

# PERSPECTIVES

in Health

Volume 10 No. 2 • 2005

The Magazine of the **Pan American Health Organization** *Regional Office of the World Health Organization*



## Communicating the Risk

# Communication: risky business

What is it about risk communication that leads people to create lists of do's and don't's? In researching the topic earlier this year I came across scores of suggestions, recommendations, and advice from experts. In fact, a list of 26 recommendations I found comes from Peter M. Sandman and his wife Jody Lanard, who write a superb article about risk communication as it relates to bird flu in this edition of *Perspectives in Health*.

The recommendations vary, but those that strike me as the most curious are the ones that call on public health experts to involve the public. Apparently, even public health professionals need to be reminded of the essential role of the public in maintaining public health. But then again, risk and crisis situations evoke a host of contradictions for many in medicine and public health. They imply rapid response in the face of uncertainty, raising the alarm but also calming fears, and empathizing with public opinion even when it's misguided. All too often the medical profession's preferred response is: "It will be all right," and "Here's what's going to happen." In the case of most hazards and crises, no one really knows.

Risk communication is a growing area of expertise and a growing necessity in an increasingly unstable world. Post-September 11, 2001, the management of risks and crises and the communications integrally built into these processes can mean the difference between credible governance and chaos. Risk and crisis communication should be an integral part of governments' planning and preparation for everything from bioterrorism to Marburg hemorrhagic fever. In the latter, crisis communication has included everything from raising awareness of how to handle dead bodies to fear-assuaging explanations about the use of bio-suits. A good plan is flexible and builds on success—or error. It was during the Ebola outbreak in Africa during the 1990s when doctors learned that, to maintain trust, they had to allow family members to see the treatment they were giving and not hide patients behind screens.

That's why the lists come in handy. Lists of sins: Don't meet the media or the public unprepared. Lists explaining how to address the public: Always stay on message and acknowledge that you don't have all the answers. Even personal presentation guidelines: Watch your gestures and maintain eye contact.

As Sandman and Lanard point out, one thing the experts do know is that reaction to and perception of risks vary vastly. For example, natural disasters are scary but not as scary as those termed "man-made." Hazards to children are often considered much less acceptable than those to adults. Frequency and adaptability are key factors that influence how situations are perceived. Children living in war zones may not drop to the ground at the sound of bullets. Residents in earthquake-prone areas may not react in panic to a tremor.

A young man may have unprotected sex with several partners because he doesn't see the risk of contracting HIV/AIDS. And if he does, he may figure he can beat it with antiretrovirals. In such a case, the risk is high, the perception is low, and the response by public health officials should be to raise the alarm. On the other hand, in 2002 two snipers near Washington, D.C., randomly shot 16 people, killing 10 of them, over 47 days. They effectively had the entire metropolitan area in a panic. Yet probabilistically, people in the area were about twice as likely to be killed in a drunk-driving incident during the same period.

But people (that is, the public) want to believe and to trust those conveying information about risks and crises. They will accept that some answers may have to come later, but they want the information as soon as it is available. This means authorities cannot wait until they have "all the facts" before speaking with the public or the media. And experts must use their skills to ensure they have communicated (not just released information) and that their messages have been understood. This is the bottom line of good risk communication. Authorities' credibility rests on the line, and, once lost, it is awfully hard to regain.

*Bryna Brennan*

Area Manager, PAHO Public Information

First Word

Perspectives in Health • Vol. 10, No. 2 • 2005

Perspectives in Health

Volume 10, Number 2

Published by the  
Pan American Health Organization (PAHO)

Mirta Roses Periago, Director

Bryna Brennan, Executive Editor  
Donna Eberwine, Editor  
Paula Andaló, Contributing Editor  
Gilles Collette, Art Director  
Wolfgang Guzmán, Designer  
Alex Winder, Production  
Armando Waak, Photographer

*Perspectives in Health* (ISSN 1020-5551) is published by the  
Pan American Health Organization (PAHO), the oldest  
continuing international public health agency in the world and  
Regional Office for the Americas of the  
World Health Organization (WHO).

Its headquarters is located at 525 Twenty-third Street, N.W.,  
Washington, D.C. 20037. Tel: (202) 974-3000

Fax: (202) 974-3663

Internet: <http://www.paho.org/>

© 2005 Pan American Health Organization

All rights reserved

Articles do not necessarily represent the official viewpoint of the Pan American  
Health Organization. Letters and editorial queries should be addressed to the editor.

Reprints: Articles reprinted with permission must carry the following credit line:  
"Reprinted from *Perspectives in Health*, the magazine of the Pan American Health  
Organization, published in English and Spanish." Reprints must carry author's  
name and two copies must be sent to *Perspectives in Health*.

POSTMASTER: Send address changes to *Perspectives in Health* magazine,  
Area of Public Information (PIN), Pan American Health Organization,  
525 Twenty-third Street, N.W., Washington, D.C. 20037.

## PAHO Member States

Antigua and Barbuda

Argentina

Bahamas

Barbados

Belize

Bolivia

Brazil

Canada

Chile

Colombia

Costa Rica

Cuba

Dominica

Dominican Republic

Ecuador

El Salvador

Grenada

Guatemala

Guyana

Haiti

Honduras

Jamaica

Mexico

Nicaragua

Panama

Paraguay

Peru

Saint Kitts and Nevis

Saint Lucia

Saint Vincent and the Grenadines

Suriname

Trinidad and Tobago

United States

Uruguay

Venezuela

## Participating States

France

The Netherlands

United Kingdom

## Associate Member

Puerto Rico

## Observer Countries

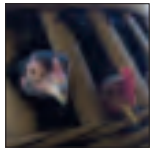
Portugal

Spain

## Features

### 2 **Bird Flu: Communicating the Risk**

by Peter M. Sandman and Jody Lanard



Many experts believe that avian influenza is a time bomb for human health. But how to deal with the many uncertainties surrounding the issue? Two leading risk communication experts give their best advice on sounding the alarm about what might be the next great flu pandemic—or not.

### 10 **The Man Who Made Polio History**

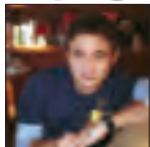
by Sara Francis Fujimura



This year marks the 50th anniversary of the first polio vaccine, the killed-virus version developed by U.S. virologist Jonas Salk. Others contributed equally to the world's battle against this crippling childhood disease. But few have been remembered as well or as fondly as the controversial Dr. Salk.

### 16 **All He Talks About Is Sex**

by Roxana Tabakman



Brazilians know him for his boyish looks, risqué humor, and lack of inhibition in talking about anything and everything having to do with sex. But Jairo Bouer has a serious mission: getting young people to think responsibly about the critical choices they'll have to make as they embark on their sexual careers.

### 20 **Mothers and Children: Make Them Count**

photos from Latin America and the Caribbean



The Americas have made great strides in improving maternal and child health in recent decades. But significant challenges remain. This year's World Health Day campaign points out that too many women and children still suffer deaths and illnesses that could be prevented using the knowledge and means that we already have.

### 28 **Kids' Sports for Life**

by Paula Andaló



Soccer and other sports provide a great way for kids to stay in shape, develop skills, and bond with fellow team members. Now experts in child and adolescent health are tapping into popular children's sports to help young players learn new ways of living a healthier life.

## Columns

**First Word**  
Risky business

32 **Last Word**  
The gift of blood



#### Front cover:

A man wearing a protective mask walks past a newsstand during an outbreak of SARS in Hong Kong in May 2003. The World Health Organization (WHO) warned that SARS could be a wake-up call for a potentially much more dangerous influenza pandemic.

