

PAHOtoday

World Health Day

Mothers and Children: Make Them Count

Every mother, every child—everywhere throughout the world—deserves good health and the chance to live a full and productive life. We have the knowledge and the means to make it happen.

What is a child's life worth? According to recent research, 3 million newborn babies could be saved for less than \$1 per child. Simple interventions such as tetanus immunization during pregnancy, clean deliveries, exclusive breastfeeding, and antibiotics to treat illness are all that's needed.

How important is a mother's life? According to the World Health Organization (WHO), more than 1,400 women die each day from pregnancy-related causes that are mostly preventable or treatable. They leave behind motherless children, and their families and communities suffer from their lost contributions. Every year, an estimated 1 million children die as a result of their mother's death.

For these and many other reasons, World Health Day 2005 is dedicated to "Healthy Mothers and Children—Every Mother and Child Counts." Its organizers are calling on governments and societies around the world to invest in the health of mothers and children not only as a basic human right but also as an

essential contribution to the well-being of families, communities and societies.

In the United States, the Pan American Health Organization (PAHO) will host a World Health Day kick-off event on April 7 in Washington, D.C., followed by a series of related events through April 14 as part of "Health in the Americas Week." PAHO member countries in Latin America and the Caribbean are planning their own events. The global launch will be held in New Delhi and will feature the release of the *World Health Report 2005*, on maternal and child health.

New Lancet series

In the first major U.S. event leading up to World Health Day, a panel of leading international public health experts presented a series of research papers published by the British medical journal *The Lancet* on newborn survival. Presented at the National Press Club in Washington, D.C., on Mar. 3, the series analyzes the status of newborn health around the world and calls for immediate and sustained action to save newborn lives.

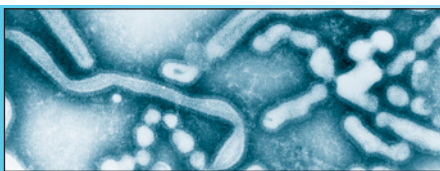
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World Health Day 2005 focuses on maternal and child health. A key message of this year's campaign is that millions of mothers' and babies' lives could be saved every year through simple, low-cost measures.

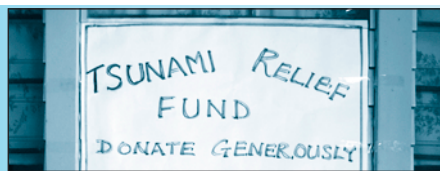
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2 **Quoted at Length**
Daniel López Acuña, PAHO's director of program management, describes the challenges of structuring the organization's work "in the best possible way" to meet its member countries' needs.



4 **Time to Prepare for Flu**
A new WHO report warns that Asia's bird flu outbreaks have brought the world closer than ever to a new influenza pandemic. Meanwhile, PAHO helps the countries of the Americas prepare.



6 **Dealing with Disasters**
PAHO joined the largest relief effort ever following the South Asian tsunami, while closer to home, it helped Guyana recover from its worst natural disaster in a generation.



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Q U O T E D A T L E N G T H



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Daniel López Acuña Director of Program Management Pan American Health Organization

Daniel López Acuña directly oversees 120 staff members in three key areas: Governance, Policy and Partnerships; Planning, Program Budget, and Project Support; and Strategic Health Development. López Acuña graduated from the National University of Mexico and holds a doctorate in public health from Johns Hopkins University. He has worked as an epidemiologist, writer and journalist and joined PAHO in 1986. He sees PAHO in the 21st century as an organization of new challenges and alliances that continues to be an inspiration for public health workers throughout the continent.

When did you first become interested in public health?

When I was 7, I received your classic doctor's bag as a present. I was definitely going to be a doctor. Years later, when I started medical school at the National University of Mexico, I was immediately drawn to public health and community and preventive medicine. I always viewed health in its wider context of social and economic problems. So I always wanted to go beyond clinical medicine, where you see individuals one by one in a clinical setting. Epidemiology seemed the appropriate specialization, with a focus on health planning.

Were you involved in politics during your university years?

I started medical school in '73. It was a very intense year, because the university was reopening after a 12-month strike. There was a lot of student activism. There were 5,000 of us entering medical school, so it was really a macro-school and very active, very connected with the rest of Latin America. Politics was really in the air, part of the legacy of the student movement of '68. And we won some major student demands.

I understand you began your writing career at medical school.

I started writing about social medicine in magazines and newspapers. I wrote a weekly column for *El Nacional* in Mexico and for *El País* in Spain. In 1979, I wrote *La salud desigual en México* ["Unequal Health in Mexico"], which was published as a text book in three editions. It brought together a lot of my journalistic writing about social problems related to health in my country—inequalities, differential access to services for different population groups. I also edited a collection of essays by classic authors in public health, called *Salud y sociedad* ["Health and Society"]. It circulated widely at a time when there were not many texts on public health available in Spanish.

Was your journalism experience useful in your later work?

Journalism taught me to systematize my thinking—both mentally and in written expression—and to write the ideas I want to convey as clearly as possible and under time pressure. To this day that experience helps me to systematize and convey my ideas.

Your image is that of a political as well as a technical person. Is that correct?

If that's the perception, I agree. I very much value technical excellence, but I have always been interested and active in policy and politics in the broadest sense of the word. For me, health policy is a key subject.

Before you joined PAHO, what did you think of the organization?

For me, PAHO was always one of the major reference points and paradigms in public health at the regional level. It was a true icon of joint work among countries. On a personal level, my first visit to the organization was a dream come true. Seeing and talking with those experts I had read and heard in seminars in Mexico turned out to be essential for my career. Moreover, PAHO gave me the opportunity to study; I bought my books at subsidized prices through the Expanded Textbook and Instructional Materials Program [PALTEX].

Do you see PAHO's mission changing?

PAHO has evolved with the times. What we've seen is that today countries' national capacities are more developed and, for that reason, the organization has to produce value-added. It has to find its ecological niche if it is to stay

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Gang Violence Requires a Preventive Approach

Youth violence is a grave and growing problem in the Americas, but the response must be multifaceted and based on more than simple repression, presenters said at an international meeting on violence prevention at Pan American Health Organization (PAHO) headquarters in February.

"Gangs have arisen as a response to the social and economic situation of young people in the region," said Lainie Reisman, of the Inter-American Coalition for the Prevention of Violence (IACPV). "Prevention and rehabilitation programs must be designed with these realities in mind."

The conference, titled "Voices from the Field: Local Initiatives and New Research on Youth Gang Violence in Central America," was organized by PAHO, IACPV, the Due Process of Law Foundation, and the Washington Office on Latin America (WOLA).

Alberto Concha-Eastman, PAHO's top expert on violence, emphasized that youth violence is a form of social conflict and must be addressed accordingly. What is urgently needed, he said, are social and development projects that provide educational and job opportunities for youths.

Participants pointed out that the chief causes of violence are family problems, economic difficulties and social exclusion. These root causes must be addressed in any efforts to reduce violence.

"One of the main sources of youth violence is lack of employment," said Ernesto Bardales, director of the Honduran nongovernmental organization Young Hondurans, Advancing Together (JHA-JA). Others emphasized the need to carry out educational reforms.

The conference focused primarily on Central America, which has been particularly hard hit by violence from gangs known as *maras*. WOLA representatives said gangs were a serious threat to public safety in El Salvador, Guatemala, Honduras and Nicaragua, as well as in southeastern Mexico and several areas of the United States. Gangs commonly carry out robberies, assaults and murders, leading to a pervasive sense of public insecurity. Some are also involved in drug and arms trafficking.

Eduardo Linares, of Homies Unidos, an organization of ex-gang members from El Salvador that tries to rescue current gang members, said, "These young people have neither jobs nor educational opportunities, and the only chance they have is to come to the United States."

The problem of Hispanic gangs has been growing in the United States in recent years. The Bush administration is currently developing an action plan for an anti-gang-violence



© Daniel LeClair

A Honduran man sports tattoos identified with gang membership. Police in Honduras and neighboring El Salvador have captured hundreds of gang members in recent years, but gang violence continues. Experts argue for increased measures aimed at prevention.

initiative that will be spearheaded by First Lady Laura Bush. It focuses on increasing young people's opportunities for education, jobs and rehabilitation.

A number of participants emphasized the limits of law enforcement in suppressing gang violence. Anti-violence measures "must be developed with complete respect for human rights norms," warned Paulo Sergio Pinheiro, rapporteur on children's rights for the Inter-American Commission on Human Rights. "The abusive and sometimes arbitrary detention of hundreds of presumed gang members...can serve to increase the level of potential violence of each group."

He called on the Central American media to reduce the "disproportionate" amount of coverage they focus on gang violence, saying this tends to exacerbate the situation by raising the profile of gangs and strengthening their ties and their "symbolic self-image."

Other participants stressed the need to work with parents and teachers to strengthen social cohesion.

Concha-Eastman welcomed the participation of representatives of the Inter-American Development Bank and the World Bank. He said that lending institutions should raise awareness of violence as a social phenomenon that requires a response in the area of economic policy as well.

The meeting ended with an agreement to hold similar forums in Central America to raise awareness of the need for preventive, rather than just repressive, approaches to violence. ■



World Health Day

From page 1

The experts noted that almost 40 percent of all child deaths worldwide occur in the first month of life. Although 99 percent of newborn deaths are in poor countries, the vast majority of funding and research worldwide focuses on high-technology solutions for the 1 percent of deaths in rich countries.

"Eight million children are either stillborn or die each year within the first month of life. This figure never makes news," said Richard Horton, *Lancet* editor-in-chief, in his series editorial. "The aim of the present *Lancet* series is to erase the excuse of ignorance for public and political inaction once and for all."

"At less than a dollar per capita per year in additional spending to provide these life saving interventions to 90 percent of mothers and babies, the cost is affordable," said Gary Darmstadt, director of the Center for International Neonatal Health at Johns Hopkins University.

Carissa Etienne, PAHO assistant director, said, "We can use simple techniques to instruct householders on danger signals and simple interventions for conditions they can manage at home. Community health workers and other individuals can be trained so they can provide a second level of care, with clear guidelines, to help improve the care of newborns and avoid these deaths."

All four articles and a number of related papers are available online at <http://www.thelancet.com>.

PAHO fact sheets for World Health Day point out that a woman born in Latin America or the Caribbean is 27 times more likely to die as a result of pregnancy complications than a woman born in the United States. Similarly, a child born in Haiti is 17 times more likely to die before reaching the age of 5 than a child born in Canada.

