# Disasters

### **Preparedness and Mitigation in the Americas**

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## From pandemic H5N1 to (H1N1) 2009: Lessons for disaster managers

Editorial



ore than three years ago, an editorial of this newsletter (No. 102) stressed the multisectoral dimension of pandemic preparedness and the need for serious contingency planning. At the time, the perceived threat was the avian influenza A (H5N1) virus, for which no human-to-human transmission had been reported (defined at that time as WHO Pandemic Phase 3).

Early this year, the pandemic (H1N1) 2009 virus rapidly developed the capacity to infect humans and to transmit from person to person, leading WHO to use a more precise definition of pandemic Phase 6 than was originally adopted.

Phase 6 is characterized by community-level outbreaks in at least one other country in a different WHO region. Designation of this phase indicates that a global pandemic is underway.

In the end, the rather ominous scenarios forecast for an avian influenza pandemic did not materialize. The pandemic that was expected to reach the Americas from Asia, carrying with it a highly lethal avian strain, ultimately originated in the Americas with a rather mild porcine variant; there was neither a high mortality rate, nor did social disturbances occur. The response remained predominantly a health matter, under the competent leadership of public health experts, and in particular epidemiologists, rather than disaster managers.

What broader lessons can and should disaster managers learn from three years of intensive awareness and planning for an avian pandemic at national and international levels?

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## "Safe hospitals" on the global political agenda

he 2008–2009 Global Campaign for Disaster Reduction, dedicated to the theme of safe hospitals, has allowed us to build new and stronger partnerships, include new players, and to generate greater political and technical awareness about this important challenge. PAHO/WHO will continue to work with governments and other partners to advance the safe hospitals issue and to ensure that it is on risk reduction agendas of governments, financial institutions, the private sector, international organizations, and agencies within and outside the health sector.

The Global Platform for Disaster Reduction, held in Geneva in June 2009, proposes that national assessments of all existing health facilities should be carried out by 2011, and that by the year 2015 specific plans for safe hospitals should be developed and implemented in all countries exposed to high risks.

At a meeting in London, in October 2009, WHO and the U.N. International Strategy for Disaster Reduction launched the Thematic Platform on Disaster Risk Reduction for Health and committed to working with local, national, and international partners to improve health and reduce risk from emergencies and disasters. The new global campaign for disaster reduction, dedicated to urban risk, provides the opportunity to continue the work of ensuring that safe hospitals are in every city on the planet.

The countries of the Region of the Americas have taken important steps in capacity building, implementing new instruments, and establishing political commitments to advance the strategy of hospitals safe from disasters.

(continued on page 8)

#### READ MORE ON RESPONSE TO THE PANDEMIC:

- ullet The Region's response to the pandemic (H1N1) 2009 and continuing challenges, pages 6 and 7.
- Influenza prevention for vulnerable populations, page 2.
- LSS/SUMA used to deploy supplies for pandemic, page 2.

## Pan American Health Organization Regional Office of the World Health Organization

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## News from PAHO/WHO

News from PAHO/WHO

## LSS/SUMA used to deploy supplies for pandemic



roviding health care for people afflicted with pandemic (H1N1) 2009 virus poses special challenges for logistics and administration of drugs and vaccines. In the coming months, the health sector must be prepared for major additional efforts as a new vaccine becomes available for distribution. The Logistics Support and Supply Management System (LSS/SUMA) has been very effective in managing vaccines for vaccination campaigns, and can be of great help in strategic distribution of vaccines in the current crisis. Several countries, including Argentina, Mexico, and Panama have expressed interest in using LSS/SUMA for such purposes.

In August, Argentina's Department of Vaccines and Immunization of the Ministry of Health installed LSS/SUMA software and conducted training because of the crisis resulting from the pandemic (H1N1) 2009. The SUMA system was used by the Ministry for inventory control of different types of vaccines at the central level; the Ministry expects to expand the system to the provinces to help with receipt, distribution, and use of vaccines.

The effectiveness of LSS/SUMA for this type of operation was tested in the emergency caused by the pandemic (H1N1) 2009 in Mexico. SUMA personnel provided logistics in managing incoming medicines and supplies and were mobilized to assist in attending to health needs of the population. In order to increase the number of people able to operate LSS/SUMA, the Ministry of Health coordinated a series of training sessions in Mexico City as well as three large, regional training sessions in the states of Campeche, Sinaloa, and Tamaulipas. More than 165 people from 26 states in Mexico participated. Training was provided to personnel from health services and institutes, public charities, the office of the President, the Ministry of Social Welfare, and hospitals. Visits were made to warehouses in individual states where recommendations were made on management systems.

The experience in Mexico made it possible to develop program files for LSS/SUMA that define specific supplies needed for health care during the pandemic emergency, and which can be integrated at facilities in other countries. LSS/SUMA does not replace existing inventory systems, but it has proved to be a valuable tool for ongoing monitoring and management of warehouses and pharmacies. For more information about LSS/SUMA, contact jeronimosuma@yahoo.com.

#### Influenza prevention for vulnerable populations

AHO/WHO, in collaboration with the International Federation of Red Cross and Red Crescent Societies, has launched a project to prevent transmission of the pandemic (H1N1) 2009 virus in prisons, orphanages, and homes for the elderly in the Region of the Americas. The project includes activities to prevent and treat influenza in institutions in Belize, Bolivia, Colombia, Guatemala, Guyana, Honduras, Jamaica, and Panama.

The purpose of this project is to improve institutional and personal hygiene measures in the facilities identified, intensify efforts to treat cases of influenza, and prevent the disease in specific vulnerable populations. Activities include early detection and immediate treatment of people suffering from influenza. Systems will be introduced to facilitate registration along with procedures for monitoring and reporting of cases.