Photo © Peter Parks/AFP/Getty Images





# Bird Flu: Communicating

*by Peter M. Sandman and Jody Lanard*

**Health authorities want to spread the word that avian influenza has brought the world perilously close to a new flu pandemic. But raising awareness about uncertain threats can itself be perilous. Two leading risk communication experts offer advice on how to sound the alarm.**



FAO photo

# the Risk

Public health officials have a pandemic-size communication problem. Experts believe a deadly influenza pandemic is quite likely to be launched by the H5N1 avian virus that has killed millions of birds and dozens of people in Asia. They are more anxious than they have been in decades. But infectious diseases are unpredictable. H5N1 could disappear—as swine flu did in 1976—and “The Great Pandemic of 2\_\_\_” could arise from a strain that doesn’t even exist yet. Even if H5N1 does cause a human pandemic, it might weaken and produce only mild disease. So it’s hard for officials to know how aggressively to sound the alarm. They don’t want to be accused of needlessly frightening the public. They also don’t want to be accused—later—of leaving the public underprepared for a disaster.

▲ Poultry await sale at a livestock market in Indonesia. More than 140 million birds have died or been destroyed in the Asian bird flu epidemic. Estimates of potential deaths from an eventual human pandemic range from 2 million to nearly 100 million.

Communication wouldn’t be such a problem if it were possible to get ready for the next pandemic without talking to the public. It isn’t. Health authorities want the public to be aware of this grave threat for three fundamental reasons: so people will prepare themselves emotionally and logistically; so people will help their schools, businesses, hospitals, and other organizations prepare; and so people will support the preparedness efforts of their governments. And there’s a fourth reason: If and when a pandemic begins, people who have had time to get used to the idea are likelier to understand their risks, follow official advice, and take an active role in protecting themselves.

---

**Officials don’t want to be accused of needlessly frightening the public. They also don’t want to be accused later of leaving the public underprepared for a disaster.**

---

Health authorities know that too soft a warning just won’t get heard; it’s not easy to pierce people’s apathy and squeeze yet another problem onto our already crowded lists of concerns. But they fear that too loud a warning could overshoot, provoking needless (or at least premature) fear and economic damage, perhaps even panic and an every-man-for-himself chaos. Authorities often miss the middle ground that can help build mutual trust: involving the public early, arousing an appropriate level of public fear, and helping people bear it.

Risk communication is a set of skills and understandings that can help health officials find and hold this middle ground. Our first paragraph above features several key risk communication approaches. It uses *responsible speculation*, it *acknowledges uncertainty*, it *shares dilemmas* about what to do, and it *does not aim for zero fear*. These and other risk communication



recommendations help build mutual trust, one of the overarching goals of the World Health Organization's (WHO) newly published outbreak communication guidelines. The threat of bird flu presents a timely—and urgent—case for looking at how risk communication works.

Before we introduce some of the fundamentals of risk communication, here is a primer on avian influenza—and why sounding the alarm isn't easy.

## Flu again? Who cares?

Influenza has long been the neglected child in the infectious disease family. Every winter, tens of millions of people get the flu. Most are home, sick and miserable, for about a week. Some—mostly the elderly—die. We know the worldwide death toll exceeds a few hundred thousand people a year, but even in developed countries the numbers are uncertain, because medical authorities don't usually verify who actually died of influenza and who died of a "flu-like illness." People think of the flu as a minor nuisance. Even a major controversy like last year's contamination of half the U.S. vaccine supply provokes only a temporary blip in flu anxiety. For a few weeks people stood in line to get vaccinated (and were inaccurately seen as panicking by many harassed officials). By January there was vaccine left over, rationing was abandoned, and the authorities were back to urging everyone to go get a shot, please!

**The factors that make a risk upsetting and the factors that make it dangerous are completely different. Actual mortality and morbidity often have little impact on how worried, frightened, or angry people are.**

When some other disease like SARS or West Nile virus captures the headlines, authorities and columnists contemptuous of the "hype" often compare the new disease to influenza. Whatever we're "overly" worried about kills fewer people every year than the flu, they tell us. We're not worried about the flu. So why worry about this other thing?

There are good risk communication answers to this question. Compared with flu, SARS and West Nile virus are unfamiliar; there is more reason to wonder if the experts really know what they're doing and if they're telling all they know. A fundamental risk communication truth is that the factors that make a risk upsetting and the factors that make it dangerous are completely different. Mortality and morbidity statistics determine the technical seriousness of the risk. But they often have little impact on how worried, frightened, or angry people are. Think of that as "cultural seriousness," determined by factors like these: Is the risk voluntary or coerced? Familiar or exotic? Controlled by the people at risk or by others? (See sidebar p. 6.)

The annual flu is a perfect paradigm of a risk that is serious technically but not so serious culturally—the sort of risk that kills people but doesn't much upset them. It is familiar rather than exotic, and anything but memorable (especially since it has been so long since the last pandemic).

PAHO

It isn't voluntary, but in developed countries getting vaccinated against it usually is. It is chronic rather than catastrophic, reappearing every year like clockwork. It's not especially dreaded. Except for striking too many old people, it is indiscriminately fair. And there aren't very many flu controversies in a typical year—no battles over control or fairness, no issues of morality or trust or responsiveness. It is very, very difficult to get people really worried about influenza.

## Not your ordinary flu!

In 1997, a child in Hong Kong died not of human flu but of bird flu, an avian influenza strain known to virologists as H5N1. Since then H5N1 has spread inexorably throughout Southeast Asia's bird population. It is a big problem for the poultry industry. So far it is only a small problem for human health. As of late June, around a hundred people were believed to have caught H5N1 directly from birds. A couple of people are thought to have caught it from other people. But more than half of the confirmed cases have died. And a high percentage of the dead were young and otherwise healthy.

Because H5N1 has never infected humans before, people have no natural immunity to it, and there is not yet an H5N1 vaccine developed and approved



▲ A Vietnamese mother cradles a portrait of her 4-year-old son who died of avian influenza in 2004. The family, from a village near Hanoi, had killed and eaten chickens that had the disease.

FAO photo

for human use. The only thing protecting us from H5N1 is that so far bird flu is a hard disease for people to catch. But influenza viruses keep changing. They mutate. And they exchange genetic material with other flu viruses, a process called reassortment. All that's needed to launch a human health crisis is a mutation or reassortment that produces a new variant of H5N1 that transmits easily between people the way "regular" flu does. If that happens, we face a worldwide epidemic: a pandemic.

Most virologists fear an H5N1 pandemic will happen sooner or later. Many fear it will happen soon. The unprecedented and almost inconceivable worst case is a human strain as deadly as the current hard-to-transmit H5N1 strain, but as easily transmitted as the annual flu. That could literally end life as we know it. Not so dire but still worse than any pandemic in living memory: a strain that transmits easily and kills, say, 5–10 percent of its victims. (The granddaddy of flu pandemics, the Spanish flu of 1918–19, killed about 2.5 percent.) Do the math. The world population is 6.4 billion. A pandemic that struck 30 percent of the population and killed 5 percent of those it struck would cause 96 million deaths. An H5N1 vaccine could cut this number sharply—if scientists can develop one that works, if governments can license it, and if manufacturers

can make enough of it. Those are big ifs, especially the last one; most of the world's poorer countries get virtually no vaccine against the annual flu now.

Even in the experts' best-case scenario—2–7 million deaths—a flu pandemic could slow travel to a trickle, lead cities to forbid inessential gatherings, and precipitate a worldwide depression. Preparing for it could include, among other things: national governments streamlining vaccine approval procedures; school boards deciding whether and how to close the schools for extended periods; businesses planning for the twin problems of absenteeism and presenteeism (sick people bringing the virus to work with them); hospitals stockpiling antiviral medications and personal protective equipment for staff; communities figuring out how to recruit and use volunteers to keep essential services running—including the all-important survivors of the first pandemic wave, who will be the only ones immune before a vaccine becomes available.

All of this information is publicly available. Most people have already heard a little about bird flu. But people face a host of other problems, and except for public health officials and poultry farmers, few are gearing up for action about H5N1. Yet.

Enter risk communication. Although people have always tried to figure out

how to communicate about risks, the field of risk communication dates back only to the 1980s, evolving from health education, public relations, psychology, risk perception, and risk assessment. There are at least three kinds of risk communication:

- Precaution advocacy ("Watch out!"): How to alert people to serious hazards when they are unduly apathetic.
- Outrage management ("Calm down!"): How to reassure people about minor hazards when they are unduly upset.
- Crisis communication ("We'll get through it together!"): How to guide people through serious hazards when they are appropriately upset (or even in denial).