Even within Latin America and the Caribbean, there are huge differences in rates of maternal and child mortality. Bolivia has a maternal mortality rate of 230 per 100,000 live births, 10 times greater than Chile's rate of 23 per 100,000. Within Bolivia, maternal mortality ranges from 124 deaths per 100,000 live births in valley areas to 352 deaths per 100,000 live births in rural areas with predominantly indigenous populations. Similar disparities are found in other countries as well.

Among children, the risk of dying is greatest for newborns, and the chief causes of newborn deaths in the Americas (as in other regions of the world) include asphyxia (the inability of the baby to breathe properly), sepsis (infection), and low birth weight.

The leading cause of maternal deaths in the Americas is postpartum hemorrhage followed by sepsis and eclampsia (convulsions leading to coma).

The most effective way to prevent these deaths is to have skilled medical personnel present during childbirth. PAHO and WHO recommend that all pregnant women have access to skilled attendance at birth. In Latin America and the Caribbean, some 60 percent of mothers have access to skilled help during childbirth, much better than in other developing regions. Yet it means that four out of 10 deliveries in the PAHO region occur in homes and without skilled attendance.

Other important interventions include essential prenatal care, the Integrated Management of Childhood Illness (IMCI) strategy, and education about simple health, hygiene and nutrition practices for mothers and families.

PAHO planned a series of panels and special sessions to highlight these and related issues, including maternal and child health in PAHO priority countries, HIV/AIDS in mothers and children, neonatal health, and the relationship between domestic violence and maternal and perinatal health.

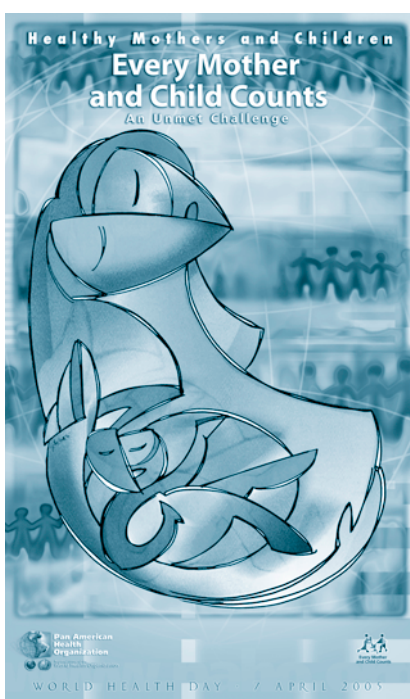
PAHO's partners for the U.S. observance this year are the U.S. Department of Health and Human Services, the Centers for Disease Control and Prevention, the U.S. Agency for International Development, the United Nations Children's Fund (UNICEF), Save the Children, the National Alliance for Hispanic Health, Family Care International, the U.N. Population Fund, the World Bank, the Student Campaign for Child Survival, the Child Survival Collaborations and Resources Group (CORE), the U.S. Child Survival Coalition and the National Healthy Mothers, Healthy Babies Coalition.

World Health Day is held each year on the anniversary of the founding of the World Health Organization. For more information visit www.paho.org/English/DD/PIN/whd05.htm. ■



© Armando Wauke/PAHO

In Latin America and the Caribbean, 60 percent of mothers have access to skilled help during childbirth, a much higher percent than in other developing regions. WHO and PAHO recommend that all pregnant women have such access.



Vaccination Week in the Americas Set for April 23-30

Vaccine experts from the Pan American Health Organization (PAHO) are working with health authorities in countries throughout the Americas to identify priorities, procure vaccines, and coordinate logistics for the hemisphere's largest immunization drive, Vaccination Week in the Americas 2005, which will run April 23 to 30.

Coordinated by PAHO's Expanded Program on Immunization (EPI), the week-long event will focus special efforts on children and adults who have traditionally been difficult to reach—those living in rural border regions, indigenous and minority communities, remote areas, and urban and peri-urban areas with low coverage.

Each country is setting its own priorities based in part on which groups have proved difficult to reach with vaccines:

- Guatemala will target some 180,000 children under 5 with vaccines against diseases including polio, mumps, rubella and measles. For the first time in a national vaccine drive, the country will use the latest pentavalent vaccine—against diphtheria, pertussis (whooping cough), tetanus, hepatitis B, and meningitis—on a target population of 80,000 infants.
- Paraguay's top priority will be eliminating rubella and congenital rubella syndrome. The country plans to vaccinate 3.5 million men, women and children between the ages of 5 and 39 against the disease.
- Nicaragua is targeting more than 3 million people ages 6 to 40 with the rubella vaccine and also plans to provide more than 900,000 children with vitamin A and parasitocides.
- Brazil plans to vaccinate 12 million people over 60 against influenza. It will also target more than 190,000 indigenous people with needed vaccines.
- Peru will vaccinate nearly 3 million people ages 2 and up against yellow fever in provinces where the disease appears in animals.
- Honduras will carry out eye exams to detect cataracts and plans to provide Vitamin A to more than 750 million people, among them infants and new mothers.

- The United States' National Infant Immunization Week 2005, sponsored by the Centers for Disease Control and Prevention (CDC), will be held as part of Vaccination Week in the Americas.
- Canada's National Immunization Awareness Week will coincide with the nationwide event.

Using the campaign's slogans of "Vaccination: An Act of Love" and "Love Them, Protect Them, Immunize Them," developed by PAHO and the CDC, respectively, countries are developing social communication campaigns that will include radio and television spots, posters, and other promotional materials. In 2004, campaign materials were translated into English, Spanish and Portuguese, as well as Creole for Haiti and Aymara for Bolivia. Materials for Guatemala were translated into 23 dialects for distribution in remote rural areas.

An important goal of Vaccination Week in the Americas is to form strategic partnerships and expand interagency cooperation at both the regional and international levels. PAHO, the CDC, the United Nations



Children's Fund (UNICEF), and many other organizations have combined technical and financial efforts to support the initiative. PAHO's five priority countries—Haiti, Bolivia, Nicaragua, Honduras, and Guyana—are receiving special economic and technical assistance.

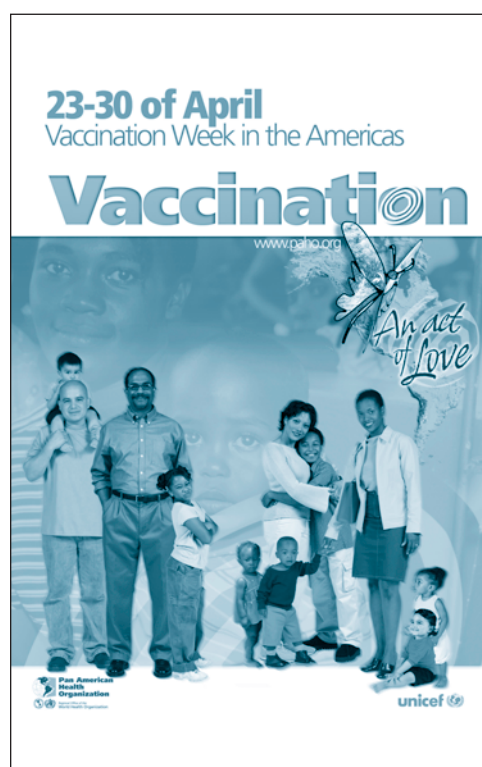
Last year's Vaccination Week in the Americas vaccinated 43.7 million people, mostly children, in South and Central America, Mexico and the Caribbean, surpassing the initial goal of 40 million people. The United States and Canada participated by publicizing the benefits of immunization.

Analysis of the results of the 2004 initiative found that 23 percent of children ages 1 to 4 who were vaccinated had not received any diphtheria-pertussis-tetanus vaccine doses previously, and 52 percent of women of child-bearing age in high-risk municipalities had never been vaccinated against tetanus and diphtheria. The findings suggest that

Vaccination Week achieved its goal of helping to reduce inequity in vaccination coverage throughout the region.

The 2004 Vaccination Week in the Americas included more than 22 binational launches and a regional launch along the border between Haiti and the Dominican Republic. Five presidents, several first ladies and a number of health ministers from throughout the region participated in the launching events.

Through similar Pan American efforts, PAHO's 35 member countries were the first to eradicate smallpox (in 1973) and polio (in 1991). The countries are now targeting measles and rubella for elimination from the Americas region. ■



WHO: "Prepare Now for Influenza Pandemic"

A recent report from the World Health Organization (WHO) warns that the world is closer to an influenza pandemic than at any time since 1968. It calls for urgent international action to prepare for "an unpredictable but potentially catastrophic event."

Avian Influenza: Assessing the Pandemic Threat was released in pre-publication form in January to elicit comments from the scientific and public health community. The report summarizes a 14-month saga of outbreaks of H5N1 in birds and humans, and analyzes developments in the virus and its ecology that strongly suggest a new flu pandemic could break out in the near future.

Starting in late 2003, a series of major outbreaks of lethal avian influenza have caused severe economic losses in a number of Asian countries. Of greater concern, the virus has also infected humans, with what appears to be a high mortality rate. As of early March

2005, 69 human cases of H5N1 had been officially confirmed, with 46 deaths.

According to the report, the H5N1 virus appears to have established itself as endemic in parts of Asia, with "a permanent ecological niche in poultry." Human cases continue to emerge, and "the virus may be evolving in ways that increasing favor the start of a pandemic," the report says.

Studies show that H5N1 has become both more pathogenic in poultry and harder than in the past, with an ability to survive several days longer. It has also expanded its host range to include cat species and other mammals: last October, the virus sickened 147 captive tigers in Thailand that had been fed infected chicken carcasses.

Also alarming is the recent detection of highly pathogenic H5N1 in dead migratory birds. "Wild waterfowl are the natural reservoir of all influenza A viruses and have historically carried low-pathogenic viruses," the report notes. This suggests "the role of migratory waterfowl in the evolution and maintenance of highly pathogenic H5N1 may be changing."

At the same time, domestic ducks, which generally fall ill when infected with H5N1, have been found recently to be secreting large amounts of lethal virus without showing any symptoms of disease. This suggests that healthy ducks "play a role in maintaining transmission by silently seeding outbreaks in other poultry." It may also explain why some recent human cases cannot be linked to contact with diseased poultry.

During 2004, a number of large bird flu outbreaks on commercial poultry farms were successfully contained through culling and vacci-

nation. A greater concern now, says the report, is with outbreaks in rural areas of Asia, where most families keep free-ranging ducks and chickens. Outbreaks on these small family farms "may escape detection, are difficult to control, and increase the likelihood of human exposures, which may occur when children play in areas shared by poultry or when families slaughter or prepare birds for consumption."

