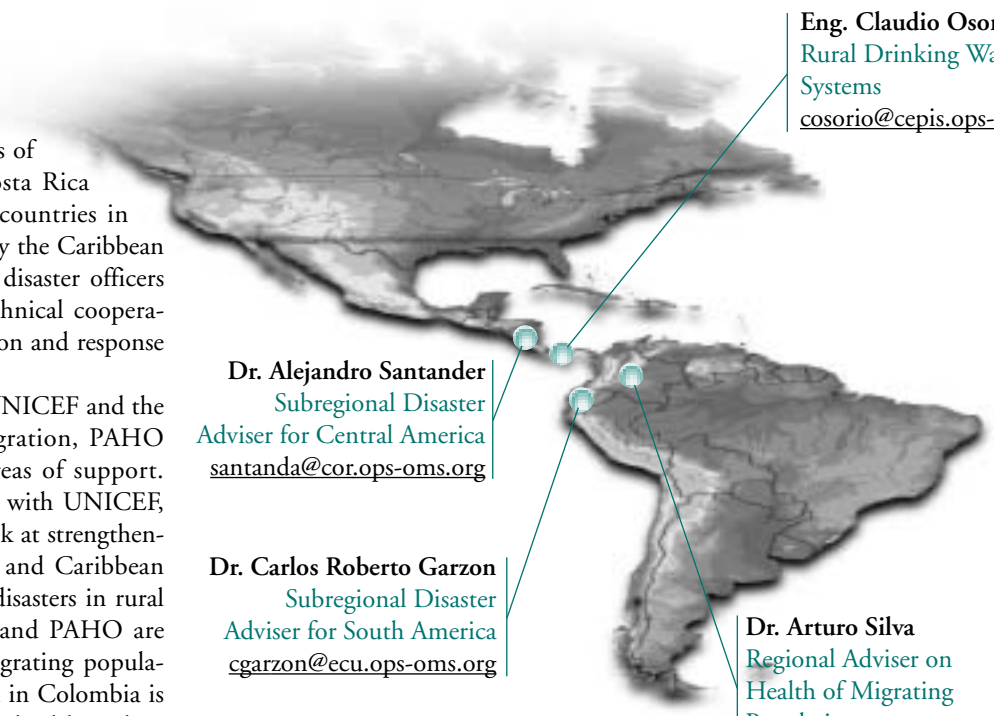
PAHO Directing Council Passes Resolution Urging Safe Hospitals

The devastation caused by Hurricanes Frances, Ivan and Jeanne was fresh on the minds of the Ministers of Health of the Americas when they met at PAHO's 45th Directing Council Meeting in late September. The regional health authorities approved a resolution urging Member States to strengthen their own disaster preparedness and mitigation programs by allocating resources and garnering political support to ensure that the health sector remains operational when a disaster-affected population most needs it. The resolution also recommends that countries set the goal of building all new hospitals with a level of protection that guarantees their remaining functional in disaster situations and implementing mitigation measures to reinforce existing health facilities, particularly those providing primary care. The complete text of the resolution is available at www.paho.org/english/gov/cd/CD45.r8-e.pdf.

Disaster Advisers Take up New Posts in Latin America

PAHO has reassigned staff responsible for its country operations in Central and South America to its subregional disaster offices in Ecuador (which covers the Spanish-speaking countries of South America and Brazil) and Costa Rica (covering the six Spanish-speaking countries in Central America). Belize is covered by the Caribbean office in Barbados. The subregional disaster officers are responsible for all aspects of technical cooperation related to preparedness, mitigation and response in these geographic areas.

Thanks to joint agreements with UNICEF and the International Organization for Migration, PAHO has stepped up other specialized areas of support. Through a Memo of Understanding with UNICEF, an engineer based in Panama will look at strengthening the capacity of Latin American and Caribbean countries to reduce vulnerability to disasters in rural drinking water systems. The IOM and PAHO are collaborating on health issues of migrating populations, and a medical officer stationed in Colombia is developing methodologies for quick health evaluations of mobile populations and to monitor access to health services. Contact these disaster advisers in their new duty stations.