This project is significant for people in prison or living in orphanages and homes for the elderly who tend to face difficult hygiene situations. In many cases gender issues are not taken into consideration in institutional settings. Age is a contributing factor for certain health conditions, increasing vulnerability to influenza for the elderly. For more information on this project, contact Dr. Dana Van Alphen, <a href="mailto:vanalphd@pan.ops-oms.org">vanalphd@pan.ops-oms.org</a>.

#### **Disaster Response Team includes communication specialists**

PAHO/WHO has completed the first stage of training and development of tools for information management and communication for disaster response. During this two-year process, a group of communication specialists was identified who have the skills and qualifications to support the Disaster Response Team in emergencies and disasters. A manual on communication and information management



in Spanish and English was prepared (see page 10) and a short field guide was endorsed at workshops in Guatemala and Barbados.

Representatives from several key partner organizations attended the workshops. For more information on this initiative, contact Ricardo Perez, perezric@pan.ops-oms.org.

## Psychosocial care for displaced populations in Colombia

AHO/WHO, in cooperation with Colombia's Technological University of Pereira, has launched the *Manual for mayors: a psychosocial approach to treating displaced, confined, or at-risk populations.* The manual aims to provide local authorities with guidelines for interventions and treatment of these populations.

The manual has guidelines proposed by the Ministry of Social Welfare of Colombia and protocols established in the Inter-Agency Standing Committee's (IASC) *Guidelines on Mental Health and Psychosocial Support in Emergency Settings.* The document will help local authorities to comply with their constitutional and social responsibilities for citizens who are displaced and affected by socio-political violence. It was prepared as part of an agreement with PAHO/WHO during the process of investigation at five sites in Colombia. The manual can be accessed at the following site: <a href="http://new.paho.org/col/index.php?option=com\_content&task=view&id=363&Itemid=361">http://new.paho.org/col/index.php?option=com\_content&task=view&id=363&Itemid=361</a>

For more details on the document, contact: castillaj@col.ops-oms.org.

The Interview

### Challenges in developing comprehensive and multisectoral risk management for Central America

he Coordinating Center for the Prevention of Natural Disasters in Central America (CEPREDENAC) is a regional, intergovernmental organization and a specialized secretariat of the Central American Integration System (SICA). It was created in 1987 by legislation in the countries of Central America. Its mandate is to promote activities, projects, and programs that will reduce the disaster risk that causes human and economic losses. The Center promotes and coordinates international cooperation and the exchange of information, experience, and technical and scientific advice on disaster prevention, mitigation, and response.

Mr. Iván Morales was recently named Executive Director of the Center. He takes leadership at a time when there is much to do and building a policy for disaster risk management in Central America is an imperative. In this interview, Mr. Morales talks about challenges in developing comprehensive and multisectoral risk management for Central America.

1. CEPREDENAC recently marked its 20th anniversary, so it is a good time to take stock of its accomplishments. Tell us about some of its achievements and about commitments or goals that have either been met or that go unfulfilled.

One of the greatest achievements of CEPRE-DENAC in these two decades is to have attained legitimacy in the region as an organization that is expert in the field of disaster management and risk reduction. This was clear during the Mitch + 10 Forum. The number of institutions and individuals who were interested in participating in this event reinforces the legitimacy of CEPREDENAC and its Secretariat. This has come about not because of a mandate but rather because of the conviction of the actors working in disaster management and risk reduction in Central America.

An unmet goal relates to the involvement of some politicians at different geopolitical levels. There is still a lack of will regarding disaster management and risk reduction on the part of authorities at departmental, provincial, and municipal levels, and even in some national ministries.

2. During your tenure, what would be the most important contribution to advancing comprehensive and multi-sectoral risk management in Central America?

The most important contribution is the Central American policy for comprehensive disaster risk management, as mandated by the Thirty-fourth Ordinary Session of Heads of State and Government of Member States of the Central American



Iván Morales, Executive Secretary of CEPREDENAC

Integration System (SICA). This policy will guide action and coordination processes among institutions, facilitating connections between policy decisions and corresponding implementation mechanisms and instruments. It will have a comprehensive focus (multi-sectoral and territorial), which will connect risk management with economic management, management of social cohesion, and environmental management.

#### **Profile**

Mr. Iván Morales, the current Executive Secretary of CEPREDENAC, has worked for 20 years in managerial and technical positions related to sustainable development, disaster management, risk management, and local and regional development. Over the past 15 years he has worked in country and regional offices of the United Nations and in international cooperation projects with government programs.



3. How do you see the role of international cooperation in this issue of risk management? How can we create synergies and greater impact in reducing vulnerability, building capacity, and, above all, reducing disaster risk?

The Central American policy for comprehensive disaster risk management provides a framework for strengthening relationships in this area. These are in line with commitments made in the Millennium Development Goals and the Hyogo Framework for Action.

International cooperation, by providing technical and financial support, is important for developing the policy and the partnerships necessary to implement the policy.

4. Besides the usual difficulties, the region is now facing new challenges, such as the international economic crisis and complex political situations like that of Honduras. In this context, how do you view the work of SICA, and how can CEPREDENAC contribute to the regional integration process?

The economic and complex political crises are beyond the mandate of CEPREDENAC. Obviously these issues affect the work performed by our specialized SICA body, but CEPREDENAC is not in a decision-making role.

In terms of integration, the second mandate of our institution is to integrate our region into processes of managing and reducing disaster risk. In practice, this is done through five program areas: scientific and technical programs, training and education, institutional strengthening, land management, and preparedness and response.

5. The health sector has been one of the most active on issues of risk and disaster management, but more coordination and collaboration are still needed between CEPREDENAC and actors in this sector. What concrete actions should be taken to increase cooperation and have a greater shared impact in the region?