Bird flu risk communication is partly precaution advocacy and partly crisis communication. It's precaution advocacy if you're talking to Southeast Asian poultry farmers who haven't heard much yet about bird flu. It's crisis communication if you're talking to poultry farmers who are trying to figure out how to cope with this huge new threat to their flocks, their livelihoods, and potentially their lives. It will be crisis communication everywhere if and when the pandemic materializes.

Meanwhile, for most of us, it's precaution advocacy. Many infectious disease experts are as worried about H5N1 as they have ever been about any microorganism. They feel weirdly alienated when they try to explain their worry to spouses or friends—or the general public. They have convinced a few medical journalists, who then feel weirdly alienated when they try to explain their worry to their editors. Bird flu is way over there in Asia. H5N1 is still flu, and flu is still the sort of risk people don't take all that seriously.

The recommendations listed below are grounded in two convictions: that motivating people to start taking bird flu seriously should be a top priority for government health departments, and that risk communication principles provide the best guidance on how to do so. The world's governments will inevitably vary in the extent to which they agree. How aggressively will these recommendations be followed? How well will they work? Nobody knows yet.



FAO photo

▲ A lab technician at Indonesia's Disease Investigation Centre checks for the avian flu virus in samples taken from poultry.



# A human transmission probable

## Risk = Hazard + Outrage

**If you make a list** of risks in order of how many people they kill each year, then list them in order of how upsetting they are to the general public, the two lists will be very different. There are risks that kill a lot of people without upsetting many—not just flu but food poisoning, smoking, overeating, not exercising, etc. And there are risks that upset a lot of people without killing very many.

Both problems frustrate risk experts and make them irritated with the public for being afraid of the “wrong risks.” Risk communication experts can’t completely cure this mismatch, but we can help the experts understand why the public so often seems to get it “wrong.”

The core problem is definition. To the experts, risk means expected annual mortality (or morbidity). To the public, risk means much more than that. Let’s redefine terms: Call the death rate (what the experts mean by risk) “hazard.” Gather together all the other factors that make people frightened, angry, or otherwise upset about a risk and label them, collectively, “outrage.” Risk = Hazard + Outrage. The public pays too little attention to hazard; the experts pay absolutely no attention to outrage. Not surprisingly, the two groups rank risks differently.

Risk perception scholars have identified more than 20 “outrage factors.” Here are some of the main ones:

### Voluntariness

A voluntary risk is much more acceptable to people than a coerced risk, because it generates no outrage. Consider the difference between getting pushed down a mountain on slippery sticks and deciding to go skiing.

### Control

Almost everybody feels safer driving than riding in the passenger seat. When prevention and mitigation are in the individual’s hands, the risk (though not the hazard) is much lower than when they are in the hands of a government agency.

### Fairness

People who must endure greater risks than their neighbors, without access to greater benefits, are naturally outraged—especially if the differences are grounded in politics, poverty, or race. An unfair risk is a big risk. The same is true of countries that are forced to endure risks that other countries don’t have to bear.

### Trust

In a high-tech world, people often doubt their own ability to distinguish dangerous risks from insignificant ones. But we feel confident that we can tell trustworthy sources from those who distort or withhold information. So we use trust, credibility, and candor as stand-ins for hazard. Why “buy” a risk assessment from someone you wouldn’t buy a used car from?

### Responsiveness

Does the corporation or government agency that imposes the risk or tells you it’s trivial seem concerned, or arrogant? Does it tell the community what’s going on before decisions are made? Does it listen and respond to community concerns?

### Morality

Some risks aren’t just harmful; they’re evil—and they remain evil even when they’re not especially harmful. Talking about risk-benefit or risk-cost tradeoffs sounds very callous when the risk is morally relevant. Imagine a police chief insisting that an occasional child molester is an “acceptable risk.”

### Familiarity

Exotic, high-tech facilities provoke more outrage than familiar risks (your home, your car, your pot belly, the annual winter flu season).

### Memorability

A memorable accident (Bhopal or Chernobyl, for example) can make some risks easy to imagine for decades—and that in turn makes those particular risks a bigger source of outrage and thus more risky as we have defined the term. A potent symbol can do the same thing: a drum of some chemical or, better yet, a leaking drum of chemical wastes.

### Dread

Some illnesses are more dreaded than others; compare AIDS and cancer with, say, emphysema. The long latency of most cancers and the undetectability of most carcinogens add to the dread.

### Diffusion in time and space

Hazard A kills 50 anonymous people a year across the country. Hazard B has one chance in 10 of wiping out a neighborhood of 5,000 people sometime in the next decade. Risk assessment tells us the two have the same expected annual mortality: 50. “Outrage assessment” tells us A is probably acceptable and B is certainly not. Catastrophic risks provoke a level of outrage that chronic risks just can’t arouse.

These outrage factors are not distortions in the public’s perception of risk; they are intrinsic parts of what we mean by risk. Since the public responds more to outrage than to hazard, risk managers must try to get people more outraged about serious hazards by appealing to outrage factors like the ones listed. Successful campaigns against drunk driving and passive smoking are two of many examples of raising public concern about serious hazards by feeding the outrage. Similarly, to decrease public concern about modest hazards, risk managers must work to diminish the outrage. When people are treated with honesty and respect for their right to make their own decisions, they are a lot less likely to overestimate small hazards.

There is a peculiar paradox here. Risk experts often resist the pressure to consider outrage when making risk management decisions, or even risk communication decisions. They disparage the “irrational” public and insist that “sound science” should wholly determine what they do and what they say. But we have decades of sound science indicating that voluntariness, control, fairness, and the rest are important components of people’s definition of risk. When a risk manager continues to ignore these factors—and continues to be surprised by the public’s response—it is worth asking just whose behavior is irrational.



## 1. Start where your audience starts

Telling people who believe X that they ought to believe Y naturally provokes resistance. You can't ignore X and just say Y-Y-Y-Y-Y. You can't simply tell people they're wrong. You've got to start where they are, with X, and empathetically explain why X seems logical, why it's widely believed, why you used to believe it too ... and why, surprisingly, Y turns out to be closer to the truth.

The biggest barrier to sounding the alarm about bird flu is that it's flu—usually seen as a ho-hum disease. It would help if people stopped calling every minor respiratory infection “a touch of the flu,” but that's not going to happen. Empathy is the only answer. Instead of ignoring the fact that people think flu is minor, or berating people for thinking that flu is minor, acknowledge that even some public health authorities use the term “flu” in ways that minimize its seriousness. (A senior U.S. health official recently apologized for his wife's absence at an event by saying she was home with “a stomach flu”—a misnomer.) After making common cause with the public—“we have all ignored influenza for too long”—talk about how horrific the next flu pandemic may be compared with the annual flu.

## 2. Don't be afraid to frighten people

Fear appeals have had a bad press, but the research evidence that they work is overwhelming. Although people don't usually stay very frightened very long, get-

**Overconfident overreassurance is terrible risk communication. Paradoxically, people usually find it alarming.**

ting them a little frightened for a little while motivates precautionary thinking and precautionary action (assuming some precautions are available).

There is one key exception. When people are already terrified, scaring them even more can push them into denial. For example, women sometimes avoid breast self-examination, not because breast cancer scares them too little but because it scares them too much. In places where bird flu is endemic, magical thinking and denial are already a problem. “I am not afraid of bird flu.... I would have been the first who died when the disease struck last year. But look, I am still healthy,” a Thai chicken butcher from Roi Et province told the *Bangkok Post* in February 2005. The *Post* noted that the butcher wore “no protective gear except nylon gloves.” For most of the world right now, though, apathy is the problem—not denial. We can't scare people enough about H5N1. WHO has been trying for over a year, with ever-more-dramatic appeals to the media, the public, and Member States. Until a pandemic begins, there's little chance we'll scare people too much.