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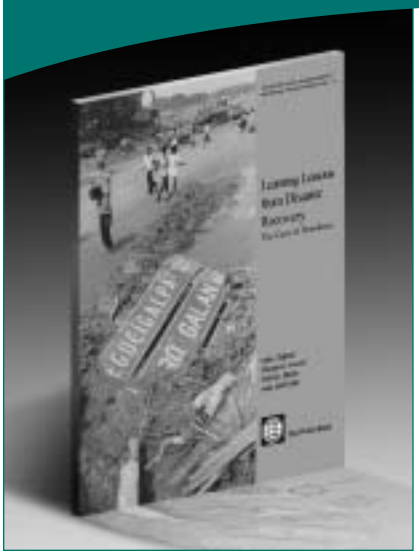
Other Organizations

Country-level use of Sphere

In Honduras, the Sphere working group launched the Spanish edition of the 2004 Sphere handbook. More than 50 people attended the event, including donors, NGOs and government officials. The group also held both a national and a regional consultation on the future of Sphere. In El Salvador, the Sphere working group was invited by the government agency in charge of disaster response to present Sphere in the legislative commissions of the National Assembly. In April the group held a consultation meeting on the future of Sphere. The French and Spanish editions of the 2004 Sphere handbook, *Humanitarian Charter and Minimum Standards in Disaster Response*, are now available in French from Oxfam in the U.K (publish@oxfam.org.uk) or in Spanish by contacting Intermón in Spain (editorial@IntermonOxfam.org). Both the French and Spanish versions of the handbook are downloadable from the Sphere website at www.sphereproject.org.

World Bank Publishes Case Study on Honduras Disaster Recovery



"Learning Lessons from Disaster Recovery: The Case of Honduras" is the title of a new release in the World Bank Disaster Risk Management Working Paper Series. It examines recovery in Honduras following Hurricane Mitch in all sectors, identifying lessons learned, good practices and constraints to be overcome. The study looks at four main areas: policies related to disaster recovery and management; systems for disaster recovery, resources; and the impact of recovery efforts. The study also contains concrete recommendations on development, transparency and equity and risk management that apply to all actors working in recovery in the aftermath of disasters.

The report grew out of a case study that was part of a ProVention Consortium initiative. ProVention is a global partnership of governments, international organizations, academic institutions, the private sector and civil society to reduce the impact of disasters in developing countries. Download a copy of the publication at www.proventionconsortium.org (click on Publications).

CRID publishes new "minikits"

CRID has just added two "minikits" to its new series of information packets (refer to the previous issue to see what these information tools are all about). The subjects chosen this time are risk mapping and community participation. The packet on risk mapping contains information on their use, information leaflets, examples of risk maps prepared in Honduran communities, and other resources such as methodologies, experiences and lessons learned, links and contacts. In the packet on community participation you will find a document on community disaster preparedness in national development, and guidelines for community organization and for training and community education, as well as links, contacts and more. Visit CRID's website at www.crid.or.cr for more information.

Member Countries

Hurricanes Frances, Ivan, Jeanne caused widespread damage throughout the Caribbean; some islands were hit more than once. Thousands of lives were lost and material losses run in the millions of dollars.

Frances

The Bahamas

Hurricane Frances affected all inhabited islands of the Bahamas chain; the most affected islands were San Salvador, Cat Island, Eleuthera, Abaco, Grand Bahama (the second most populated island) and parts of New Providence. Some of these islands house particularly vulnerable population groups. Two people died as a result of the hurricane, but more than 1,500 were evacuated to shelters; approximately 88,000 persons were at risk for vector and water-borne diseases due to water contamination and disruption of environmental health services.