There has been friction between health ministries and the authorities of national CEPREDEN-AC systems, for example, on the issue of emergency operations centers (EOCs). However, these conflicts happen less frequently, and we envision work between partners which will benefit the region in the area of disaster risk reduction. This is part of what the Central American policy for integrated risk management is trying to achieve.

For more information about CEPREDENAC please visit: www.sica.int/cepredenac.

Other Organizations

### CDEMA's new name matches a new approach

s of September 2009, the Caribbean Disaster Emergency Response Agency (CDERA) has changed its name to the Caribbean Disaster Emergency Management Agency (CDEMA). The change represents an organizational transition and a new approach based on comprehensive disaster management.

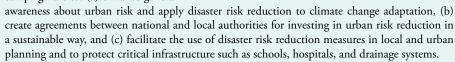
The agency's structure and mandate have been expanded to include reducing losses resulting from disasters and adopting disaster mitigation policies and practices at national and regional levels. In addition, cooperative arrangements and mechanisms have been made to develop a culture of disaster loss reduction.

Under the new structure, CDEMA will work with 18 countries, including Haiti and Suriname, who recently signed agreements to join the organization. According to the Executive Director of CDEMA, participating countries are ready to embrace policies and programs that reflect new challenges and hazards, which range from climate change to cross-border hazards such as pandemics. You can get more information by contacting zaccarem@cpc.paho.org.

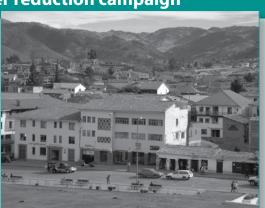
## Addressing urban risk is new theme for disaster reduction campaign

he International Strategy for Disaster Reduction (ISDR) has announced "Building resilient cities, addressing urban risk" as the theme for the 2010–2011 World Campaign for Disaster Risk Reduction. The campaign builds on "cities at risk" and "urban risk" issues developed by the ISDR and its partners around the world. The campaign targets local governments of different size, characteristics, risk profiles, and locations.

The objectives of the 2010–2011 campaign are to: (a) enhance general



The campaign will emphasize three lines of action: communicating clearly and raising awareness about local and urban risk, political engagement, and technical tools and capacity building. For the health sector, the campaign presents the opportunity to continue inter-sectoral work and promotion of the hospital safety campaign within the context of safe cities. For more details about the campaign, contact isdr@un.org or visit www.unisdr.org.



## Mitch + 10 renews Central America's commitment to risk management

In July, participants gathered in Guatemala for the Mitch +10 Regional Forum to strengthen Central American policy guidelines on risk management. The Mitch + 10 Declaration states that risk management must be integrated into planning processes and public investment. The Declaration calls on the region to reduce gender gaps of those affected by disasters, to lessen dependence on international cooperation in integrating risk management processes, to strengthen local risk reduction and disaster response capacity, and to update the regional risk reduction plan, among other issues.

The meeting brought together governments, U.N. agencies, donors, and other stakeholders to exchange experiences and lessons learned about risk management in the 10 years since Hurricane Mitch caused severe damage in Central America, and which serve as the basis for regional policy on risk management. The forum was organized

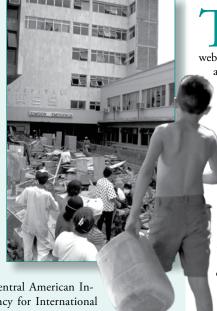
by CEPREDENAC with the support of the Central American Integration System (SICA) and the Spanish Agency for International Cooperation for Development (AECID). The full Declaration can be viewed at: www.sica.int/cepredenac.



he Foundation for the Coordination of Information Resources for Disaster Prevention (FundaCRID) signed an agreement with UNICEF to launch a website specializing in resources on education and risk management. This website will make it easier for authorities, teachers, technicians, and cooperating institutions to access materials about risk reduction for the education sector. It will also open the door to greater specialization for the Regional Disaster Information Center (CRID) in a critical area of risk management, allowing the development of products and services that are tailored to the needs of the educational community.

This agreement provides CRID with new opportunities for cooperation with other partners, which, like UNICEF, are active in the field of education and risk management, including ministries of education in Latin America.

A practical manual on information tools and resources on disaster preparedness in the education sector is being developed. This manual is one of the products of a DIPECHO project that CRID has been collaborating on since November 2008. For more information, contact isabel.lopez@crid.or.cr.





## Flip chart on safe hospitals:an educational tool for community use

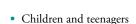
s part of the 2008-2009 Global Campaign for Disaster Reduction, which is dedicated to the theme of safe hospitals, many manuals and promotional and training materials have been prepared. However, their contents are almost always technical and they are written for specialists and practitioners. A simpler, more practical tool was needed that would help a wider and less specialized audience get the message. How could we call on a community, a school, or a rural health center to be partners and participants in this campaign? This flip chart gives us that opportunity. It has an entertaining format and design, and it teaches by using simple and direct language.



A flip chart is used for presenting ideas in a display format. Each illustrated sheet presents only the most important ideas; pictures are accompanied by short, simple text written in a font that is easy to read. In this case, the flip chart is 10 pages long. It presents key messages about the 2008–2009 Global Campaign which have been adapted for teaching at the community level, in health care centers, and/or schools.

It was conceived and developed as an informational, motivational, and educational tool that could communicate the strategic importance of safe health facilities, whether large hospitals in

urban areas or small health posts serving urban and rural populations. The flip chart can be used to work with a variety of audiences, including:



- Persons associated with health services in the region
- Users of health services
- Media and education sectors
- Authorities from different levels and sectors, including regional and local authorities
- Community at large

The three objectives—to inform, motivate, and educate—are achieved by inviting reflection on the "stories" that are presented. A story is presented on each page of the flip chart. Through individual or collective reflection about the images, new stories, behavior, lessons, and conclusions will emerge that will enhance the potential and scope of the material.