H5N1's potential to ignite a pandemic depends, however, on its acquiring the ability to pass easily between humans. There are two ways this could occur. H5N1 could infect someone who also is infected with a human form of influenza A, and the two viruses could exchange genes (reassortment). Or, the virus

could adapt in an evolutionary fashion during subsequent human infections, acquiring the ability to transmit itself efficiently from one person to another (adaptive mutation). The deadly 1918 Spanish flu pandemic is believed to have been caused by a virus that mutated in this way.

The report notes that opportunities for either of these events to occur continue to increase and appear more likely.

The WHO report also notes that a virus that gradually acquires an improved ability to pass between humans would be harder to detect through surveillance than a fully transmissible pandemic virus that emerged from a reassortment event. "The resulting explosion of



Health workers collect culled chickens in Hong Kong after an outbreak of avian influenza. H5N1 has affected millions of birds in nine Asian countries. But the virus has failed so far to pass easily between humans, the crucial development for which pandemic watchers remain on alert.

Photo by Bobby Yip © Reuters/CORBIS

PAHO Supports Pandemic Planning

The Pan American Health Organization (PAHO) is working with its member countries to develop national influenza pandemic preparedness plans to help them cope should a new and virulent strain of influenza cause a global epidemic.

PAHO's technical cooperation in this area is based on guidelines developed by the World Health Organization (WHO) in 1999, which are currently being updated and incorporated into a "model national plan" for pandemic preparedness.

Octavio Oliva, PAHO regional advisor on viral diseases, says, "A number of countries, particularly in the Southern Cone, have been developing preparedness plans for some time. Others are just beginning the process. But there are many things that still need to be done on all sides."

The Canadian Pandemic Influenza Plan, which follows the WHO guidelines, "provides a good example of a fully developed plan," says Oliva. "Even the best plan cannot prevent cases once the pandemic is under way, but it can help minimize the impact."

The U.S. Centers for Disease Control and Prevention (CDC) are supporting both PAHO's and WHO's efforts in this area. PAHO and the CDC plan to hold a workshop in May in Atlanta for countries of the Andean region and Central America. It will provide training in

epidemiology and surveillance of influenza and other respiratory viruses and provide an opportunity for the countries to discuss and compare their progress on developing pandemic preparedness plans.

A similar workshop was held in Rio de Janeiro in April 2004 on surveillance of and response to epidemic-prone respiratory viral diseases, including severe acute respiratory syndrome (SARS) and avian flu.

PAHO's pandemic preparedness efforts focus on strengthening countries' capacities in the following key areas:

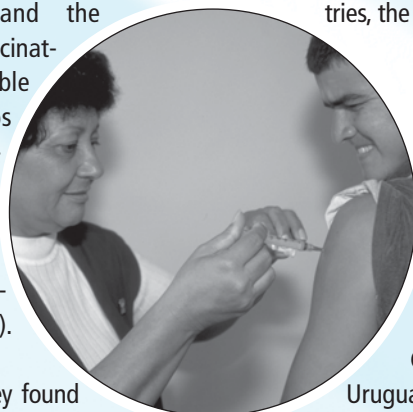
- Epidemiological surveillance of influenza.
- Supply and distribution of vaccines and antiviral drugs.
- Health services preparedness.
- Hospital capacity and response.
- Risk communication.

The Canadian national pandemic plan notes that "the most effective public health intervention to mitigate the impact of a pandemic is through immunization with an effective vaccine against the novel virus, and, to a lesser extent, through the use of antiviral drugs." Oliva adds that risk communication—"what governments are going to tell people"—will also be of critical importance.

PAHO has been providing ongoing technical cooperation to its member countries in the areas of influenza surveillance and laboratory and diagnostic capacity, and has been promoting the use of an annual influenza vaccine in the region (see article below). Pandemic preparedness planning has become a priority in this work in recent years. ■

Flu Vaccine Use Growing in Region

A growing number of countries in Latin America and the Caribbean are vaccinating their vulnerable population groups against influenza, following recommendations made by the Pan American Health Organization/World Health Organization (PAHO/WHO).



A recent PAHO survey found that 37 percent of its member countries have incorporated the flu vaccine into

their national vaccination programs, most during the past 10 years. In several other countries, the vaccine is available in the private sector.

Only a few countries have data on flu vaccine coverage, but those that do—Bermuda, Brazil, Chile, Cuba, Honduras, and El Salvador—have exceeded the PAHO/WHO targets of vaccinating 50 percent of the elderly by 2006 and 75 percent by 2010. The targets were set by the 2003 World Health Assembly, which called on WHO member countries to increase vaccination of all high-risk groups: the elderly, people with chronic disease, and health care workers.

Chile has been using flu vaccine since 1975, and along with Brazil and Uruguay included flu vaccination for the elderly and other high-risk groups in its Vaccination Week in the Americas drive last April. Brazil plans to vaccinate 12 million people over 60 during this year's vaccine week.

Most of the countries purchase their flu vaccine from private laboratories. In the past two years, only six have used the PAHO Revolving Fund for Vaccine Procurement to purchase flu vaccine. PAHO encourages countries to use the fund, both to reduce costs and for quality control.

The survey also found that two-thirds of the region's countries have influenza surveillance programs. Brazil's focuses on viral strains circulating in tropical zones, providing critical information for WHO's recommendations on the composition of the flu vaccine (see story next page). ■

cases would be difficult for any surveillance system to miss."

Past pandemics may hold some important lessons about how to prepare for and cope with any new pandemic. The report highlights several conclusions:

- Pandemics are as unpredictable as the viruses that cause them. Different pandemics have shown very different levels of mortality, severity of illness, and patterns of spread.
- All pandemics produce a rapid initial surge of cases, which then increase exponentially. This means "a sudden sharp increase in the need for medical care will always occur."
- The overall impact of a pandemic depends on its ability to cause severe illness in nontraditional age groups, particularly young adults. Milder pandemics have tended to target the elderly and the very young, those most affected by ordinary influenza.
- Pandemics tend to unfold in waves. Age groups and areas not affected initially are likely to be more vulnerable during a second wave, which is often more severe.
- Good surveillance is key to early detection of the onset of a pandemic. It makes it possible to alert health services, isolate and characterize the virus, and make it available to vaccine makers.
- Surveillance capacity in Asia is particularly important, as this is where most pandemics have originated.
- Quarantine and travel restrictions have proved ineffective in stopping the international spread of pandemics. But within countries, banning public gatherings and closing schools are potentially effective measures.
- Stopping the pandemic's spread is extremely difficult, but slowing it can help health services cope by having fewer people ill at one time.
- In the past, vaccines have arrived too late and in too little quantities to have an impact. Nevertheless, the report emphasizes the importance of advance work to prepare the way for vaccine production once a pandemic virus emerges.
- Countries with a domestic manufacturing capacity will be the first to receive vaccines.
- The "best-case scenario" is a pandemic that has its main impact on the very old, the very young and the chronically ill, as these can be more easily targeted with vaccines. Still, health systems must anticipate a high demand for medical care.

The report notes that vaccine development and production will by necessity be primarily the responsibility of wealthier countries. However, many experts believe an effective vaccine against a pandemic version of H5N1 will have to be developed using "reverse genetics," a process that would result in a "genetically modified organism," raising biosafety issues that could delay production in Europe.

The report says it is "impossible to predict with any accuracy" the number of deaths that would result from a new pandemic. "Best-case scenarios," modeled on the relatively mild 1968 pandemic, predict excess deaths ranging from 2 million to 7.4 million. However, "other estimates that factor in a more virulent virus, similar to that responsible for the deadly 1918 pandemic, estimate much higher numbers of deaths." ■

New Strain Added to Flu Vaccine

A new strain of influenza virus will be included in next season's influenza vaccine, following the recommendations of a panel of experts convened twice a year by the World Health Organization's Global Influenza Program.

The new strain was first identified in California in January and has already spread widely, according to WHO. Known as A/California/7/2004(H3N2), the strain was identified in more than 20 percent of U.S. flu patients tested in early 2005. It has also appeared in Canada, Mexico, Europe, Asia, Africa and the Pacific Islands. WHO predicts it will be the dominant virus circulating in the Northern Hemisphere during the next flu season.

Otavio Oliva, regional advisor to the Pan American Health Organization (PAHO) on viral diseases, notes that new strains are only included in the vaccine when they are significantly different from the previous year's strains. "There is no evidence that A/California is more virulent than any of the recent H3N2 strains of Influenza A," he says.

Researchers are currently working on a prototype A/California vaccine to allow manufacturers to begin growing it in chicken eggs, the first step toward production.

The standard flu vaccine is composed of three strains of influenza virus selected from among thousands of candidates identified by national influenza centers in WHO member countries around the world. For this year's vaccine recommendations, the centers isolated and characterized more than 10,000 viruses from all six WHO regions.

The recommended Northern Hemisphere vaccine for the next flu season will contain A/New Caledonia/20/99 (H1N1)-like virus (which has been included for the last six years), and B/Shanghai/361/2002-like virus (which has been included for two years). The California strain will replace A/Fujian/411/2002 (H3N2)-like virus (which was included in both the northern and southern hemisphere vaccines for 2004).

The Southern Hemisphere vaccine for 2005 is already in production and consists of A/New Caledonia/20/99(H1N1)-like virus, B/Shanghai/361/2002-like virus, and A/Wellington/1/2004(H3N2)-like virus. Recommendations for the 2006 Southern Hemisphere vaccine will be made in September.

PAHO's member countries use both southern and northern hemisphere versions, depending on their geography.

In addition to recommending the viral strains for flu vaccines, WHO provides manufacturers with prototype strains and materials to ensure and verify that their products meet global standards. ■



(From page 2)

relevant and make new contributions. Forty years ago, the level of institutional development in public health was much lower. I think we have to see it as very positive that the gap between national institutional capacities and international capacity has been narrowing, because we have helped build these national capacities.

So it's a success story for technical cooperation?

Success is closing down programs that are no longer relevant and finding new areas of action. PAHO is looking for these new areas at the same time it is consolidating its space as a continental forum. Definitely, for the public health workforce, PAHO and the actions it promotes are authoritative voices.

You see PAHO's mission clearly. What is your mission?