Research evidence won't protect you from criticism, of course. Fear appeals often provoke angry pushback from people questioning your motives or your competence, accusing you of “crying wolf” or provoking “warning fatigue” or panicking the public. That happened after WHO Western Pacific Regional Director Shigeru Omi said that, in a worst case, a bird flu pandemic could kill up to 100 million people (a well-justi-

fied estimate). Of course, there is a genuine downside to issuing warnings that turn out to be unnecessary. Although panic is unlikely and warning fatigue is temporary, there is some credibility loss, especially if the warnings were exaggerated or overconfident. But consider the alternative. Which is worse, being criticized for “unduly” frightening people or being criticized for failing to warn people?

## 3. Acknowledge uncertainty

When the first Thai bird flu outbreaks subsided in 2004, a senior public official said: “The first wave of bird flu outbreak has passed ... but we don't know when the second wave will come, and we don't trust the situation.... So the Public Health Ministry is being as careful as possible.” This exemplifies two risk communication principles: acknowledge uncertainty and don't overreassure. (Thailand was initially too reassuring about bird flu, but not in this example.) During Malaysia's first outbreak, tests were pending regarding what strain of flu was killing the chickens. Senior veterinary official Hawari Hussein said, “We know it is H5, but we're hoping it won't be H5N1.” This very brief comment not only acknowledges uncertainty; it also expresses wishes, another good crisis communication practice. Everyone shared Hussein's hope, but feared the worst.



▲ Shigeru Omi, regional director for WHO's Western Pacific Region, and spokesman Peter Cordingley brief reporters during a regional health ministers' conference on avian influenza in Bangkok, Thailand, in 2004.

Overconfident overreassurance (“the situation is under control, everything is going to be fine”) is terrible risk communication. Paradoxically, people usually find it alarming. They sense its insincerity and become mistrustful even before they know the outcome. But overconfident warnings are also unwise. There is so much we don’t know about H5N1. Will it ever achieve efficient human-to-human transmission and ignite a pandemic? If that happens, will it become less lethal in the process, or perhaps not lethal at all? How many people will it infect? How quickly will it spread? How long will it last? How much antiviral medication will be available in different parts of the world, and how well will

#### 4. Share dilemmas

Sharing dilemmas is a lot like acknowledging uncertainty. Not only are we unsure about what will happen; we’re also unsure about what to do. Everyone finds this hard to admit. But dilemma-sharing has huge advantages:

- It humanizes the organization by letting the pain of difficult decisions show.
- It gives people a chance to make suggestions and be part of the process.
- It moderates the conflict between opposing recommendations.
- It reduces the outrage if you turn out to be wrong.

Officials who make difficult, debatable

exists), that may save millions of lives if a pandemic materializes. But a vaccine is no magic solution. We probably can’t make and distribute enough vaccine for most of the world. And what if there is no pandemic? Or what if the virus mutates or drifts a lot, and the vaccine proves minimally useful? Is this really a good use of scarce health dollars, especially in developing countries? Maybe we should stockpile antiviral drugs. But they’re expensive, and who knows how well they will work against the actual pandemic strain that arises? The worst response to the stockpiling dilemma is also the most tempting: Stockpile only a little vaccine and some antivirals and imply that you have enough. Some officials are already engaging in this



### Governments face a host of policy dilemmas both before and during an outbreak. Good risk communication means sharing those dilemmas and letting the public help you decide.

it work? How long will it take for an effective vaccine to be available? Which countries and which people in those countries will get the vaccine first? How well will health care systems cope? How well will national and international economies cope? And how well will civil society cope?

Bird flu experts and risk communicators cannot answer these questions. But we can and should raise them, acknowledging our uncertainty at every turn.

▲ Technicians at Thailand’s National Institute for Animal Health check poultry samples for avian flu virus.

decisions look easy and obvious are colluding with people’s passive desire to be taken care of by an all-knowing government. They then feel entitled to blame the government if things go badly. Dilemma-sharing does raise some anxiety at first, but it allies with the public’s resilient, resourceful, mature side. This leads to better buy-in and better coping down the road.

The most important bird flu dilemma at the moment is stockpiling. If we stockpile H5 antigen or an H5N1 vaccine (once it

kind of overreassurance. The risk communication answer: Share the dilemma and let the public help you decide.

#### 5. Give people things to do

One reason sometimes given for not alarming the public is that there’s nothing for people to do anyway. A Jan. 13, 2005, *Wall Street Journal* article quoted Canadian infectious disease expert Richard Schabas as saying: “Scaring peo-

▲ Workers burn chicken carcasses at a farm near Ho Chi Minh City, Vietnam.



ple about avian influenza accomplishes nothing, because we're not asking people to do anything about it." But the error isn't scaring people. The error is failing to realize—and say—how much they can do to prepare.

Helping resolve government policy dilemmas is just the beginning. Thailand, for example, has trained almost a million volunteers to reach out to every village in the country to inform people about the risks and signs of bird flu and how to try to protect themselves and their flocks. Many companies, hospitals, schools, and local governments around the world are starting to plan for "business continuity" in the event of a pandemic. Even cognitive and emotional rehearsal—learning about H5N1 and thinking about what a pandemic might be like and how you'd cope—is a kind of preparedness and a kind of involvement. The WHO outbreak guidelines say: "If possible, representatives of the public should be brought into the decision-making process.... Risk communication messages should include information about what the public can do to make themselves safer."

Here are some other recommendations in brief:

## 6. Be willing to speculate—responsibly

Warnings are intrinsically speculations. Like hurricane forecasters, we have to offer both worst-case scenarios and likelier scenarios, always acknowledging that we may turn out to be wrong.

## 7. Don't get caught in the numbers game

Battles over how many people an H5N1 pandemic might kill are pointless. What matters is that flu pandemics are horrific, and for the first time ever we can see one coming and start getting ready.

## 8. Stress magnitude more than probability

The rationale for H5N1 pandemic preparedness isn't that we're sure it's coming, but how bad it could get. Overconfidence about risk probability is a mistake. Dramatic warnings about risk magnitude are more justified. (There are times when it's best to stress probability. But the un-

certain prospect of a catastrophe should be about magnitude.)

## 9. Guide the adjustment reaction

Once people get past their apathy and start taking a new risk seriously, the normal response is an "adjustment reaction"—a temporary fearfulness, sometimes accompanied by misplaced or excessive caution. This is the teachable moment. Don't ignore it or ridicule it; guide it. Then we settle into the "new normal."

## 10. Inform the public early and aim for total candor and transparency

These are two of the hardest risk communication recommendations for governments to adopt. There are so many barriers—fear of damaging the economy, looking incompetent, turning out to be wrong, causing undue alarm. But the price of informing the public late, of covering up or minimizing the problem, is high:

diminished credibility, just when you need it most to help your people through an influenza pandemic.

Most of these recommendations are counterintuitive. That's the toughest thing about risk communication: it contradicts what comes naturally to most authorities, especially when they're under pressure. And risk communication is itself an uncertain field. We think it improves the odds of a good outcome, but we can't guarantee a good outcome every time. Health authorities face tough choices as they plan how to talk to people about a possible flu pandemic, and one of those choices is: how much to let risk communication guide their choices.

---

*Peter M. Sandman, Ph.D., and Jody Lanard, M.D., are risk communication consultants based in Princeton, N.J., USA. See [www.psandman.com](http://www.psandman.com).*

---



## Web Course on Risk Communication

**An interactive, self-taught course** on risk communication is available at the website of the Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS), one of 10 scientific and technical centers of the Pan American Health Organization (PAHO). The course covers the theory and methodology of risk communication and discusses strategies and effective interventions for target populations. It was developed by PAHO and the U.S. Agency for Toxic Substances and Disease Registry (ATSDR) with support from the U.S. Centers for Disease Control and Prevention (CDC). Students who finish the course successfully receive a certificate of completion. The course is available in English, Spanish, and Portuguese at [www.cepis.ops-oms.org/tutorial6](http://www.cepis.ops-oms.org/tutorial6).