#### How to use the flip chart

The flip chart can be "guided use" teaching, where the person leading the session suggests that the audience perform certain activities such as: discuss these stories

as a group and compare different versions from the discussion process and propose conclusions and lessons learned from each of the stories.

For "open use" teaching, sheets from the flip chart can be placed in locations throughout the community, such as waiting rooms and clinics of health facilities, shops and supermarkets, places where people stand in line (city hall and other public institutions, banks, utility payment windows, etc.), and educational facilities. With open use, there is the

potential for collective reaction to messages on each sheet, as well as individual reflection. Having the media use the sheets as newspaper inserts is a good use of the material.

The development and use of the flip chart is a joint initiative of the U.N. International Strategy for Disaster Reduction, PAHO/WHO, the International Federation of Red Cross and Red Crescent Societies, and UNICEF, with support from the Humanitarian Department of the European Commission (ECHO). The objective of this project is to broaden the reach of the safe hospitals campaign and include people working with national agencies and international NGOs, the private sector, academic institutions, parliamentarians, local authorities, and communities.

For more information about this project, contact Ricardo Perez, perezric@paho.org.



#### The Three Little Pigs

Following the familiar children's story, "The Three Little Pigs," the message of this flip chart concludes that safe health facilities provide security, continuity, and quality of health care and benefit all members and sectors in the community ... including the Big Bad Wolf. Similar stories can be used to encourage listeners to use their imaginations to find similar conclusions.

#### Noah's Ark

In this flip chart, health facilities/services are symbolized as Noah's Ark, which is suitably prepared to face the effects of a storm. The graphics let you see elements inside the Ark that determine its safety, such as: trained personnel, proper equipment, an emergency plan, structure that can resist various hazards, ongoing maintenance, and, of course, responsible users.

## **Member Countries**

#### The Region's response to the pandemic (H1N1) 2009 and continuing challenges

hroughout history there have been many outbreaks of disease that have resulted in high numbers of deaths. These epidemics have had and will continue to have very different impacts on particular health systems and societies. There are crisis management difficulties that are common to emergencies and disasters, whatever their origin.

Once again, experience has shown that in this type of health crisis, the number of cases may be less relevant than the presence of the disease itself. Some years ago, the Region of the Americas and the rest of the world mobilized to respond to six deaths resulting from Anthrax in the United States and 44 deaths from severe acute respiratory syndrome (SARS) in Canada. Both events had enormous social and economic consequences beyond the health sector.

The emergence of a new type of influenza in humans caused by a virus of avian origin (avian influenza A H5N1), and confirmation of human cases with mortality approaching 60%, prompted almost all countries to begin efforts to improve their capacity to respond to an imminent pandemic.

The terminology applied to this process was similar to that used for emergency and disaster management, including "preparedness" and "contingency planning." However, in most cases progress was made only in developing preparedness plans that were known to a limited group of health officials. In a very few cases, operational plans were both developed and tested that involved all the key components of health and other sectors. In even fewer cases were personnel trained in tasks envisaged in the plan, or supplies

and resources provided that would be needed to respond to a crisis.

With the confirmation of the pandemic (H1N1) 2009 virus that was easily transmissible among humans and that had potentially serious effects, response mechanisms were activated that were in direct proportion to the level of preparedness.

It was necessary to immediately take urgent steps to contain the disease at a time when there were many more questions than answers about its clinical features, transmissibility, the attack rate,



effective treatment, the risk for health personnel, and effective control measures. However, prioritizing the health and lives of the population above other considerations was not without major social and economic impacts. These impacts were greater in sectors such as tourism, trade, and transport than in the health sector, and affected Mexico more severely than other countries.

In such a situation, it is not surprising that there were issues common to other health crises. Of note were decisions based on fear, the emergence

#### PAHO/WHO's response to the pandemic

he pandemic (H1N1) 2009 has been a unique public health event because it affected all countries of the Americas almost simultaneously, demanding an unprecedented response.

PAHO/WHO's response to the outbreak focused on providing technical assistance for crisis management and coordination and surveillance and investigation of cases. It gave advice on health systems and services, information management, risk communication, and logistics, and assisted in resource mobilization by coordinating with important external partners.

Upon notification confirming an outbreak of illness from the pandemic (H1N1) 2009 virus associated with deaths on 23 April 2009, PAHO/WHO immediately activated its Emergency Operations Center (EOC). The EOC serves as PAHO's center for strategic coordination, analysis, and decision-making during an emergency or crisis.

The PAHO/WHO Task Force met daily to report developments using situation reports and

briefings with the media and other organizations. A website portal for the pandemic (H1N1) 2009 was created to ensure that technical information could be accessed as soon as it was made available.

The EOC provided point-of-contact services and improved communication with country and field offices as well as with other regional offices. It also provided the logistical support to deploy technical experts to the field and to ensure timely shipment of oseltamivir antiviral (Tamiflu), personal protective equipment and another supplies needed by countries to deal with the pandemic.

#### **Country response**

As part of its immediate response, PAHO/WHO deployed staff from several technical areas to affected countries. The first team arrived in Mexico on 24 April, the day after notification of the outbreak. The team offered advice and assistance in disaster management, epidemiology, health services, logistics, communication, and

other fields. Nearly 100 experts were deployed in the region to Mexico, Guatemala, Honduras, Nicaragua, El Salvador, Dominican Republic, Chile, Bolivia, Ecuador, Paraguay, Argentina and Jamaica.

PAHO/WHO monitored laboratories in Member States and provided technical support in distribution and use of diagnostic kits and other laboratory equipment. This included coordinating shipment of specimens from national laboratories to WHO Collaborating Centers. Technical documentation and manuals were written, revised, and updated. Laboratory equipment, reagents, and information on their installation were provided to Cuba, Haiti, Jamaica, El Salvador, Paraguay and Dominican Republic.