At this point, my responsibility is program management, trying to structure in the best possible way the work of PAHO's governing bodies. Also, producing medium- and long-term strategies and policies for meeting the countries' demands and needs. Another responsibility I have is to search constantly for strategic alliances and to develop relationships, with the idea that international cooperation in health should be carried out with diverse partners in order to maximize PAHO's work. The task, in short, is to translate policies into budget programs that allow us to carry out work in all areas at the country level. And to prepare a regional budget program that emphasizes support for the neediest countries.

What are the budgetary effects of the new country focus?

The idea is that 40 percent of the organization's resources be directed toward country programs, that these programs receive direct financial support for their execution. PAHO depends not only on quotas but also on mobilizing resources to more or less match the quotas, and this is something we do directly with donors: banks, foundations, the private sector, etc. In this sense, we have signed umbrella agreements with USAID, with the governments of Spain, Sweden and Norway, to strengthen our programs and to bridge the gaps that sometimes appear in our regular finances. We also have gained greater access to funds from WHO; we have received \$15 million in the last 12 months, a figure that exceeds what we got in the previous biennium.

Is that primarily for programs that address the Millennium Development Goals?

The millennium goals are our frame of reference. They're often thought of as being directed at the least-developed countries, like those in Africa and Southeast Asia. But I think they are of central importance in Latin America and the Caribbean, where there have been setbacks in many health indicators—for example, in nutrition and access to potable water. If we don't make important changes in investments in health, the region will not be able to meet the MDGs. We need to change course to reverse the situation, because 50 years ago there was less inequality than today. We cannot allow ourselves to regress when it took so much to achieve what we have. We have to correct this regression right away.

How do you envision PAHO 50 years from now?

I think PAHO's role will be more normative and multilateral, and less tied to assistance. It will have a more central role in scientific and technical exchange and in creating norms for joint action in public health and for the development of global public goods. I think its work in institutional development and capacity building will diminish.

What is your chief motivation in your work?

People are always my inspiration. Sometimes the sheer pace of work can make me feel distant, but the closeness of faces, perceptions and concrete needs remains the motor that drives my daily work. ■

Tsunami Response: Swift and Massive

The international response to the Dec. 26, 2004, earthquake and tsunami in South Asia was the largest relief effort ever mounted. Experts from PAHO and WHO were among thousands of disaster, rescue and relief workers who poured into the region in the days and weeks following the disaster.

The massive earthquake off the Indonesian island of Sumatra and the ensuing tsunami directly affected at least 12 countries, claimed more than 280,000 lives and left many thousands injured. The disaster also destroyed the livelihoods of more than a million people in the affected areas, according to the International Labor Organization.

Jan Egeland, the United Nations' chief relief coordinator, said the sheer scale and speed of the international response had made it the "best-ever emergency relief effort." He noted that within a few weeks, donor countries had pledged some \$900 million for relief and recovery efforts.

David Nabarro, who led the World Health Organization's efforts to address the health impact of the disaster, said in early February, "We have managed to prevent any major disease outbreak from affecting the tsunami-affected populations. When this started—the relief effort—I did not believe that we would succeed in avoiding outbreaks."

Immediately following the disaster, international health experts predicted that unless the international community took immediate steps to control disease, as many as 500,000 survivors of the disaster could become victims of diseases such as dengue fever, Japanese encephalitis, measles, cholera, malaria, dysentery and diarrhea.

Efforts to restore sanitation services, the provision of food and water, and close surveillance succeeded in preventing any large-scale outbreaks of disease. Nevertheless, survivors in some areas have suffered diarrheal diseases and tetanus, and have developed mental health problems as the full impact of their losses have sunk in. Malaria and dengue remained a concern, as flooding increased the number of breeding grounds for mosquitoes.

PAHO joins relief effort

In support of WHO's role as technical coordinator for all health assistance in tsunami-affected countries, PAHO sent in experts in disaster relief and communications to work with WHO offices in India, Sri Lanka and Indonesia. PAHO emergency preparedness advisor Dana Van Alphen coordinated health actions on behalf of WHO in Banda Aceh, the region hardest hit by the disaster.

The priorities for WHO were supporting countries' efforts to provide adequate supplies of safe water, to put in place strong sanitation and hygiene infrastructure, and to provide basic medical supplies.

WHO distributed millions of water purification tablets to displaced populations, supplies to provide basic medical care to more than five million people for three months, and kits to provide full surgical care for more than 100,000 patients, as well as anti-diarrhea treatments and oral rehydration salts.

In addition to public health experts, WHO mobilized logisticians to help ensure adequate distribution of supplies and sanitation engineers who worked to ensure safe drinking water.

PAHO/WHO communications experts helped provide an information-hungry press corps with the latest updates on the situation. A PAHO photographer and cameraman spent three weeks documenting the relief efforts in Sri Lanka.

"It was very moving to see WHO experts rolling up their sleeves and working hand in hand with local people," said Manuel Calvit of PAHO's public information office. "We were surprised to find out that many mothers were able to save their immunization cards, because public service campaigns have successfully instilled in them their importance and because they've lived through crises and have an emergency kit where they keep valuables, including the cards. Those who lost their cards were demanding replacements."

PAHO photographer Armando Waak recalled, "The devastation we saw seemed even larger than what we saw in the news at home. People in the affected areas and, in general, in all the places we visited were very appreciative of WHO attempting to help in any possible manner. I noticed a dedicated attitude among the local workers and children who were cleaning up and beginning the process of reconstruction after the disaster." Waak added, "I found a similar attitude and interest in helping at the International Airport, where all the relief aid was arriving. Everybody we met wanted to make a difference."

One of WHO's most important contributions was an effort to ensure safe childbirth services for an estimated 40,000 pregnant women left homeless as a result of the tsunami. The effort, primarily in Indonesia, India, Sri Lanka and the Maldives, focused on providing pregnancy and childbirth services in every temporary shelter, and addressing special medical and nutritional needs of mothers and newborns. ■

Kobe Co Calls for Ne to Dis

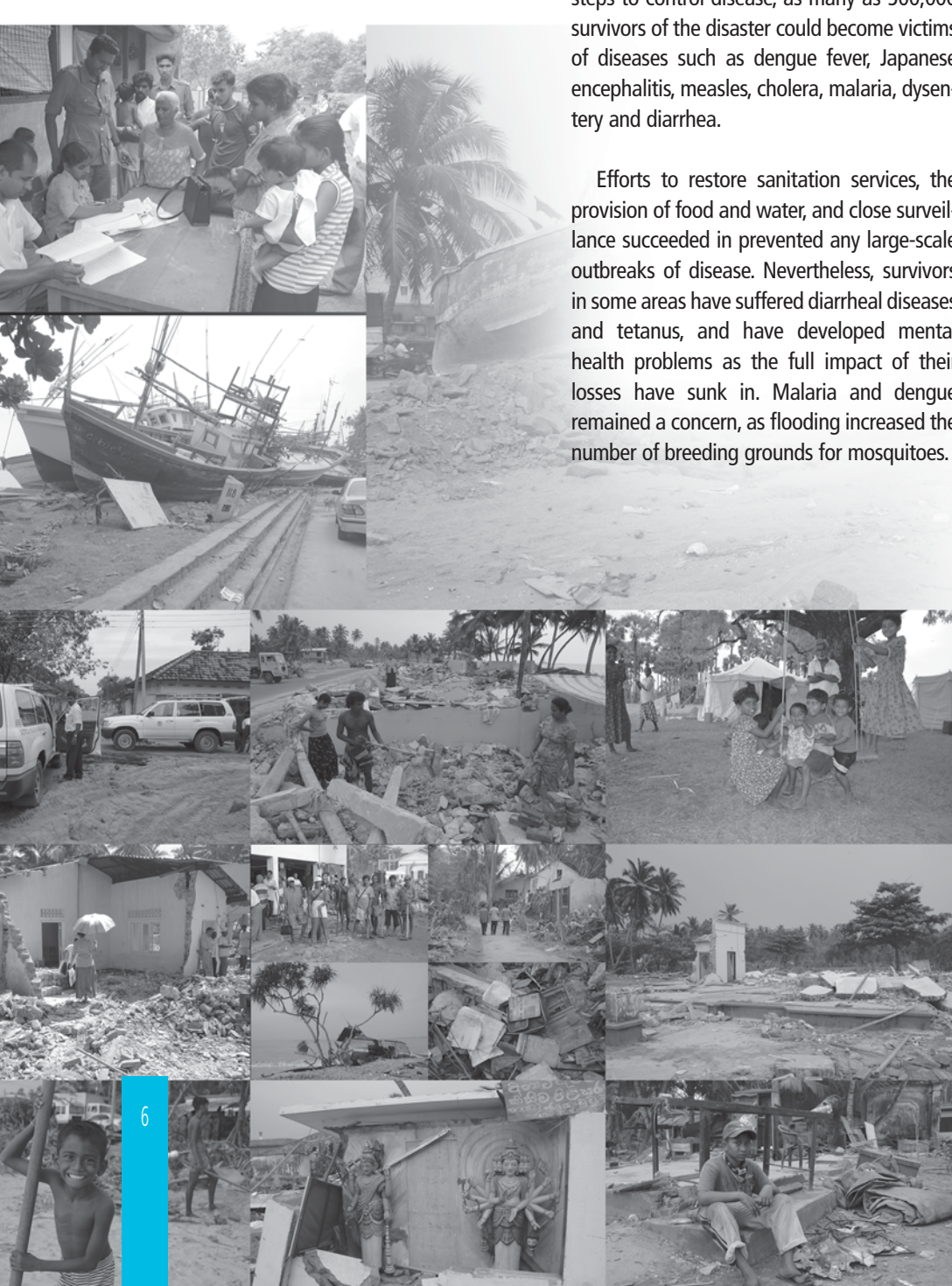
Participants in the World Conference on Disaster Re emments and societies to devote greater attention and in the way they approach the issue.

The five-day conference was the largest-ever international math of one of the largest disasters in history: the Dec. 26, 2004 tsunami. Participants said the tsunami tragedy proved that natural development efforts. The world needs better disaster risk man for disaster reduction into strategies for sustainable developm

Members of the Pan American Health Organization's prog conference sessions on disaster reduction in hospitals and o In recorded remarks, PAHO Director Mirta Roses told cor Grenada and Haiti, hospitals and health facilities that the co paralyzed or destroyed at the same time that they were m assistance." She urged that all hospitals be made disast

PAHO disaster chief Jean-Luc Poncelet also empha thousands of school children were among the victim have perished in classrooms during floods, earthq

The conference produced a framework grating disaster risk reduction into hea hospitals are built to be disaster-s facilities to make them more



Sri Lanka photos by Armando Waak/PAHO



PAHO Aids Guyana Flood Recovery

With attention focused on South Asia's tsunami, floods in Guyana made barely a ripple in the international press. Yet they added up to the worst natural disaster in the country's recent history.