The Princess Margaret Hospital in Nassau, a 400-bed hospital and the only hospital that provides tertiary care, only temporarily was forced to relocate patients. The Rand Memorial Hospital in Grand Bahama was partially evacuated due to infrastructure damage and flooding. The Bahamas has a network of 115 clinics strategically located throughout the islands to provide primary level health care. Several clinics were affected, significantly compromising the provision of health services.

Jeanne

Haiti

Jeanne had already been downgraded to a tropical storm when it hit Haiti, but nonetheless, heavy rains caused serious flash floods in the Artibonite and North West departments of the country and left more than 1,800 dead. Health structures in the affected areas, already crippled by underdevelopment and years of political unrest, took a heavy blow. An estimated 90% of private and public clinics and the government hospital, serving a population of approximately 220,000 people, were damaged. Departmental health authorities, NGOs and other actors worked to reestablish basic health care. The Red Cross movement set up a field hospital. An epidemiological surveillance system was set up to identify, as early as possible, emerging epidemic health problems, vector control programs have begun again and a very basic cold chain was re-established.

An enormous amount of work however remains to be done. One month after the disaster an estimated 2,500 families were still in need of shelter and the clean-up of Gonaives, the capital of the Artibonite, remains a high priority. Large quantities of mud and debris need to be removed, houses and roads rebuilt, schools and other public buildings cleaned and repaired. Food distribution will have to continue for some time, as crops were destroyed, leaving the population dependent on external assistance. Deforestation, poverty and political instability contributed to the high number of lives lost in the disaster and long-term assistance will be necessary to reduce the vulnerability of the Haitian population.

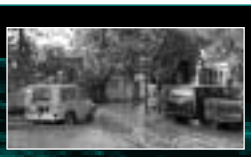
Dominican Republic

Strong rains brought on by Tropical Storm Jeanne caused heavy flooding in the north and northeast part of the country. Eleven provinces were affected. As rivers overflowed, communication with many areas was cut off, homes were destroyed or damaged and electric power and drinking water was lost.

Some 22,000 sought refuge in shelters and at least 37,000 people were evacuated from their homes. This situation raised concerns about an increase of communicable diseases already present in the area, such as dengue, malaria, leptospirosis, diphtheria and meningococcal disease.

Fortunately, the Dominican Republic has a well coordinated health services network, which was put into action as soon as the storm hit. All the main health facilities were evaluated and made ready with supplies and personnel. To avoid the spread of diphtheria and tetanus, all those in shelters and most children under six in the affected area were vaccinated.





Ivan

Cayman Islands

When it comes to hurricane preparedness, the Cayman Islands ranks high. However, even this was not sufficient to withstand the force of Ivan, which battered the islands with winds up to 165 mph and generated a 20-foot storm surge. Fortunately, only two deaths were reported.

85% of housing in the West Bay area of Grand Cayman suffered damage; the sewage system collapsed and raw sewage contaminated the flood waters. The Bodden Town Civic Centre, a designated shelter collapsed at the height of the hurricane and had to be evacuated. The airport was completely flooded and without power for several days, and the island was left without communications of any kind for two days.

Fortunately, the capital, George Town, was on the sheltered side of the island and it weathered the storm fairly well. The hospital was recently built to hurricane standards and it held up to expectations. It provided shelter for homeless staff, relatives and many others for up to 2-3 weeks after the storm.

Cuba

Cuba evacuated 1.3 million people—more than 10% of its population—from coastal areas of Isla de la Juventud and the provinces of Pinar del Rio and Havana. This opportune decision helped avoid a loss of life. Hospitals readied 5,000 hospital beds and 1,100 medical brigades. The storm downed power and telephone lines and trees in Isla de la Juventud and other areas, and destroyed many crops. There was also widespread damage to houses and other buildings, flooding in Pinar del Rio and blocked highways near Santiago de Cuba.