Technical guidelines, documents, and tools also were distributed to PAHO/WHO field staff who were working with national authorities. In addition, an Internet-based self-learning program on pandemic (H1N1) 2009 was developed and launched.

of rumors and conspiracy theories, the intrusion of political and economic factors, and insufficient official information. These problems were multiplied by the press and electronic media, which were sometimes much more difficult to control than the disease itself.

Counting confirmed cases became the highest priority, and the media demanded this from health authorities. Suspected cases were not as important, even when they were serious or caused more deaths than the new virus.

Other national priorities and more pressing public health needs were put aside, and sometimes the pandemic was used for purposes that had nothing to do with control of the disease. In such a context, the public expects and often demands authorities to carry out visible and urgent actions to demonstrate their concern for protecting the health of citizens. Among the most common are closing airports and using extreme measures to control foreign borders. Such actions require a major investment of resources and personnel, and have proven time and again to have little value in preventing a disease from entering a country.

The health sector took the lead in responding to the outbreak in almost all countries, but in many cases, they also took charge of actions that should have been dealt with by other sectors and actors, were unrelated to surveillance and diagnosis of disease, and were only marginally relevant to the response, if at all. A major weakness was the lack of more active involvement from the health services network, precisely those who were treating the sick.

Why all the actors who were involved in preparing for the pandemic did not take action during the response phase is an important question. There are still major challenges in combating this disease, which is here to stay, and whose future behavior may be more severe than what we have seen thus far. It is imperative that the health sector, where it has not done so, be open, strengthen coordination with other sectors, and share responsibility. Institutions and countries as a whole must recognize and make better use of their national potential.

It is still possible to strengthen information management, improve how institutions build capacity, use a multisectoral approach to solving problems, and to make the most of regional solidarity. We must remember that new problems require new resources. It is necessary to maintain a balance between responding to the pandemic and other public health priorities.

For more information, write to Dr. Ciro Ugarte at: ugarteci@paho.org.



About one million doses of the oseltamivir antiviral (tamiflu) were sourced by PAHO and distributed to all countries in the region. Personal protective equipment acquired from the U.S. Agency for International Development (USAID) was also distributed. In addition, PAHO purchased and distributed 3.5 million doses of seasonal influenza vaccine.

#### **Working with partners**

PAHO's response to the pandemic (H1N1) 2009 virus outbreak in the Region demanded internal mobilization of resources and expertise from all technical areas. PAHO's strategic approach to the situation required support from key external partners, who contributed to establishing a wide and successful operations network throughout the response to the outbreak.

USAID has been a key partner for PAHO since the early stages of the outbreak. PAHO was able to secure an additional 25,000 personal protective kits from USAID which were distributed to countries from the Regional Humanitarian Response Depot based in Panama. An additional 220,000 treatments of tamiflu were loaned by USAID and the U.S. Centers for Disease Control and Prevention (CDC) in response to urgent requests made by those countries reporting the highest number of confirmed cases.

Securing additional operating resources has been an important aspect of PAHO's response to the pandemic. Established partnerships and funding mechanisms with USAID, the Canadian International Development Agency (CIDA), and the Spanish Agency for International Cooperation and Development (AECID) made it possible to increase operations in the region. PAHO also has the responsibility of informing officials from countries outside the region and other organizations about actions taken in response to the evolving situation. For more information, write to Dr. Robert Lee at leerober@paho.org.

## The Caribbean assess the management of the health emergency



he countries of the Caribbean met in Barbados to assess the implementation of plans, the response, and lessons learned since the pandemic (H1N1) 2009 virus was detected. The three-day meeting was sponsored by the Caribbean Disaster Emergency Management Agency (CDEMA) with support from the United States and Canada.

Participants highlighted the importance of broad, multi-sectoral cooperation and coordination in responding to the pandemic. Although the pandemic (H1N1) 2009 virus is a public health problem, participation by a variety of stakeholders must be coordinated for effective response. Moreover, the need for consistency between partners and coordination mechanisms was emphasized. It was noted that while a crisis can result from health circumstances or needs, the health sector alone cannot cope with a major emergency.

Participants discussed the need for countries to strengthen their surveillance systems to detect influenza cases promptly. The integration of primary care services into national response by the health services proved to be successful in the case of the pandemic. Some countries used primary care services as triage centers for influenza patients. This strategy helped ease the burden on hospitals.

Participants agreed that accurate, consistent, transparent, and timely communication increased credibility and confidence in national authorities and reduced anxiety in the general public.

Clear guidelines still need to be established about a variety of issues. Among those discussed were: closing services such as schools, restaurants, and other public health measures; surveillance at border crossings; better use of volunteers; media relations; the demands that large, profitable public events place on the system; and balancing political and economic issues with public health regulations.

National experiences offer valuable lessons about good practices. No single approach can solve the problems associated with the pandemic, and policies should be tailored to national circumstances. For more information, write to Monica Zaccarelli at zacarem@cpc.paho.org.



## Safe Hospitals

#### "Safe hospitals" on the global political agenda

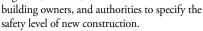
(from page 1)

The Hospital Safety Index has proved to be easy and quick to use. It has enabled major advances in assessing safety, which is the first step in establishing criteria and priorities for actions needed to strengthen safety measures. Support given to the safe hospitals initiative by ECHO (the Humanitarian Department of the European Commission, through their DIPECHO plans) and other donors such as OFDA/USAID and the Canadian International Development Agency has been critical. This support has assisted in promoting use of the Index and in developing pilot mitigation activities. Above all, it has helped to build skills and strengthen the policy actions and decisions which will allow for significant advances in the medium and long term.