In January, torrential downpours of nearly 10 times the average rainfall produced heavy flooding in Guyana's coastal areas, the most densely populated part of the country. More than 300,000 Guyanese, or more than half the population, were affected.

Moderate floods are not unusual in Guyana, but the massive and prolonged flooding in January was the worst experienced in a generation. At the peak of the crisis, more than 192,000 people in the areas of Georgetown, East Coast, East Bank and West Demerara were affected. Three weeks after the floods' peak, 92,000 people still had water in or around their homes.

For a period of six weeks, nearly 3,000 people were living in 24 schools serving as shelters. Twenty-four health centers were affected by the floods, leaving 200,000 people without access to health services. Many schools were closed for as long as eight weeks.

Livestock, pasture land and crops also were lost or damaged in the floods, creating long-term economic problems for a country that is already one of the lowest-income nations in the hemisphere.

As a member of the Task Force on Health, the Pan American Health Organization (PAHO) worked with Guyana's Ministry of Health on disaster response strategies. With the United Nations, PAHO issued an appeal for emergency relief funding. PAHO's country office in Georgetown set up a situation room and a syndromic surveillance system, producing daily reports and maps for the national task force's decision-making and planning. PAHO also provided training for members of Guyana's Civil Defense Commission in the use of SUMA, a PAHO-designed software program for the management and distribution of donations to the relief effort.

PAHO also developed and provided treatment guidelines for mobile health teams, and helped set up seven temporary clinics, while providing training for 115 primary care health workers. It also provided medical supplies to help the Georgetown Public Hospital care for an increased patient load.

As a result of PAHO's surveillance activities, health workers were able to detect an outbreak of leptospirosis in its early stages and prevent its spread through mass prophylaxis with doxycycline. A bacterial disease, leptospirosis most commonly results from exposure to water contaminated with the urine of infected animals. A communication campaign initiated at the start of the flooding warned against unnecessary contact with floodwaters and decreased the number of children playing in the potentially contaminated water. But PAHO field workers still found many people wading barefoot, increasing their risk of leptospirosis infection through open wounds or cuts on their feet.

Throughout the affected areas, health workers found stagnant water contaminated

by raw sewage and animal carcasses. Water levels receded slowly because of limited pumping capacity and poor maintenance of drainage channels.

Clean drinking water was a top priority. PAHO helped set up and coordinate committees addressing water, sanitation and solid waste issues, and helped monitor drinking water quality. PAHO's country office in Guyana coordinated with its country office in Brazil to facilitate a Brazilian donation of chlorine gas to treat the water supply. PAHO also helped develop a plan to distribute water to shelters and affected villages.

With the disaster behind it, Guyana is now working with PAHO to build its capacity in areas including disease surveillance, monitoring of water quality and environmental health, disaster preparedness, health-promoting schools, food safety, and safe water and sanitation systems. ■

Conference with Approach Masters

...duction, held Jan. 18-22 in Kobe, Japan, called on gov- efforts to disaster reduction, and to make major changes

...al meeting on natural disasters and took place in the after- 004, Indian Ocean earthquake and tsunami.

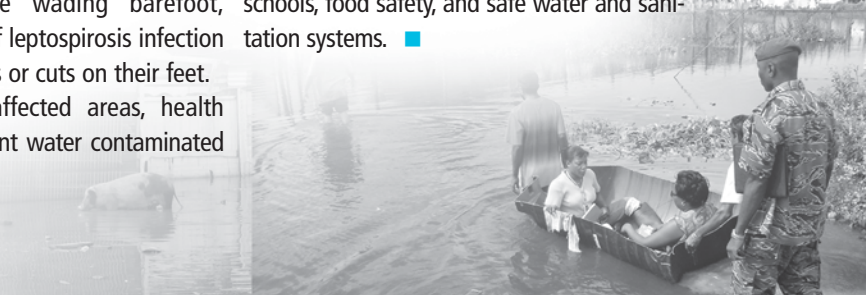
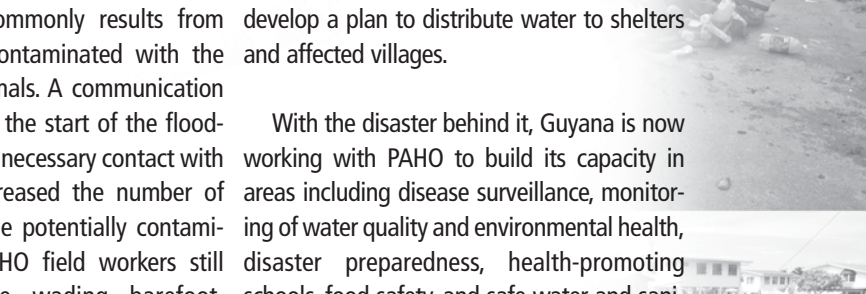
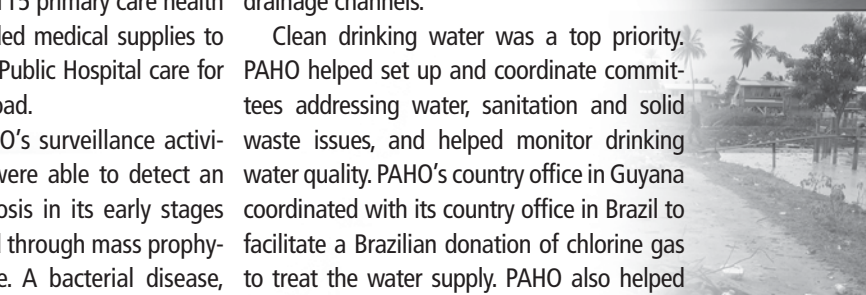
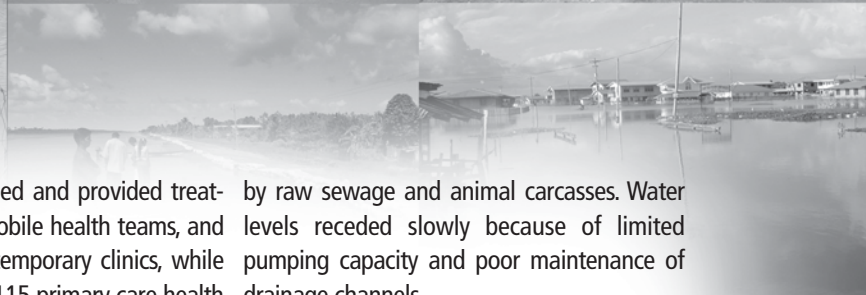
...disasters cannot be treated as a separate area of concern in management, but even more important is incorporating measures ment.

...gram on disasters and humanitarian assistance organized two other critical facilities.

...ference participants: "During the 2004 hurricane season, in community once viewed as points of reference and trust were most needed, and they became themselves in need of urgent er-safe by 2015.

...sized the importance of fortifying schools, noting that ns of the Indian Ocean tsunami, and thousands more quakes and hurricanes.

...of action for 2005-2015 that calls for inte- health sector planning, ensuring that new safe, and upgrading existing health disaster-resistant. ■



Guyana photos by: Tom Vlugman, Byron Crape, Els Scholte, Hedwig Goede, UNDAC

Global Tobacco Treaty Enters into Force

The World Health Organization Framework Convention on Tobacco Control (FCTC) entered into force on Feb. 27, following its ratification by 57 countries, including seven Member States of the Pan American Health Organization (PAHO).

The convention aims to save millions of lives now lost to tobacco and is the first global public health treaty negotiated under the auspices of WHO and its Member States.

The provisions of the treaty, which are binding for ratifying countries, are based on measures that tobacco control experts say are the most effective means available to reduce tobacco use. The provisions call on countries to:

- Ban all tobacco advertising and promotion within five years of the treaty's entry into force.
- Require health warning labels that cover at least 30 percent of the surface of tobacco packages, within three years.
- Protect people from secondhand smoke in all indoor public places and workplaces.
- Consider increasing prices and taxes on tobacco products.

These measures have already been implemented by countries of all income levels and have proven to be highly cost-effective, says Heather Selin, a PAHO expert on tobacco control.

"For every 10 percent price increase on tobacco products, you see a decline in per capita consumption of 4 to 8 percent," says Selin. "Smoke-free workplaces reduce consumption among smokers by nearly 30 percent." She adds that strong graphic health warnings on tobacco packages have been shown to be effective in informing smokers about health dangers and in motivating their attempts to quit. Countries with bans or comprehensive restrictions on tobacco advertising and promotion have reduced consumption much more than countries with no or partial restrictions, Selin says.

Western Hemisphere countries are already among the world leaders in tobacco control. Canada, Cuba, the United States and Uruguay have implemented smoke-free environments in a number of sectors and jurisdictions. Brazil, Canada and Venezuela require tobacco packages to carry graphic health warnings that are among the strongest in the world. Brazil, Canada and Cuba have comprehensive restrictions on tobacco promotion.

Countries of the Americas participated in the negotiations leading up to the treaty, and as of mid-March, seven had ratified the treaty: Canada, Honduras, Mexico, Panama, Peru, Trinidad and Uruguay.

The final FCTC text was adopted unanimously by the World Health Assembly in May 2003. By late November 2004, 40 countries had become contracting parties to the treaty—the trigger that brought it into force 90 days later. By late February, 17 additional countries had ratified it, making it one of the most rapidly embraced U.N. treaties in history. ■

Wider Use of Cervical Screening Could Save Lives

An easy, inexpensive method that uses ordinary vinegar to screen women for cervical cancer could, if used more widely, increase the number of women whose disease is caught early and treated.

The findings were reported in an English-language article in the January 2005 issue of the *Pan American Journal of Public Health*.

The screening method—known as visual inspection with acetic acid, or VIA—has been recommended for use in low-resource settings but could help save women's lives if it were more aggressively promoted as an alternative or supplement to the Papanicolaou smear, or Pap smear, according to the study.

Cervical cancer is the second most common form of cancer in women after breast cancer. It is caused by a sexually transmitted virus, human papilloma virus, which causes lesions on the cervix that, if left untreated, can develop into cancer.

Largely as a result of widespread screening with Pap smears, cervical cancer incidence and mortality rates have declined steeply in North America, to below 10 per 100,000 women in Canada and the United States. However, rates in most Latin American and Caribbean coun-

tries remain above 20 per 100,000 (in many cases, much higher) and are surpassed only by rates in East Africa and Melanesia.