In Isla de la Juventud houses and other buildings were damaged and electric and telephone services were interrupted. In New Gerona, capital of Pinar del Rio, many streets were flooded. In Santiago de Cuba, at the east of the island the storm destroyed part of the main highway and blocked transit between that city and Pilon, 180 km. to the east.

Grenada

Hurricane Ivan was a category 3 storm when it devastated the island of Grenada, destroying concrete homes, uprooting trees and ripping the roofs from many buildings. More than 30 people lost their lives and damage was estimated at about US$560 million (150% of the nation's GDP).

The island's only referral hospital, St. George's, was damaged, but the wards remained operational. The Princess Alice Hospital suffered structural damage to more than 75% of the roof and could not function for a time. Although to some extent all health facilities suffered some damage, none was completely destroyed. Damage to individual facilities ranged from 5% to 75% of the structure. The cost to repair damage to health centers and hospitals throughout the island has been assessed at more than US$ 5 million. One month after the passage of Hurricane Ivan, more than 8,000 persons still remained in shelters.

St. Vincent and the Grenadines

In St. Vincent and the Grenadines, houses were damaged, but the main hospital in Kingstown did not sustain severe damage. There was no call for international assistance. However, in the islands of the Grenadines, the main hospitals in Union Island and St. Andrews lost their roofs. The island's school also lost its roof. The storm downed trees, caused severe flooding and brought down telephone lines.

Jamaica

The eye of Hurricane Ivan passed 30 miles south of Jamaica, reducing the anticipated impact on the island. Preparedness measures were put into place and thousands of people were evacuated from potential danger zones to ensure safety. Fifteen people lost their lives, and 207 communities in 11 parishes suffered damages.

The National Emergency Operations Centre (NEOC) reported extensive damage to house roofs and roads. There was also widespread damage to infrastructure. Light and water services were cut off for some time after the storm had passed. Fallen utility poles and trees made several roads impassable. Damage to coastal roads in the east was primarily due to storm surges and flooding. There were also several reports of persons trapped in their homes due to cave-ins.

Jamaica suffered extensive damage to the environment and the agricultural sector was also severely affected. Losses were reported in livestock and banana industries. Many health facilities sustained some kind of damage, but were quickly brought back to service.

Publications and Multimedia

Publications and Multimedia

International Migration, Health and Human Rights

This publication provides an overview of some of the key challenges for policy-makers in addressing the linkages between migration, health and human rights. It attempts to provide a useful platform to stimulate action to address migration and health in a comprehensive and human rights-sensitive way.

The first section explains why the issue of migration and health is addressed and what is meant by doing this through a human rights framework. It then explores some of the terminology used and what is known about the magnitude of, and reasons for, migration. The second section links the reasons that people migrate with the health and human rights implications of moving for the populations left behind. It focuses attention on the issue of migrating health professionals by highlighting relevant trends, financial implications and ongoing trade negotiations. The third section considers the health implications for those on the move both in the context of public health as well as in relation to the health of the individual. It considers the various ways in which migration is managed, such as detaining and screening at the border. The last section considers the health and human rights issues of migrants once in the host country. It focuses particular attention on the most vulnerable categories of migrants and highlights some of the key challenges to promoting and protecting their health.

Download the publication from www.who.int/hhr/activities/en/intl_migration_hhr.pdf. Printed copies can be purchased (US$9.00) from the WHO Bookshop by writing to bookorders@who.int

Management of Dead Bodies in Disaster Situations

The new and widely-requested English version of this publication is now available. The proper management of dead bodies is very important to the survivors of emergency and disaster situations. This manual was written to call attention to this aspect of disaster management, especially for authorities and those in charge of disaster preparedness and response, so that it becomes part of disaster plans and a key component of humanitarian assistance.

For print copies of the publication, write to disaster-publications@paho.org. The publication can also be downloaded in PDF format from www.paho.org/disasters (select Publications Catalog).