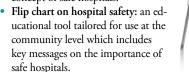
The Directing Council of PAHO/WHO, which is made up of health ministers from the Region, has renewed and strengthened its involvement in the safe hospitals initiative and is in the process of forming a hospital safety committee to ensure compliance with commitments. Despite many advances, the goal of safe hospitals is an ongoing process that requires dedication from all sectors. The most significant achievements in the Region are outlined below.

#### **Tools developed**

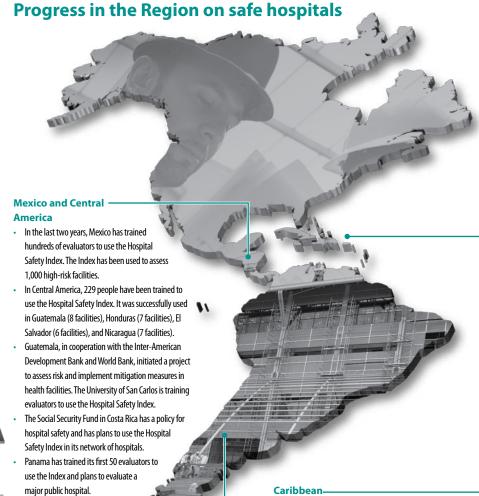
- Hospital Safety Index: a reliable, low-cost, rapid assessment tool that measures the level of safety in health facilities. It takes into account hazards and structural, nonstructural, and functional elements.
- Wind Hazard Maps for the Caribbean: these updated maps help engineers, builders,



• Virtual Journey through a Safe Hospital: a multimedia training program that contains all the elements we must understand about the real workings of a hospital and the concept of safe hospitals.



For more information about these initiatives, visit www.paho.org/disasters.



#### **South America**

For more information write to

santanda@pan.ops-oms.org.

- At the ministerial level in Colombia, Ecuador, and Peru, resolutions to implement the safe hospital strategy were adopted as state policy.
- Training in the use of the Safe Hospital Index for the region began with a workshop in Ecuador. Now all South American countries have people with expertise in using the Index.
- Health facilities have undergone assessment as follows: Argentina (3 facilities), Bolivia (6 facilities), Chile (100% of facilities), Colombia (6 facilities), Ecuador (10 facilities), Paraguay (1 facility), Peru (100% of facilities in Arequipa; standards have been approved for safety inspections), and Uruguay (assessment of the regional hospital in Maldonado).
- Progress is being made in developing a methodology and forming national committees that will assist authorities verify that new hospital construction is safe.

For more information write to cgarzon@ecu.ops-oms.org.

- PAHO/WHO carried out training courses on using the Hospital Safety Index to ensure that all Caribbean countries have a team of evaluators in place by 2010. Efforts are being focused on ensuring that new hospitals are built with the necessary levels of resistance so that they will be functional immediately after a disaster strikes.
- The use of new wind speed maps and the presence of a "check consultant" will be instrumental in achieving those goals.
- Training was completed by 78 professionals from 16 countries in the use of the Hospital Safety Index and in developing plans to correct identified deficiencies in facilities.
- At least eight countries have already applied the Index; four
  of them have started implementing mitigation measures to
  reduce risk in health facilities.
- Countries are identifying funding sources to carry out safety plans. The European Commission's Humanitarian Aid Department and the Canadian International Development Agency have been instrumental in this process.

For more information write to zaccarem@cpc.paho.org.



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#### Risk and poverty in a changing climate\*

he risk of both mortality and economic loss in disasters is concentrated in a very small portion of the Earth's surface. Countries with large populations exposed to severe natural hazards account for a very large proportion of the global disaster risk. For example, 75% of global flood mortality risk is concentrated in only three countries: Bangladesh, China, and India. Small island developing states and other small countries have far higher levels of relative risk with respect to the size of their populations and economies.

Disaster risk is not just a consequence of hazard severity and exposure, but there is a range of other "drivers" of disaster risk: unplanned urbanization, vulnerable rural livelihoods, and ecosystem decline, which are made worse by the effects of climate change. Investing in disaster risk reduction will help reduce poverty, safeguard development, and aid climate change adaptation.

These are some of the conclusions of a major report by the United Nations on the status of disaster risk reduction in the context of the International Strategy for Disaster Reduction (ISDR). Production of the Report was coordinated by the ISDR Secretariat, in collaboration with the U.N. Development Programme (UNDP), the World Bank, the U.N. Environment Programme (UNEP), and a wide range of other ISDR partners. The Global Assessment Report on Disaster Risk Reduction: Risk and Poverty in a Changing Climate provides evidence that disaster risk is increasing worldwide. The report analyzes disaster risk patterns and trends by presenting over 30 years of disaster data and examines progress by countries in achieving the Hyogo Framework for Action, the international framework for reducing disaster risk. A 20-point action plan to reduce risk is presented.

Following are other conclusions that are summarized in the Report:

- Global disaster risk is highly concentrated in poorer countries with weaker governance. Particularly in low and low-middle income countries with rapid economic growth, the exposure of people and assets to natural hazards is growing at a faster rate than risk-reducing capacities are being strengthened, leading to increasing disaster risk.
- Countries with small and vulnerable economies, such as many small-island developing states and land-locked developing countries have the highest economic vulnerability to natural hazards.
- Most disaster mortality and asset destruction are intensively concentrated in very small areas ex-

posed to infrequent but extreme hazards. Such damage represents a significant and largely unaccounted for component of disaster impacts.