In this context, VIA has been developed as an alternative to the more complex and expensive Pap smear in developing countries. The method involves washing the cervix with vinegar for one minute, after which the health worker performs a naked-eye observation of the cervix to see whether the epithelium, a protective tissue layer, turns white. This would indicate precancerous lesions.

Unlike a Pap smear, which requires laboratory processing, VIA yields immediate results. If the findings are abnormal, women receive special counseling about the results and about the importance of returning a week later for confirmatory studies with colposcopy and biopsy.

In contrast, women who receive Pap smears must return to the clinic to learn their results. Because many never do, many are never informed that they need treatment.

The *Journal* study involved 1,921 women and was carried out at the Peruvian Cancer Institute (Instituto de Enfermedades Neoplásicas) in 1999 and 2000. Its principal author, José Jeronimo, is a Peruvian physician



who works at the Division of Cancer Epidemiology and Genetics at the U.S. National Institutes of Health's National Cancer Institute.

Examining both VIA and Pap smear screening, Jeronimo et al. found that VIA increases detection of pre-malignant lesions on the cervix.

Moreover, while 26 percent of women who had positive Pap smears failed to return for follow-up, only 3 percent of the VIA-positive women failed to return. VIA thus "diminishes the probability of losing women before they are appropriately followed up and treated," said the article.

The study concludes that VIA should be promoted as a screening method in developing countries, but not just in low-resource settings where medical personnel have limited training and medical equipment is not necessarily up to date. VIA offers significant advantages even in settings with better-trained staff and more up-to-date medical equipment, the study says.

"VIA can be used as a screening tool in poor countries not only in rural areas and small health centers but also in hospitals, cancer institutes, and other health facilities with better resources." ■

Book Takes New Angle on Adolescent Health

A groundbreaking new book from the Pan American Health Organization (PAHO) offers a new perspective on the challenges of health promotion and prevention efforts aimed at adolescents.

Youth: Choices and Change, produced by PAHO's Adolescent Health Unit, examines the latest behavioral change theories and models and shows how these can be successfully applied to the development of international public health programs targeting teens.

It argues that the key to developing successful programs in this area is taking into account the target group's developmental context. Interventions aimed at 13-year-olds, for example, need to account for the different emotional and social needs of this age group as compared with those of 15- or 18-year-olds. The book also notes the importance of taking into account cultural, ethnic and gender differences, as well as poverty, and how these affect adolescents as they grow and mature.

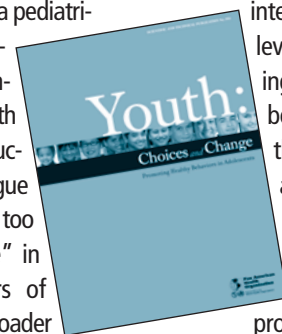
The book's authors—Cecilia Breinbauer, a psychiatrist specializing in child and adolescent health, and Matilde Maddaleno, a pediatrician and public health expert specializing in adolescence—examine the reasons why some health interventions for adolescents succeed while others fail. They argue that most such interventions are too narrowly focused and "curative" in their approach; few designers of these programs consider the broader social context in which young people live.

The authors show how the lifestyles and habits of adolescents in Latin America and the Caribbean present special challenges and opportunities to public health work. Respectful and successful interventions depend on choosing the right theoretical framework for a target group's socioeconomic situation, as well as consideration of different stages of adolescent development and the needs and wants they engender.

The authors provide an overview of theories and models of health promotion at the interpersonal, community and policy level. They provide detailed reporting on how these theories have been applied in diverse contexts throughout the world to encourage and maintain healthy behaviors in young people.

Youth: Choices and Change also notes that adolescent health programs have tended to overlook pre-adolescents and early adolescents, a group they say is ripe for appropriate interventions. The book presents a list of developmentally appropriate goals for planning health promotion and prevention programs for this age group.

The ultimate goal, the authors say in their introduction, is "positive, sustainable behavioral change which enables young people to become actors of their own change and achieve their self-set goals." ■



Planut: Software for Nutrition Planners

The Pan American Health Organization (PAHO) and the Pan American Institute for Food Protection and Zoonoses (INPPAZ) have created a new software program, Nutritional Planner (Planut) 3.0, that can help nutrition experts develop dietary recommendations that maximize nutrition while minimizing food costs.

Nutritionists at INPPAZ, one of nine PAHO scientific and technical centers, designed Planut using nutritional guidelines developed by the World Health Organization (WHO), the U.N. Food and Agriculture Organization (FAO) and PAHO. The software combines nutritional

criteria and data on local food prices to produce high-nutrition, low-cost dietary options. Users can set their own dietary goals and input new foods that are not in the original database.

Planut, currently only available in Spanish, can produce dietary plans for up to seven days and target them to particular groups according to age, sex and culture. ■



Early Warning for Climate-Related Diseases

The International Research Institute for Climate Prediction (IRI) in Palisades, New York, has been named a Pan American Health Organization/World Health Organization (PAHO/WHO) Collaborating Center for Early Warning Systems for Malaria and other Climate-Sensitive Diseases (visit <http://IRI.columbia.edu>).

Part of Columbia University's Earth Institute, IRI uses developments in climate science to help susceptible populations prepare for and mitigate the effects of drastic changes in patterns of temperature and precipitation. As a PAHO/WHO Collaborating Center, IRI will develop climate information systems that can forecast outbreaks of climate-related diseases including malaria, dengue and cholera.

Changes in climate can have a major impact on human health by affecting the environmental conditions in which disease vectors, such as mosquitoes, live and reproduce. Unusually warm or wet weather, for example, can expand breeding sites or create more hospitable habitats, leading to an increase in the vectors' range and numbers.

Examples of such events include a 1994 drought in Puerto Rico that led to an increase in dengue fever, due to household storage of domestic water. Wetter-than-normal spring seasons have preceded dengue fever upsurges in Costa Rica and Fortaleza, Brazil. Studies in Mexico have shown significant correlations of dengue fever with temperature and rain.

These patterns, and the possibility of predicting them in advance, have aroused growing interest among both climatologists and public health experts. Recently the two communities have embarked on several collaborative ventures. As part of an effort to develop a Malaria Early Warning System, WHO last year partnered with the Southern Africa Development Community Drought Monitoring Center to hold the first Southern African Regional Epidemic Outlook Forum, in September. Participants reviewed seasonal climate forecasts and the implications for the next malaria season.

The new PAHO/WHO center plans to launch two new projects this year focusing on malaria and dengue in Colombia and cholera in Asia and Africa.

In addition to developing early warning systems, the center will work with local agencies and other groups in epidemic-prone regions to help implement effective prevention and control measures.

IRI has previously worked with the Argentine Association of Regional Consortia for Agricultural Experimentation, the Centro de Previsão de Tempo e Estudos Climáticos and the Fundação Cearense de Meteorologia e Recursos Hídricos in Brazil, and the Instituto del Mar in Peru. ■

PAHO Efforts Among World-Class Health Successes

Two hemispheric public health efforts spearheaded by the Pan American Health Organization (PAHO) are among 17 large-scale health interventions held up as models of success in a new book from the Center for Global Development (CGD) in Washington, D.C.

The book, *Millions Saved: Proven Successes in Global Health*, demonstrates that "major public health efforts can and have changed the world for the better—well beyond what would have occurred through income growth alone," CGD President Nancy Birdsall notes in the preface.

"The magnitude and profundity of current health challenges facing the developing world—from AIDS to chronic malnutrition to the looming threat of tobacco-related cancers—can seem daunting," Birdsall writes. "But past challenges have been surmounted and serve as object lessons: Even in countries with few financial resources and limited health infrastructure, sensible and systematic efforts to improve health have worked."

The book cites the PAHO-led hemispheric campaign to eradicate polio and efforts to control Chagas' disease as two examples of successful, cost-effective public health interventions, along with the World Health Organization-led global campaign to eradicate smallpox.

Other efforts detailed in the book include Thailand's "100 percent condom" program, which targets commercial sex workers and other high-risk groups to prevent HIV/AIDS, and China's use of directly observed treatment (DOTS) to reduce tuberculosis prevalence and improve the cure rate in half of China's provinces.

Polio eradication

In the late 1970s, polio caused some 15,000 cases of paralysis and 1,750 deaths each year in Latin America and the Caribbean.

In 1985, PAHO launched a major campaign to eradicate the disease in the region. The effort built on PAHO's decade-old (at the time) Expanded Program on Immunization, which had succeeded in reducing the toll of childhood illness in the region.

To increase polio immunization coverage, endemic countries in the region implemented national vaccine days twice a year, during which they vaccinated every child under 5, regardless of vaccination status. The final stages of the campaign included Operation Mop-Up, which consisted of house-to-house vaccination in communities with polio cases or low vaccine coverage. A key component of the effort was the "most comprehensive surveillance system for human health that has ever existed in the [Western] hemisphere," the book notes.

As a result of the PAHO-led campaign, the hemisphere reported its last case of polio in 1991, and the disease was formally declared eradicated from the Americas in 1994. At the global level, the number of polio cases has been reduced from 350,000 in 125 countries in 1988 to fewer than 800 cases in just six countries in 2003. Despite setbacks that have plagued the final stages of the global campaign, the world is today on the verge of eliminating polio forever.

Millions Saved notes that the polio eradication effort in the Americas received some \$120 million in support from national and international donors during its first five years. PAHO's partners included the United Nations Children's Fund (UNICEF), the U.S. Agency for International Development (USAID), Rotary International, the Inter-American Development Bank and the Canadian Public Health Association.

Fighting Chagas

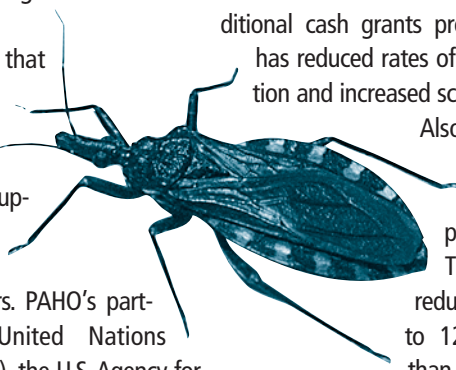
Chagas' disease is a parasitic illness that can cause fatal organ damage and is only endemic in South America. In the early 1980s, there were some 700,000 new cases each year. In 1991, PAHO launched the Southern Cone Initiative to Control/Eliminate Chagas in seven South American countries. The program sent teams of fumigators to treat more than 2.5 million homes across the region with long-lasting pyrethroid insecticides. It also funded improvements in rural housing to eliminate the insect vector's hiding places and carried out blood screening to prevent transmission through transfusions.