NEXT ISSUE

In the next issue:

Several months ago, PAHO conducted a survey of satisfaction with its print and multimedia disaster publications and training materials. As a preview, respondents told us that they considered our web page and the Disasters newsletter our most useful and best known information sources. The complete survey results in the next issue of this newsletter.

Combining new and traditional methods for effective learning

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figure out how to evaluate the success of e-learning initiatives.

- As opposed to a traditional learning environment, where a classroom instructor has a pretty good sense of when students have grasped a concept, self-paced or independent learning modules often lack the element of human interaction that makes this possible. In the same way that a videotaped lecture is no substitute for a live instructor, e-teaching must include a great deal of human interaction.
- No matter how complete or authoritative a textbook or publication is, some concepts will always require an instructor to effectively transform information into knowledge.

The myth: e-learning is economical and easy

E-learning is not necessarily a cost-saving alternative to traditional face-to-face training workshops. It's expensive to launch this type of initiative and converting content requires special skills. In addition to the costs associated with editing and formatting the content for an electronic medium, materials must be reviewed or redeveloped to provide a structured learning format. In a well designed e-course, the larger the audience, the better the return on investment. E-learning will continue to be costly unless it reaches a large number of students. Is health disaster management a suitable topic for this?

E-learning is not the easiest form of training and learners must adapt to what is still a non-traditional format. E-learning requires a commitment to follow through with a schedule. Participation and interaction are essential, particularly in a group learning environment. Past experience in courses such as LEADERS, which encourages peer interaction, has shown that the knowledge and experience participants bring with them to the course is one of the most valuable resources. Learners must also have a realistic idea of how much time they can and are willing to allocate to an e-course and how soon they expect to acquire the skills and knowledge.

To embark on or embrace this type of learning environment, learners must perceive a real value added. For example, many disaster managers have told us that certification or continuing education credits lend legitimacy to their profession and enhance their status within their organization. Distance learning can be a cost effective way of delivering tailor-made training, backed by a credible institution, to the greatest number of individuals possible.

What's next?

Just as the radio never replaced books or newspapers and the television did not spell the end of movie houses, e-learning must find its complementary niche among more traditional forms of training. It's easy to become overwhelmed with the time and cost required to set up and launch an e-learning initiative, thus increasing resistance and making it a prospect that never quite reaches fruition. However, by starting small, developing short modules that can be incorporated subsequently into a more comprehensive program, there's no better time than now to begin.

For example, evaluations from the first four LÍDERES courses (a rigorous disaster management training program that encompasses more than 18 modules over a 13-day period) have revealed particular interest in certain topics. Developing these topic areas into e-learning modules would enable PAHO to deliver the most relevant or popular content to a much larger audience. In doing this, a balanced approach would be best for courses such as LÍDERES, whose on-site costs are quite high. In this scenario, self-paced learning, where a student progresses through material at his/her own pace, would be blended with live e-learning, where tools such as audio or videoconferencing and synchronous events allow greater interaction, all of which would eventually lay the foundation for those face-to-face course modules that do not lend themselves as well to this format.

It's hard to match the social value of face-to-face learning, which may make some even more resistant to adopt distance learning methodologies. This may suggest that it is best to introduce changes slowly or in stages, perhaps within the context of a traditional training workshop, where an e-learning module could be designed as a follow-up instructional exercise to a traditional training program or as a requirement that participants must complete prior to attending a workshop. In this way, e-learning would support existing traditional learning initiatives without replacing them all together.

While technology itself will never be the driver for developing distance learning opportunities for the disaster community, e-learning initiatives, particularly web-based initiatives that incorporate some form of live interaction that simulates face-to-face encounters, can and are becoming an important component of training strategies. PAHO hopes to help enable the disaster "community of practice" to communicate, collaborate and share knowledge regionwide and to learn and use that knowledge to become more effective—all hallmarks of a learning organization.

& Selected Bibliography

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