- Poorer communities suffer a disproportionate share of disaster loss. Poor households are usually less resilient to loss and are rarely covered by insurance or social protection.
- Climate change is already changing the geographic distribution, frequency, and intensity of weather-related hazards and threatens to undermine the resilience of poorer countries and their citizens to absorb loss and recover from disaster impacts. This combination of increasing hazard and decreasing resilience makes climate change a global driver of disaster risk. Climate change will magnify the uneven distribution of risk, skewing disaster impacts even further toward poor communities in developing countries.
- Progress toward reducing disaster risk is still mixed. In general terms, countries are making significant progress in strengthening capacities, institutional systems, and legislation to address deficiencies in disaster preparedness and response. Good progress is also being made in other areas, such as the enhancement of early warning. In contrast, countries report little progress in mainstreaming disaster risk reduction considerations into social, economic, ur-

ban, environmental, and infrastructural planning and development.

climate change adaptation.

- The institutional and legislative arrangements for disaster risk reduction are weakly connected to development sectors.
- Countries have difficulty addressing underlying risk drivers such as poor urban and local governance, vulnerable rural livelihoods, and ecosystem decline in a way that leads to a reduction in the risk of damages and economic loss.

A failure to address the underlying risk drivers will result in dramatic increases in disaster risk and associated poverty outcomes. In contrast, if addressing these drivers is given priority, risk can be reduced, human development protected, and adaptation to climate change facilitated. Rather than a cost, this should be seen as an investment in building a more secure, stable, sustainable and equitable future. Given the urgency posed by climate change, decisive action needs to be taken now.

\*These conclusions are taken from a summary of the United Nations 2009 Global Assessment Report on Disaster Risk Reduction: Risk and poverty in a changing climate—investing today for a safer tomorrow. The complete report can be found at: www.unisdr.org.





## **Publications** and Multimedia

Publications and Multimedia





#### Future of the Red Cross in Latin American and the Caribbean

The International Federation of Red Cross and Red Crescent Societies has released the document The future of the Red Cross in Latin America and the Caribbean: the challenges of risk management and social cohesion.

This is an ambitious, 400-page study, which takes a measure of national Red Cross societies in the current socio-economic context of Latin America and the Caribbean. The study identifies new challenges faced by Red Cross societies in terms of performance, governance, management, financing, organization, and cooperation, and examines activities of each national society in the broader context of IFRC

strategies. The document makes recommendations for addressing the most urgent and important of these strategies. A special section is devoted to the profound changes that international cooperation agencies are undergoing, and which will, in turn, affect the financing and operation of national societies.

The study is the result of self-reflection and self-analysis carried out by each of the national societies. It provides a valuable and up-to-date socio-economic analysis of the region, with particular emphasis on the problems facing humanitarian action. The document can be accessed in Spanish at www.ifrc.org.

#### Climate change and health: Mexico and the U.S. Border

This is a collection of articles (available in English and Spanish) that analyze climate change in the region and its consequences for human behavior, especially relating to health.

The publication includes papers presented at the Workshop on Climate Variability and Health, held in December 2008 in El Paso, Texas. The workshop was organized jointly by PAHO/WHO, the Colegio de la Frontera Norte, the Border Environment Cooperation Commission, and academic,

scientific, and government institutions from both sides of the U.S.-Mexico border.

The text can be accessed at <a href="www.opsecu.org/files/ingles.pdf">www.opsecu.org/files/ingles.pdf</a>, or from the CRID database at <a href="www.crid.or.cr/digitalizacion/pdf/spa/doc17674/doc17674.htm">www.orsecu.org/files/ingles.pdf</a>, or from the CRID database at <a href="www.crid.or.cr/digitalizacion/pdf/spa/doc17674/doc17674.htm">www.opsecu.org/files/ingles.pdf</a>, or from the CRID database at <a href="www.opsecu.org/digitalizacion/pdf/spa/doc17674/doc1767





#### New manual on communication and information management in disaster situations

PAHO/WHO has published a new manual to help information management and communication specialists who are involved in disaster preparedness and response activities in the health sector. The manual gives recommendations on how to manage information and to communicate with the public in emergency situations. It also addresses

the production of situation reports, how to deal with the media, and pre-

paring messages for the public and general educational and informational materials.

The guide is useful for courses and training activities and complements other efforts by PAHO/WHO to develop better communication for risk management. It is the result of extensive consultation, with input from a large number of media and disaster management professionals in Latin America and the Caribbean. For more information write to perezric@paho.org.

To download a copy of the manual in PDF format, visit: www.paho.org/disasters.

#### Field Manual for the PAHO/WHO Regional Disaster Response Team

In response to requests from the Ministers of Health from Latin America and the Caribbean, PAHO/WHO established a Regional Disaster Response Team to assist countries that are dealing with emergencies or disasters. The Team is responsible for carrying out a rapid assessment of needs, assisting in coordinating emergency response, and advising PAHO/WHO and its partners. The Team assists in the health sector's response to an emergency, paving the way for installation of the "health cluster," as prescribed by the United Nations Humanitarian Reform.

This manual describes deployment of the Disaster Response Team, its objectives, and responsibilities at different stages of an emergency. It explains the process of mobilizing resources and provides practical information for work in the field. The manual includes evaluation forms and checklists

for health services, shelter, water and sanitation, epidemiologic surveillance, damage assessment and needs analysis, and mental health, among others. These forms are important for collecting and analyzing the information needed for providing the most appropriate types of humanitarian assistance.



The information in this manual will be of help to those advising PAHO/WHO offices and health sector agencies and institutions when they respond to emergencies or disasters. To view or download the document in PDF format, visit www.paho.org/disasters.

#### From pandemic H5N1 to (H1N1) 2009: Lessons for disaster managers

(from page 1)

• Detailed scenarios rarely are accurate. Many countries prepared detailed pandemic plans based on an analysis of the past three pandemics, which were, by and large, poorly documented. Specific attack and fatality rates were selected for planning purposes. Potential consequences, including serious social and institutional disruptions were identified, and concrete measures pre-selected. However, the dramatic health, social, and economic consequences did not materialize as anticipated in the scenarios. In the case of pandemic preparedness, is this a failure?