By 2000, the program had helped reduce the incidence of Chagas by an average 94 percent in participating countries, and annual deaths from the disease dropped from 45,000 to 22,000. By 2001, transmission had been halted in Uruguay, Chile, and large parts of Brazil and Paraguay.

Participating countries provided more than \$400 million to fund the program, which *Millions Saved* terms one of the most cost-effective interventions in public health.

In the Americas region, the book also cites Mexico's Oportunidades ("Opportunities") program, which provides education, health and nutrition to rural families through a conditional cash grants program. The program has reduced rates of illness and malnutrition and increased school enrollment.

Also cited is Jamaica's policy of fluoridating table salt to prevent dental caries. The program helped reduce severe caries in 6- to 12-year-olds by more than 80 percent in less than a decade. At only 6 cents per person per year, salt fluoridation has proved highly cost effective, saving \$250 in dental treatment for each \$1 spent. ■



Luis Fermín Tenorio Cortez, center, was the last recorded case of polio in the Americas. He was 2 in 1991, when his case was reported. By 1994, the disease had been officially declared eradicated from the hemisphere, making the Americas the first region to achieve such success.

© Armando Vaak/PAHO

Suriname Film Tackles HIV Themes

A popular new “edutainment” film sponsored in part by the Pan American Health Organization (PAHO) uses a Romeo-and-Juliet-style love story to tackle tough issues about stigma and discrimination and living with HIV.

Produced in Suriname and first screened on World AIDS Day, *A Love Story: Lesley and Anne* depicts the relationship between two young people from different social backgrounds who are confronted with an HIV-positive diagnosis. The film shows how the young couple deals with their families’ disapproval and how a family’s love and understanding can help someone live a full life with HIV.

Youth audiences, the media and health specialists have praised the film, and teachers have requested that it be screened in local schools.

The film, recorded in Dutch with English subtitles, has so far aired on all of Suriname’s television stations and two stations in Guyana. Special preview screenings were organized for focus groups of youths, members of nongovernmental organizations, the press, teachers, actors, writers, directors and other special audiences. Members of the public called the film’s production office and sent e-mails with comments for weeks after the broadcast.

Responses from focus groups previewing the film were overwhelmingly positive. Viewers voiced approval of the film’s realism and its openness in discussing sex and sexuality. “In Guyana we tend to mystify sex, and this is the breeding ground for the spread of HIV,” said one viewer.

Audiences readily embraced the message that common misconceptions about class and status help fuel the spread of HIV. A number of viewers said the most important messages were that “HIV knows no class” and “rich people believe their money makes them invul-

nerable.” Viewers also were receptive to the message that family support is essential for maintaining the quality of life of people living with HIV.

Several focus group participants insisted the target audience for the film should extend to adults as well as youths. One 18-year-old female said that by exclusively targeting youth, the makers of edutainment and information products were guilty of stigmatizing youth and suggesting that adults were always responsible and did not need to change their behavior.

Audiences in both countries voiced approval of the fact that *A Love Story: Lesley and Anne* was produced locally rather than by outsiders.

The 40-minute film was written and directed by Surinamese filmmaker Sharda Ganga and features two 20-year-old Surinamese teaching students in the starring roles. The boyfriend’s younger sister was portrayed by 13-year-old Kim Aikman, who acted in a previous PAHO edutainment series, *LIBI!*, broadcast in Suriname along with *Soul City*, the award-winning South African edutainment series.

A Love Story: Lesley and Anne was produced as a pilot project to test the use of locally produced edutainment films in the fight against HIV in Suriname and the wider Caribbean. Project supporters are now considering distributing the film for use throughout the Caribbean, making it available for classroom and other educational uses. They are also developing a teaching kit for school teachers and community leaders. A follow-up series is under consideration for Caribbean-wide distribution.

The Canadian International Development Agency and the Norwegian Agency for Development Cooperation were cosponsors of the film project with PAHO. ■

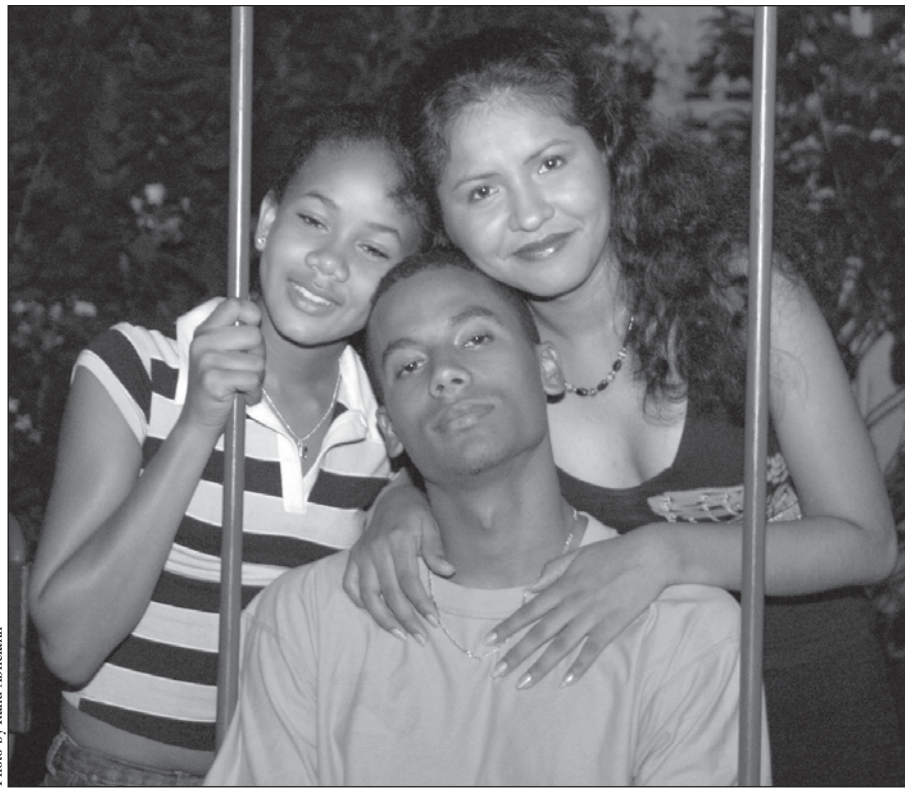


Photo by Ranni Abhelekh

(From left) Kim Aikman, Diego Dbanradj and Farida Colom star in *A Love Story: Lesley and Anne*, a new “edutainment” film from Suriname that explores the issues of stigma, family ties and vulnerability to HIV/AIDS. Sponsored in part by PAHO, the film has won wide praise for its frank and realistic approach to these issues.

Washington Wizards, PAHO Team Up for Health



The Washington Wizards basketball team is partnering with the Pan American Health Organization (PAHO) in a series of special game nights that take important health messages to new audiences.

The partnership uses basketball as a platform to promote healthy living habits and preventive practices in the Washington-area community. The themes of the partnership so far include healthy environments for children, youth violence prevention, and healthy mothers and children. Two game nights took place in December and February, and a third is scheduled for April 9.

PAHO has produced public service announcements (PSAs) featuring Wizards players, which are shown in the arena and broadcast on television. Health messages appear on the MCI Center’s giant screens, and lobby exhibits offer health information.

In a PSA for “Healthy Environments for Children” game night—organized with support from the U.S. Environmental Protection Agency (EPA)—Wizards guard Steve Blake tells viewers, “Your home and your neighborhood are your environment, too.” Juan Dixon, another guard, tells parents, “Please don’t smoke around your kids,” and forward Jarvis Hayes adds, “Keep pesticides and chemicals out of reach.” The announcement ends with center Etan Thomas telling viewers, “The ball is in your court. Make it happen!”

A Feb. 9 game night focused on preventing youth violence and received support from the

U.S. Department of Health and Human Services (HHS), the Centers for Disease Control and Prevention (CDC), the National Youth Violence Prevention Resource Center, and the Wizards.

CDC Director Julie Gerberding issued a special communiqué for the event. “We simply cannot allow violence to continue to steal our most valuable resource—our children,” she said. “We continue to learn what works to help stop violence, like helping our children learn to talk through their feelings as well as by learning to respect themselves and others. Partnerships, like the one CDC is joining with the Washington Wizards and the Pan-American Health Organization, will go a long way to help all our children realize their dream of growing up in a safe and healthy world.”

Special PSAs for “Youth Violence Awareness Night” featured Wizards team members, local youth, and U.S. Surgeon General Richard Carmona. They were shown during the game at the MCI Center in Washington and on television.

A third game night is scheduled for April 9 and will focus on “Healthy Mothers and Children,” the theme for World Health Day 2005. It will be part of a worldwide effort to reduce the number of women who die from pregnancy-related causes and the number of children who die during their first month of life.

The Washington Wizards are part of the National Basketball Association, the major basketball league in the United States. ■

Publications Awards Highlight Region’s Research

PAHO’s publications recently earned awards from two professional associations and inclusion in a leading health research index. The honors indicate growing recognition not only of the PAHO publications program but also of scientific research in Latin America and the Caribbean.

The Association of American Publishers recognized the recent PAHO book *Vaccines: Preventing Disease and Protecting Health* with an award in the medical science category. Edited by Ciro A. de Quadros, the book details the important role vaccines have played historically and examines the current challenges for vaccine research and production.

Another recent PAHO publication, *Building Better Health: A Handbook of Behavioral Change*, received a special award from the British Medical Association. Aimed at community health promoters, the book is a guide to disease prevention and behavioral change techniques that promote better health habits.

PAHO Publications Area Manager Judith Navarro noted that such recognition is an indication of the growing importance of scientific

contributions coming out of Latin America. A recent essay in the *Public Library of Science (PLOS) Biology* journal showed that the number of scientific articles by researchers from Latin America has increased more than the number from Europe, North America and industrialized Asia. The essay also notes that Latin American researchers remain underrepresented in major international scientific journals and suggests that researchers in this region may not be getting the recognition they deserve.

Something that may help change this is the recent decision by the Institute for Scientific Information (ISI), a leading indexer of scientific journals, to include PAHO’s *Revista Panamericana de Salud Pública/Pan American Journal of Public Health* in its Social Sciences Citation Index and Current Contents/Social and Behavioral Sciences Index. The *Revista/Journal* is one of approximately 200 journals (out of some 2,000 reviewed annually) chosen by the index for inclusion last year.