# The Man Who Made **POLIO HISTORY**



*by Sara Francis Fujimura*

**Fifty years ago, Jonas Salk announced he had developed a safe and effective vaccine against the most dreaded childhood disease of the 20th century. Others may deserve as much credit for their roles in the conquest of polio, but no one will be remembered more fondly than Salk for the hope he gave to parents and children around the world.**

[www.paho.org](http://www.paho.org)



**I**ron lungs. Leg braces. Isolation wards. For anyone 50 or older, these words can bring back flashes of dread. Younger generations—with more than a dozen immunizations under their belts—can't remember the years when polio epidemics were a terrifying annual event. Parents throughout the Western Hemisphere no longer have to fear an infection that could start like a summer cold but end with their child dead or paralyzed for life. Most are unaware that, half a world away, polio still ravages children in Africa and southern Asia.

Poliomyelitis, known popularly as polio, is a highly infectious viral disease transmitted through fecal-oral routes, often through contaminated food or water. Though polio can strike anyone at any age, children are especially at risk. The virus primarily infects the intestines, without causing serious illness, but sometimes it attacks nerve cells of the central nervous system. Symptoms vary from mild, temporary paralysis to extensive paralysis resulting in permanent quadriplegia. In its most severe form, bulbar polio, the virus attacks the brain stem, destroying the motor neurons that tell the body how to swallow, speak, and breathe. Without respiratory support, a patient with this type of polio usually dies.

In her book *Patenting the Sun: Polio and the Salk Vaccine*, Jane Smith recalls a chilling scene from polio's tragic past:

It struck lightly at first—a summer cold, a headache, a mild fever that was scarcely more than the flush of playing outdoors on a steamy day. Then suddenly there was the faint crash of a small body falling, the cry of terror. “Mama, I can't move!” “My head, Pa, I can't lift my head!” There was the scream of pain as the little arms and legs twisted inward on themselves, or the most fearful sound of all, the choking rasp that came when the lungs forgot how to pump and the throat how to swallow, when before your eyes the baby grew still and blue and cold.

Parents watched helplessly as yesterday's healthy child was rushed to the hospital and encased in a claustrophobic iron lung. Mothers and fathers could only pray that their child's body would recover and remember how to breathe again. Little legs that used to climb trees and play

hopsotch became twisted and atrophied, requiring the use of heavy metal braces, crutches, or wheelchairs for mobility.

No wonder older generations shiver at these memories.

There is still no cure for polio. But it can be prevented. This year marks the 50th anniversary of Jonas Salk's injectable killed-virus polio vaccine (IPV). Along with Albert Sabin's later oral live-virus version, the Salk vaccine made it possible to conquer this dreaded disease in every country of the Americas (see sidebar p. 15). Today, children and parents around the world rest easier for Salk's and Sabin's achievements.

The first known scientific description of polio was recorded in 1789 by British physician Michael Underwood. He reported a strange disease that seemed to target children, leaving them with residual paralysis. Polio continued to resurface in pockets each year, but it wasn't until the early 20th century that the number of paralytic cases reached epidemic proportions.

Few people who were alive at the time can forget what happened in the years from 1938 to 1955. U.S. President Franklin D. Roosevelt—himself a polio survivor—rallied his country to a war on polio. With the creation of the National Foundation for Infantile Paralysis (now the March of Dimes) in 1938, a massive fundraising effort began to support care for polio patients and research by top scientists on virology, immunology, and

epidemiology. The cause became more urgent in the years after World War II, as polio epidemics worsened: At their peak in 1952, the United States reported some 58,000 polio cases.

Then, on April 12, 1955—10 years to the day after Roosevelt's death—the March of Dimes announced that the Salk vaccine was both safe and effective.

Success quickly followed: In 1957, the first year the vaccine was widely available, the number of U.S. polio cases dropped to 5,000. By 1960, annual polio cases were down to 3,000. The last case of wild polio in the United States was recorded in 1979; in Latin America, in 1991. By 1994—after a generation of polio immunizations—the Americas as a region was declared polio-free.

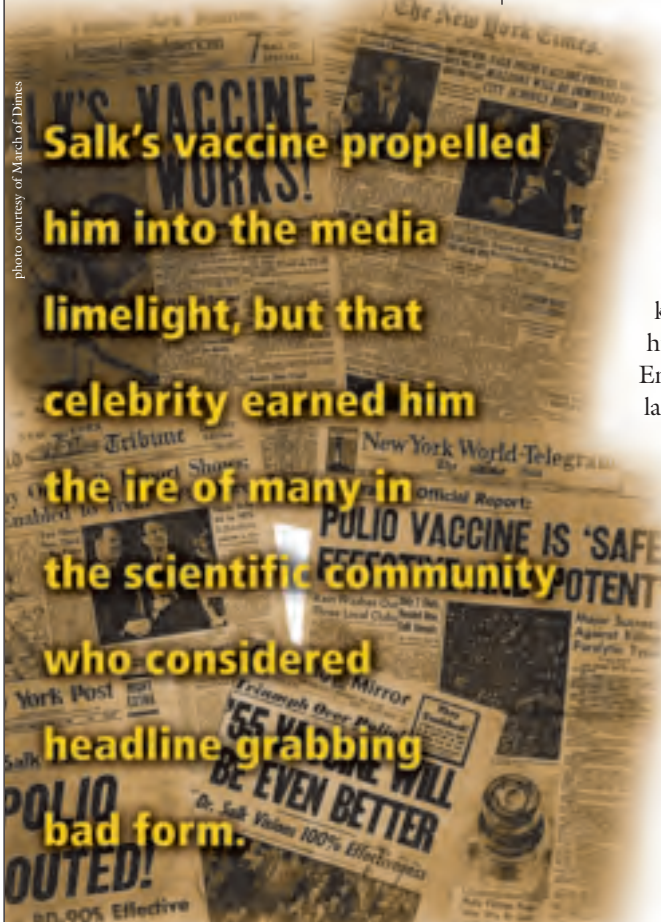
Doctors and parents around the world this year are paying tribute to Jonas Salk and his polio vaccine. But how much credit really belongs to Salk?

## The great race

Some argue that John Enders of Harvard University deserves much of the glory, and in fact he and colleagues Thomas Weller and Frederick Robbins eventually won the Nobel Prize for their research associated with polio. Their groundbreaking work made it possible to grow poliovirus in laboratory cell cultures, setting the stage for subsequent polio vaccine development.

The work of Julius Youngner, a member of Salk's team at the University of Pittsburgh, also was crucial. Youngner developed a method known as trypsinization that allowed poliovirus to be grown in tissue from monkey kidneys rather than in the human fetal cells used by Enders. This set the stage for large-scale production of virus and vaccine.

Salk himself entered the polio picture as a virologist at the University of Pittsburgh Medical School, where he originally specialized in influenza. Salk's initial





**At its peak in 1952, polio caused some 58,000 cases in the United States. By 1960—five years after the Salk vaccine became available—the number was down to 3,000.**

involvement was in typing the poliovirus, as a way to earn money to expand his lab.

Bankrolled and encouraged by the March of Dimes, Salk progressed rapidly in his research toward a killed-virus vaccine, and by the summer of 1954, he was ready to test an experimental version nationwide. Over the objections of critics including Enders and vaccine rival Albert Sabin, Salk and the March of Dimes launched what was then the largest field trial ever at-

tempted. Its subjects were the “Polio Pioneers,” nearly 2 million children (including Salk’s own three sons) whose parents volunteered them to participate in the trials. Salk’s mentor, the eminent University of Michigan epidemiologist Thomas Francis, Jr., oversaw the effort, earning his own honored place in polio history. It was Francis who announced on April 12, 1955, “The vaccine works. It is safe, effective and potent.”

Following that historic day, the Salk vaccine quickly became part of the pediatrician’s arsenal against childhood diseases. More than 450 million doses were administered in the vaccine’s first four years. Promoted by the March of Dimes, Salk became an overnight celebrity, with appearances in national magazines such as *Life* and *Time* and on radio and television shows. But his celebrity earned Salk the ire of his fellow researchers, most notably



Sabin. Headline grabbing, in those less media-dominated times, was considered bad form in the scientific community.