This reality is not unique to pandemic preparedness. The World Food Program (WFP) recently completed a global evaluation of its extensive contingency planning for food insecurity worldwide. One striking conclusion reached was that few, if any, of the detailed plans based on precise scenarios were actually implemented (or needed to be implemented) because what actually occurred was distinct from what was forecast. Our ability to anticipate the future (what, where, and when) is remarkably inaccurate! The experience with pandemic planning only confirms an observation that applies to all types of hazards.

- What matters most is the planning process, not the written plan. Does a failure to construct accurate scenarios mean that this planning effort was in vain? Definitely not. WFP's evaluation concluded that the collective planning process itself was very useful and led to a better response, even if the characteristics of the crisis differed from what was anticipated. The fact that ministries of health have worked with other actors to address vulnerabilities, discuss potential corrective measures and identify institutional weaknesses almost certainly improved the response to the pandemic (H1N1) 2009 virus. Coordination and the exchange of information were improved and ad hoc changes were made to pre-established measures. Perhaps, the disaster management community attaches too much importance to the output—a detailed written plan-rather than to the outcome: greater institutional awareness and ongoing dialogue and preparedness among actors.
- A lead role for technical experts. In most countries in the Americas, experts in communicable diseases from the ministry of health carried out the response to the pandemic (H1N1) 2009 rather than professionals from the civil protection system or health disaster managers (as was contemplated in some of the original scenarios). The success of response to the actual pandemic reflects the institutional flexibility and technical competence of public health experts in the Region. This being said,



it is also true that only a small percentage of the costs resulting from a pandemic are health related expenditures; the majority of the costs (>99%) are due to measures taken to allay fears, whether justified or not.

- Generating excessive fear may backfire. For years, the public has been reminded of the potential catastrophic consequences of a repeat of the pandemic of 1918. In fact, in some cases, raising the public's level of concern and fear was seen as necessary to stimulating political support and funding. As a result, pandemic readiness at the global level often has been better funded than similar efforts for multi-hazard preparedness-an imbalance noted by many developing countries. In Latin America the public response tended to be highly emotional and led to pressure for measures of questionable cost-effectiveness. The health sector's role is important to allay or mitigate fear and to reassure the population that measures are in place and accurate information is available. Countries may wish to examine whether or not the credibility of the health forecasters was affected by the public's overemphasis on the most dramatic scenarios, and whether generating what is now perceived to have been an excessive amount of concern and fear may not have been ultimately counterproductive.
- Worst-case scenarios will occur... one day. The 1918 pandemic is proof enough that a new pandemic, with fatality rates up to 2% or more, remains a possibility. The pandemic (H1N1) 2009 virus' capacity to mutate means that we cannot exclude any scenario. If we should re-

frain from overemphasizing or singling out the worst-case scenarios in our communication with the public, they should, nevertheless, remain in the minds of disaster and health planners. How to secure support for planning for the worst-case scenario without over-alarming the public or jeopardizing our credibility is an

the public or jeopardizing our credibility is an issue that warrants debate.

Lessons learned. Now that the first wave of the pandemic (H1N1) 2009 has followed its rather benign course, it is easy to reflect back on whether the measures taken were justified and cost effective. Estimating the effectiveness of prevention measures against a hazard that was ill-defined and potentially variable is, at best, a difficult endeavor. Judgments made in hindsight, with the benefit of information and perspective, are of little help to understanding and improving actual decision-making processes that take place in a climate of uncertainty. Nevertheless, there is much to learn. We cannot merely turn the page on one of the greatest public health efforts to prepare for a severe crisis. An evaluation for educational purposes, at both regional and national levels, should be carried out and the results discussed and saved for future pandemic threats.





What's

The Regional Disaster Information Center's (CRID) mission is to promote the development of a culture of prevention in Latin American and Caribbean countries through the compilation and dissemination of disaster-related information and the promotion of cooperative efforts to improve risk management in the Region.

> Regional Disaster Information Center Apartado Postal 1455-1011 Y Griega Pavas, San Jose, Costa Rica Tel: (506) 296.3952 | Fax: (506) 231.5973 crid@crid.or.cr

#### Hospitals Safe from Disasters now on DVD

Material developed for the Web site on Hospitals Safe from Disasters is now available on DVD, allowing users to access all of the site's content. To order a copy, contact: <a href="isabel.lopez@crid.or.cr">isabel.lopez@crid.or.cr</a>.

#### Materials devoted to the pandemic (H1N1) 2009 virus in the CRID

CRID has created a special section that makes it easier to access existing information on the subject of pandemic (H1N1) w009 virus. The information has been compiled from various sources on a broad range of topics. These include recommendations for prevention and management, information for specific groups (for example, teachers, hotel managers and staff, health personnel, and pregnant women), technical documents, national response plans, materials for radio and television, links to recommended Web sites, magazine and scientific articles, and useful training materials. These materials can be accessed at the following site: www.crid.or.cr/crid/influenza\_AH1N1/index.shtml.

#### New documents available

The following new documents are available at CRID:

- Training manual on gender and climate change (in English), published by the International Union for Conservation of Nature (IUCN), United Nations Development Programme (UNDP), and the Global Gender and Climate Alliance.
- World Disaster Report 2009: Focus on early warning, early action. International Federation of Red Cross and Red Crescent Societies.
- Evacuation and Sheltering of Hospitals in Emergencies: A Review of International Experience, 2009. Bagaria, Jayshree; Heggie, Caroline; Abrahams, Jonathan; Murray, Virginia.

To access these documents and the entire collection of CRID information resources, visit: www.crid.or.cr.

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