With the addition of the *Revista/Journal*, ISI databases will provide easier access to research on public health concerns in Latin America and the Caribbean.

For the *Revista/Journal*, inclusion in the ISI index is “a clear acknowledgement, based on objective, measurable criteria, that [the journal] can confidently take its place among the world’s top-ranking scientific journals,” Managing Editor Maria Luisa Clark wrote in a recent editorial. It is “proof against the widespread misconception that research from developing countries is, of necessity, second rate.” ■

Battling Foot-and-Mouth on Brazil's Amazon

It may be the last place to look for sick cattle, but animal health experts in Brazil have taken to the waters of the mighty Amazon to fight one of the region's age-old foes: foot-and-mouth disease.

The *Tucuxi* ("River Dolphin") has been sailing the lower Amazon and its tributaries to spread the word among locals about what needs to be done to eliminate *febre aftosa*, or foot-and-mouth disease, from their region by the end of 2009.

The disease has been eradicated or eliminated through vaccination in much of Brazil and other South American countries. Yet the lower Amazon remains one of the region's high-risk areas.

The *Tucuxi* is a pilot project that forms part of "Brazil Free from Foot-and-Mouth," a plan launched by Brazil's Ministry of Food and Agriculture late last year to promote vaccination and raise awareness of the connection between improving animal sanitation, eradicating the disease and generating local employment and income.

Brazil's efforts, in turn, are part of an ongoing hemispheric drive to eradicate the disease, spearheaded by the Pan American Foot and Mouth Disease Center (Panaf-tosa), one of nine scientific and technical centers of the Pan American Health Organization (PAHO).

A kind of floating schoolhouse, the *Tucuxi* has as its main audience primary school children, but it also reaches out to livestock farmers, community leaders and local authorities.

The boat's "school teachers" are five experts on animal sanitation and veterinary public health. They have been sailing up and down the region's waterways to take their message to 15 communities during the project's pilot phase. "Classes" consist of talks on vaccines and their administration, how to detect foot-and-mouth disease, how to prevent it from spreading, and tips on cattle-rearing methods.

The *Tucuxi* has also ferried folkloric performers to shows for local audiences along its route. The Ministry of Food and Agriculture has partnered with Banco da Amazônia, Banco do Brasil, the Lutheran University of Brazil (Ulbra) and the Rural Federal University of Pará, among others, to mount expositions on foot-and-mouth in a number of town central squares.

In Santarém and Monte Alegre—where the pilot project was launched—students, members of the army and the navy, livestock farmers, local residents and community leaders have received educational information through the campaign.

Pará state was chosen for the project's launch because it has the largest herd in the region, with 15 million cattle and buffalo, and is particularly vulnerable to foot-and-mouth disease. By the end of December, the project had provided information and prevention services to cover more than 1.1 million animals, according to Adinor Batista dos Santos, president of the rural union in Santarém, the boat's final destination.

Foot-and-mouth is a highly contagious disease caused by a virus that can infect cattle, buffalo, goats, and swine. The disease causes weight loss—often as much as 20 percent in affected animals—reductions in milk production, and in many cases, infertility.

The death rate among adult animals is only 3 percent, but among young animals mortality is closer to 50 percent. Calves are highly vulnerable, with death rates reaching up to 85 percent. Foot-and-mouth also makes animals more susceptible to other diseases.

After the initial phase of the pilot project, the boat's itinerary includes 13 other municipalities in the southern and central Amazon regions to mobilize awareness of foot-and-mouth disease. The government's aim is to vaccinate 90 percent of the herd in the region and reduce the area's designation from high risk to medium risk in the short term, while working toward elimination by 2009.

Brazil, Latin America's largest country, is the world's largest exporter of beef. In 2004, the country exported some 1.6 million tons of beef, worth an estimated \$2.2 billion.

By eliminating foot-and-mouth disease, the country hopes to boost its sales of high-quality meat for both domestic consumption and export, producing financial benefits for the country as a whole as well as increased employment and income generation at the local level. ■



A poster on board the *Tucuxi* says: "Vaccinate Your Cattle – Brazil Free of Foot-and-Mouth."



The *Tucuxi* has sailed the Amazon and its tributaries, visiting 15 communities in the Brazilian state of Pará. The banner reads: "Pará fights foot-and-mouth disease with health education."



School children listen to messages about foot-and-mouth disease during a class on Brazil's floating schoolhouse, the *Tucuxi*. The pilot project is part of a hemispheric effort to eradicate foot-and-mouth disease, spearheaded by the Pan American Foot and Mouth Disease Center (Panaf-tosa), one of nine technical and scientific centers of the Pan American Health Organization (PAHO).

PAHO, OTCA to Collaborate on Amazon Health

The secretary general of the Organization of the Amazon Cooperation Treaty (OTCA), Rosalía Arteaga Serrano, and the director of the Pan American Health Organization (PAHO), Mirta Roses, signed an agreement in February to work together to improve health conditions in the Amazon regions of Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Venezuela and Suriname. The accord will form the basis for joint health actions in environmental health; communicable diseases, particularly malaria; epidemiological surveillance; sustainable development; and access to services, among others. During the signing event, Roses noted, "The Amazon is one of the most valuable and most threatened regions and is fundamental for the survival of many threatened species, including humans. But in addition to its ecological and touristic value, it is a reservoir of viruses and bacteria, of potentially dangerous pathogens as well as therapeutic agents. All of this is part of its essential importance to public health."

Nutrition Handbook for People with HIV/AIDS

The Caribbean Food and Nutrition Institute (CFNI) has concluded a regionwide promotion of a handbook for people living with HIV/AIDS that spells out the importance of good nutritional habits. *Healthy Eating for Better Living* is now available in 18 Caribbean countries. The final launch took place in the Bahamas in February at a workshop for HIV/AIDS patients and care-givers. Minister of Health Marcus Bethel noted during the event that poor nutritional habits contribute to immune system compromise, increasing the susceptibility of people with HIV/AIDS to other infections. Studies have shown that good nutrition can

delay the development of AIDS following infection with HIV. CFNI has published a similar book for health professionals and is organizing nutrition training for care-givers in several countries. CFNI's Nutrition and AIDS project is supported by the Canadian International Development Agency.

Chile Study Focuses on Disabled Citizens

Chile's first National Study on Disability, released in late January, shows that one in eight Chileans—12.9 percent of the population—lives with some form of disability, and one in three Chilean households has a disabled member. Carried out by the National Fund for Disabilities (FONADIS), the study surveyed 14,000 households to determine the scope, distribution and nature of disabilities in the Chilean population. It employed a methodology developed by the World Health Organization (WHO), and PAHO/WHO provided support for the study. Its findings will be used to establish priorities in programs and actions by both national and local officials.

Among other findings of the study: more women (58.2 percent) than men (41.8 percent) in Chile are disabled, half of disabled Chileans have completed a basic education, one in eight has finished middle school, and only one in 20 has any higher education. Only one-third are gainfully employed.

Bolivia Opens New Kidney Institute

Bolivia in late January inaugurated a new Institute of Nephrology, the first facility in the country to specialize exclusively in kidney disease. The institute will carry out activities in the areas of education, prevention, early detection and treatment of renal disease. It has support from Bolivia's Ministry of Health, the Bolivian Society of Nephrology, the International Society of Nephrology, and PAHO. Preliminary

data suggest that some 70 out of 100,000 Bolivians have renal disease, and 800 men, women and children develop kidney disease each year. A urine test to determine if one is at risk of renal disease costs only 10 bolivianos (about \$1.25), while the cost of kidney dialysis runs 4,500 (\$560) per month. The mayor of La Paz, Juan Del Granado, and Rosario Quiroga, vice minister of health, were on hand for the new institute's inauguration.

Cyber Network Offers Journalism Award

Spanish- and Portuguese-speaking journalists in South and Central America and the Caribbean are invited to apply for a new Latin American Award for Health Journalism. The award is offered by Red Salud ("Health Network"), a cyber network created by PAHO, the Communication Initiative, and the Foundation for a New Ibero-American Journalism to encourage more and better media coverage of public health topics. This year's award will recognize excellence in coverage of issues related to antiretroviral treatment of HIV/AIDS. The winning entry will offer useful, clear and valid information about the treatment, progress, and effects of, as well as access to, antiretroviral drugs in Latin America. Submissions must have been published or broadcast between January 1, 2004, and April 30, 2005, and the submission deadline is May 7. Contestants should have at least three years of journalism experience in Latin American print, broadcast or electronic media. First prize will be \$2,000, with second and third prizes of \$1,000 and \$500. Visit <http://www.comunit.com/la/redsald/>.

Child Health Program Receives Spanish Award

The Ibero-American Association of Medicine and School and University Health gave a special award to a PAHO initiative to improve and

promote child health in the Americas. The Integrated Management of Childhood Illness (IMCI) program received the Dr. Tolosa-Latour Institutional Award in November 2004. It cited IMCI as "the main available intervention for improving child health conditions" and for being a "key strategy for the achievement of the Millennium Development Goals."

The award is granted every year to organizations, institutions or public programs for outstanding work in defense of the rights of health, education, and child welfare. Yehuda Benguigui, who heads PAHO's IMCI program, was given the award at the closing of the International Week of Primary Care for Infants and Youth in Toledo, Spain. IMCI is a strategy launched by WHO and the United Nations Children's Fund (UNICEF) in 1996 as the principal tool to improve child health.

Health Conference Calls for More Research

An international conference in Mexico City in November 2004 called for increased support for health research to help eradicate poverty and improve public health. The Global Forum for Health Research drew some 700 participants, including PAHO Director Mirta Roses and WHO Director-General LEE Jong-wook, to discuss the role of health research in efforts to achieve the Millennium Development Goals.

The conference's final statement called for: increases in the amount and pace of health research focused on improving health and lifespans; more research on equity and accountability in the global health system; commitment of at least 2 percent of developing countries' national health budgets to support health research and strengthen capacity in this area; an increased role for civil society in developing an agenda for research and applying the knowledge and technologies it produces; and greater priority on research and development that lead to products that address the needs of developing countries.



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PAHO TRAINING PROGRAM IN INTERNATIONAL HEALTH

The **Pan American Health Organization** invites applications for its **2006 Training Program in International Health**,

an 11-month professional work-study program at PAHO headquarters. Applicants must be permanent residents of a PAHO member country, age 35 or under, with an MPH or equivalent degree and a minimum of two years' experience in health services, education or research.

For applications and information, contact your local PAHO/WHO country office or:

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Or visit: www.paho.org
Application deadline: July 31, 2005