In 1960, Sabin announced his successful development of a new oral polio vaccine (OPV). Like many traditional vaccines, it used a weakened form of the virus to establish a harmless infection in patients, thus providing immunity to any future exposures. Dropped onto sugar cubes or mixed into a sweet syrup, Sabin's vaccine was swallowed rather than injected. Soon after its introduction in 1962, the United States—and indeed, most national immunization programs—adopted the oral vaccine. In the meantime, the Salk vaccine had saved more than 35,000 people from death or disability, according to 1958 estimates of the U.S. Public Health Service.

The debate over which of the two vaccines is better has continued since their introduction and is still not fully resolved. Today, both vaccines are in wide use, and both have played important roles in the global fight against polio.

## A global goal

At its peak, polio paralyzed or killed up to 500,000 people worldwide every year. Today, children from developed nations are more likely to be struck by lightning than to contract polio. But in a handful of developing nations, the combination of poverty, overcrowding, and poor sanitation continues to provide a fertile breeding ground for polioviruses. Malnourished, impoverished children with limited access to basic health care are the most at risk.

In 1985, the Pan American Health Organization (PAHO) launched an initiative to eradicate polio from the Western Hemisphere by the year 2000. Three years later, the World Health Organization (WHO) decided to build a global effort on the PAHO model. Together with Rotary International, UNICEF, and the U.S. Centers for Disease Control and Prevention, WHO launched the Global Polio Eradication Initiative, with the goal of certifying the world polio-free by the year 2000. The effort came close. After the Americas were certified polio-free in 1994, the Western Pacific region followed in 2000, and Europe in 2002.

Despite setbacks to these efforts in the last two years (during which the virus has reappeared in 16 countries that were previously polio-free), polio is well on its way to becoming only the second disease, after smallpox, to achieve global eradication. Cases have plummeted by 99 percent (from 350,000 in 1988 to 784 in 2003). Polio, once feared around the world, is now endemic in only six countries—Afghanistan, Egypt, India, Niger, Nigeria, and Pakistan.

Supporters credit this success to the global campaign of immunizing every child with Sabin's oral polio vaccine. Endemic countries have hosted National Immunization Days (NIDs) to reach their goal. During these three- to four-day events, volunteers load up plastic or Styrofoam "cold boxes" to preserve the vaccine, and travel by car, boat, motorcycle, and foot with the goal of vaccinating every child under 5, no matter how remote the location. They have been largely successful. Over the last 15 years, UNICEF has provided enough OPV to vaccinate more than 2 billion children. Last year alone, India boasted that 165 million of its children were vaccinated in just three days.

Though Salk's IPV is today the recommended vaccine in the United States, it is Sabin's OPV that has been the vaccine of choice during mass campaigns in other countries. It has several advantages:

- Because it is given orally, OPV doesn't require sterile injection equipment or a trained health care worker to administer it.
- It is relatively inexpensive, about 8 U.S. cents per dose.
- It can create "passive immunization" in areas of poor sanitation and hygiene when others come in contact with the feces of recently immunized children.

In its favor, the killed-virus Salk vaccine cannot cause polio, while the live-virus Sabin vaccine can, though it only very

rarely does (usually in people with compromised immune systems).

What has kept polio eradication from succeeding at the global level?

Funding is a major issue, especially continuous funding. More than \$3 billion has been spent since 1988 on polio eradication, but the Global Polio Eradication Initiative estimates that an additional \$200 million is needed for 2006 operations.



photo courtesy of March of Dimes

"Two or three years back, because of lack of funds, NIDs were discontinued in most African countries that apparently had interrupted transmission," says Ciro de Quadros, director of international programs at the Sabin Vaccine Institute. "However, transmission was still going on in some countries, such as Nigeria. Therefore, when cases from Nigeria were exported to neighboring countries, transmission was again reestablished in those countries."

Civil unrest also has undermined the efforts. In 1995, ceasefires were negotiated

in Afghanistan so that more children could be immunized during an NID. In 2001, conflict-ridden central African countries, including Angola and the Democratic Republic of the Congo, pulled together to vaccinate more than 16 million of their children.

### Taken for granted?

Thanks to immunization, two to three generations of children in the developed world have not had to contend with polio and other serious childhood diseases such as

to vaccinate their children are really relying on the herd effect of general vaccination for protection.”

This is a deadly gamble. With global travel and trade becoming more prevalent and affordable, could polio—and perhaps other highly transmittable childhood diseases—return to the Americas?

De Quadros thinks it could. “Polio is still endemic in parts of Africa and Asia,” he says. “Therefore, the countries of the Americas have to maintain very high levels of vaccination coverage and surveillance.”

Smith agrees, pointing to Africa as an example. “The rise in polio cases in Africa and other areas where many parents refused vaccination—after almost total eradication—suggests what can happen if larger numbers of

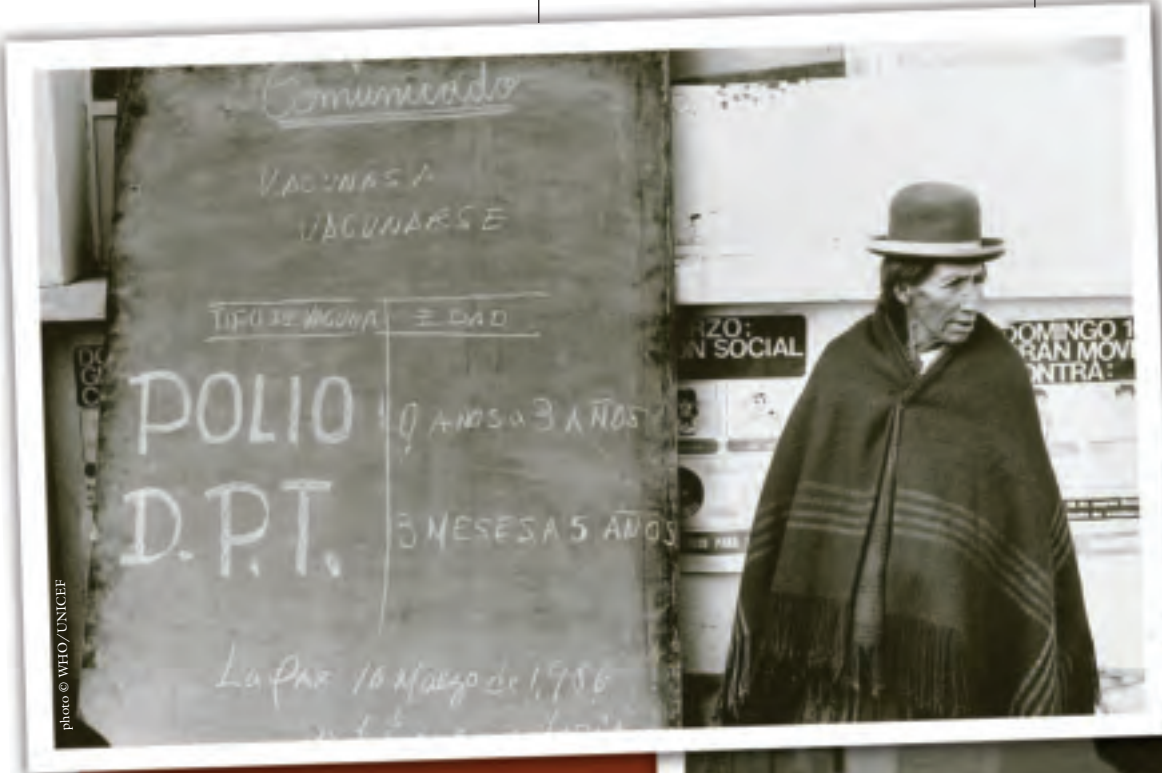


photo © WHO/UNICEF

photo © Armando Waak/PAHO

**The last case of polio in the Americas was reported in Peru in 1991. In 1994, the disease was declared eradicated from the Western Hemisphere.**



In August 2003, rumors that the vaccine caused sterility in girls caused a number of northern states in Nigeria, especially Kano, to suspend immunization efforts. The area subsequently saw a dramatic rise in polio rates in the already endemic country. Worse, 12 neighboring polio-free countries—including Botswana, Chad, and Sudan—were reinfected. In July 2004, immunization programs resumed, but the polio outbreak spread to Yemen, causing 22 cases there. And as recently as May and June 2005, a poliovirus traced genetically to Nigeria infected at least 20 children in Indonesia.

measles, whooping cough, and diphtheria. Perhaps for that reason, many of their parents take vaccine-protected health for granted. More worrisome is a small but significant backlash against routine immunization.

“Lack of experience with epidemic disease has led some people to fear the relatively small risks of vaccines more than the larger ones of resurgent epidemics,” says author Jane Smith. “Families who decline

children are not vaccinated.”

The 50th anniversary of the Salk vaccine is a timely reminder of a past to which no parent or child could want to return.

*Sara Francis Fujimura is a freelance writer who lives in Gilbert, Arizona, USA.*



## A Pan American success

After Jonas Salk and Albert Sabin, few individuals deserve more credit for polio eradication in the Americas than Ciro de Quadros, the Brazilian epidemiologist who headed the Pan American Health Organization's immunization program from 1977 to 2002. After playing a key role in the global campaign to eradicate smallpox, de Quadros took on the polio challenge in the face of what many others saw as insurmountable obstacles.

Fresh out of medical school in the late 1960s, de Quadros accepted a position as chief medical officer at a health center in a small town in the Amazon region of his native Brazil. Armed with Sabin's oral polio vaccine as well as the DPT (diphtheria, pertussis, and tetanus) vaccine, BCG to fight tuberculosis, and tetanus booster shots, he set out with his tiny staff to bring immunization levels up to 100 percent in the area served by his health center. It was an ambitious goal; at the time, immunization rates in many parts of Brazil were less than 10 percent.

A meticulous record keeper, de Quadros kept track of all the families in his assigned area. He would send out a staff member to locate any child who missed a scheduled immunization appointment. In time, the efforts paid off; by 1989, polio had been wiped out in Brazil.

By 1981, de Quadros had set himself the goal of eradicating polio from throughout the Americas. While respected colleagues insisted it couldn't be done, he disagreed, pointing to promising data from two weekends of National Immunization Days, or NIDs, held in Brazil starting in 1980.

"On each of those weekends, about 20 million children under 5 years of age received a dose of oral polio vaccine regardless of previous vaccination status," de Quadros wrote in the 1997 book *Polio*. "Cases of polio dropped dramatically from an average of over 100–200 cases per month to fewer than 20."

Mustering support was not easy. WHO's director general, Halfdan Mahler, at first strenuously opposed de Quadros' global eradication plan, decrying it as a vertical program that detracted from efforts to expand primary health care. Many others were simply skeptical.

"Political and social will was often a problem," de Quadros recalls today. Moreover, "disease surveillance was virtually nonexistent in many of the region's countries."

At first, the project lacked financial resources, and several of the target areas were struggling with civil unrest. It was Albert Sabin himself who came to the rescue.

"Rotary International was planning its centennial in 2005 and was looking for a global target that could be achieved by that date," says de Quadros. "Sabin approached them with the idea that it could be the global eradication of polio."



**Lessons learned from polio eradication in the Americas have been applied to other public health efforts around the world.**

With that, Rotary International committed to raise \$120 million in five years to purchase vaccines for the eradication effort. De Quadros' plan was finally rolling. The goal of eradicating polio from the Americas was announced by then PAHO Director Carlyle Guerra de Macedo at a May 14, 1985, press conference in Washington, D.C., with Sabin and Salk both present. UNICEF, the Inter-American Development Bank, and the U.S. Agency for International Development also committed millions of dollars.

Citing the success of NIDs in Cuba and Brazil, de Quadros and his supporters agreed that NIDs were the best way to reach the most people. They also suggested that the countries offer other routine health care services at the same time to increase participation.

In some countries, civil unrest threatened to undermine the efforts. Immunization workers feared for their lives in El Salvador and in Peru. De Quadros called on UNICEF, the Red Cross, and even the Catholic Church to intervene. He also took the bold

step of appealing directly to the warring parties. The result in El Salvador was an agreement to hold "days of tranquility" so that NIDs could go on as scheduled.

"We organized three days of tranquility each year, and we vaccinated nearly every child in El Salvador," says de Quadros. "We had to negotiate with both government and guerrilla forces, and that was only possible because the goal of vaccinating children was such a noble cause."

In Peru, negotiating with the ruthless Shining Path guerrilla movement proved unsuccessful. Undeterred, de Quadros and his cadres organized a series of mop-up campaigns to help limit poliovirus transmission to just a few areas. They also engaged the media, using press conferences to appeal to everyone—including the guerrillas—to cooperate with the vaccination efforts. A few months later, when key guerrilla leaders were captured by government forces, de Quadros' team recognized several as having directly assisted the mop-up campaign.

By 1991, Peru had reported the last confirmed case of wild polio, and in 1994, an international commission officially declared the disease eradicated from

the Americas region. In 1988, the World Health Assembly announced the goal of global polio eradication by the year 2000. The target date was later changed to 2008, and despite a number of recent setbacks, global polio eradication is considered achievable within the next few years.

Lessons learned from polio eradication in the Americas have been applied to other public health efforts around the world. For example, Mahler's model of piggybacking primary health care onto specific immunization efforts is still being emulated. In Africa, where HIV, measles, and meningitis are more of a daily threat than polio, workers have offered meningitis and measles shots along with the polio vaccine to help attract more people. The notion of "health as a bridge for peace" has been used in countries including Lebanon and Afghanistan.

Says de Quadros: "If we apply the lessons learned from this experience to other public health initiatives we will have a healthier world as a legacy to our children."

**Jairo Bouer has made a career of talking publicly about what people do in their most private moments. His penchant for sex talk has made him a media star and won him a loyal following. But behind his sex-guru image is a more serious agenda: trying to prevent unwanted pregnancies, sexually transmitted diseases, and drug and alcohol abuse among Brazilian youths.**





# All He Talks About Is SEX

by Roxana Tabakman

**O**n a given morning, you might find him in one of São Paulo's *favelas*, a poor urban neighborhood where children play barefoot on unpaved streets around open sewers. In the afternoon, he might show up at an exclusive private club, where uniformed babysitters and dark-skinned drivers cater to a mostly white clientele. But no matter where he is, he always talks about the same thing: sex, sex, and more sex.

Thirty-nine-year-old psychiatrist Jairo Bouer talks about sex with everybody. He tells jokes, makes puns, and calls things by their real names—the ones used by everyday people, not academics. He's especially good at making teenagers laugh. But he does more for Brazil than spread laughter. For Bouer, humor is a tool in his daily work of helping to prevent unwanted pregnancies, sexually transmitted diseases, and drug and alcohol abuse, particularly among Brazil's young.

A psychiatry graduate from the University of São Paulo, one of Brazil's most prestigious universities, Bouer turned to sex—professionally speaking—toward the end of his residency, when he joined a newly formed academic group

"One of a physician's main duties is to provide information. If you can do that on a large scale, you're doing more to promote prevention."

known as the Sexuality Project, or Prosex. About the same time, he launched his journalistic career by taking over the health page of one of Brazil's largest daily newspapers, *Folha de São Paulo*.

His first article wasn't about sex, nor was it aimed at adolescents; it was about diseases pets can transmit to their owners. Six months later he began writing a health column for the paper's youth supplement, a move that put him on the road to becoming the teen idol he is today. "That's where I started reading kids' questions—all of them handwritten; this was before e-mail—and answering them in my newspaper column," he recalls.

Bouer soon began turning his attention to HIV/AIDS, and he attended each of the World AIDS Conferences, starting with the 1996 meeting in Vancouver where antiretroviral therapy was introduced. But to prevent HIV/AIDS, you have to talk about sex. By now, 11 years after writing his first weekly column, Bouer has explored just about every possible angle on the subject.

Today he has two radio programs, appears on television ("I reach the rich by cable and the poor by parabolic antenna"), writes books, participates in conferences

## Setting an example

"Brazil is a good example for other countries, especially in Latin America," says Jairo Bouer, "in the natural way we talk about sexuality. We have an open culture that makes it easier for people to talk calmly and openly about sex."

Still, Brazilian culture can also create obstacles, for example, making contraceptive use among adolescents less than optimal. But Bouer says there are solutions. "This could be improved by systematizing prevention projects in schools, in the classroom, integrating them permanently into school curricula. It's true that these projects exist in some areas in some public school systems. But in many private schools and in the poorest regions, this discussion does not take place as it should or as often as it should. We need to expand our terrain."

For Bouer, one of the most frustrating problems is logistical. In Brazil, contraceptives are available for free only in health centers or through special programs. "We need to make them more accessible to the younger population," he says. In this area, Brazil may have something to learn from others. Bouer says he would love to see Brazil join that select club of countries that have health centers specifically targeted at young people.

"It's a fantastic idea! These are places where young people can go and see a doctor, talk about their sexuality, get contraceptives. I think it's an investment Brazil should make."

If young people in Brazil score relatively well on the "sex test," the same cannot be said about their use of drugs, notes Bouer. "Drug abuse is a very common problem. We need to talk about it a lot more, pay more attention to it in the media and in schools so we can deal with it in a direct manner. In the world of drugs, we still have a major task ahead of us."

The first step, he says, is understanding that it is impossible to have a drug-free society: "In the same way it's impossible to imagine a society where young people don't have sexual relations." The big push has to be for prevention, he says, but without forgetting something equally important: harm reduction.

"If we adapt ideas from the developed world to the realities of our world, we can apply them to Brazil and other countries in Latin America. But we have to design strategies that will work for the target population, and that means investing more in pilot projects for harm reduction in specific populations. There are several initiatives in Brazil, some of them by NGOs, others by municipalities, to study specific aspects in specific populations. These need to be expanded. Harm reduction is fundamental, and NGOs, the media and the state all need to work together on it."

(including some organized by the Pan American Health Organization), serves as a government consultant on HIV/AIDS and drug and alcohol prevention, and has his own website—you guessed it—on sex. Time is his scarcest resource, and some weeks he seems to live in the sky, judging by the airtime he logs flying between Rio de Janeiro and São Paulo.

How did Bouer become Brazil's number-one sex guru?

His first big break came in late 1998, when MTV Brazil invited him to do a four-hour program on sex called *Erotica*. But his wide celebrity has much to do with his appearances on the kind of popular music and entertainment programs that many of his professional peers might disdain. For Bouer, following an act with long-legged, scantily clad dancers provides the perfect opportunity to remind some 30 million viewers that they really need to take care of themselves.

"One of a physician's main duties is to provide information. If you can do that on a large scale, you're doing more to promote prevention," he says.

Bouer works for and with young people, and he adapts his language to their tastes. In his radio program *Oral Sex* (a double entendre in Portuguese that also means "spoken sex"), Bouer and his guests talk about condoms as the passport to happiness.

"That's why you have to carry one with you everywhere and make sure you check the expiration date," says his drag queen cohost, Nany People. The show receives a constant stream of calls from listeners, some weighing in on the day's opinion poll about "the best car to have sex in," others asking questions like, "Can any fluid from the penis make you pregnant?"

"The questions this decade haven't changed," notes Bouer. "It's a new generation of kids, and they're better informed, with fewer prejudices and taboos. But they still have the same concerns as they start their sexual careers."

With the anonymity of radio or the Internet, people readily shed their inhibitions and say whatever they want, without embarrassment. Bouer's casual style makes young people feel he's someone they can confide in.

But for more conservative minds, couldn't he be perceived as dangerous?

"I've never had problems," he insists. "I've gotten letters from people who don't agree with my advice, but nothing that

Bouer's celebrity has much to do with his appearances on the kind of popular music and entertainment programs that other health professionals might disdain.



isn't civilized. I often go to schools, including religious ones, and only once a Catholic radio station refused to air us because they didn't like what we said about masturbation. I really think parents are too worried about AIDS and teenage pregnancy to try and block the flow of information. You have to get it into kids' heads that it's their decision—from taking drugs to using a condom—but they should make it responsibly."

Research in Brazil shows that the public has access to ample information about preventing sexually transmitted infections.



“But it’s never too much to give clear explanations, especially when they’re directed at the neediest populations,” Bouer says. “You have to make the information accessible, that’s the first step. After that, you have to find ways to get people to use that information. You have to invest in responsible autonomy. We can’t keep having one in four pregnancies being teenagers’.”

One of Bouer’s biggest challenges is his self-set goal of increasing the rate of consistent condom use among young Brazilians. Although 60 percent of Brazilians say they used condoms their “first time,” rates of use decline after that, especially among females. Men tend to be more careful than women, who

“At that moment when they put a condom on, or say that they won’t have sex without one, they are in some sense alone. It’s clear that they need to know how to think for themselves.”

As he talks about sex, it becomes abundantly clear that Bouer is one of those lucky few who not only love what they do but are successful at it and, through their success, have a positive effect on others’ lives.

Sounding just for a moment more like a psychiatrist than a sex guru, Bouer describes his calling: “Adolescence is a very important phase of life, involving both physical and psychological transformation. Accompanying them in this phase creates

## Not “Dr. Sex”

The waiting area in Jairo Bouer’s adolescent psychiatry practice belies his nearly superstar status. Though it’s just a short walk from São Paulo’s poshest downtown corner, the clinic occupies a small, modest house. It’s Bouer’s personal humility, however, that most distinguishes him from other “media doctors.”

“Some professionals go to the media to promote their practice, to be trendy. For me it’s the opposite. The more time I spend doing media work, the less time I have for my practice. I don’t have a superstar salary. In fact, I charge less than many of my colleagues because I know I don’t have the time to keep myself up to date.”

Although Bouer’s celebrity agenda keeps him as busy as the president of Brazil, he decided a few years ago that he would never give up his psychiatry practice.

“Going back and dealing with individual patients isn’t easy, but it’s important. The kind of contact you have through the media is sporadic. It doesn’t resolve people’s problems. No matter how much you encourage them to see a doctor, in the end you never know if they go. You can answer questions, suggest behavioral changes, detect problems and debunk misconceptions, but can you produce change? It’s hard to know. Plus, people have lots of sources of information, and you don’t know what they’re getting from each one.”

Occasionally, fans show up at Bouer’s office after seeing him on television or hearing him on the radio. They ring the bell and ask for “the doctor from *Fantastic*,” a popular TV program Bouer regularly appears on. He won’t see them.

“I only take patients referred by other doctors,” he says. “If they come to me because of my media activities, I do phone triage to see if they really need me. I’m not the ‘Dr. Sex’ they say I am.”



tend to place more faith in the stability of their relationships.

Tackling issues like these requires connecting well with both young men and young women. But while teenagers often want formulas, Bouer says he doesn’t have them. Instead, he encourages young people to think reflectively and perceptively about what’s happening to them.

“You have to get it into kids’ heads that it’s their decision—from taking drugs to using a condom—but they should make it responsibly.”

the possibility of influencing them in certain aspects that will stay with them and provide a point of reference for the rest of their lives.”

---

*Roxana Tabakman is a biologist and journalist who specializes in health. She lives in São Paulo.*

---





# Mothers and Children: Make Them Count





Photo © Armando Waak/PAHO

*The birth of a child is one of life's greatest miracles, and motherhood is virtually sacrosanct in cultures around the world. But how much are the lives and health of mothers and children really worth to families, communities, countries, and the global community?*

Mothers and children are important in their own right, as human beings and loved ones. But equally important are their contributions to economic and social development. When mothers and children become ill or die, it is more than a personal or family tragedy; it exacts an enormous cost from their families, communities, and nations. Ensuring the health and well-being of children and mothers is not only humane and just; it also helps ensure the health of societies.

According to the Pan American Health Organization/World Health Organization, more than half-a-million mothers die each year from complications related to pregnancy and childbirth.

More than 30,000 children under 5 die every day. Many more children and mothers suffer ill health and permanent disabilities as a result of complications of pregnancy and childbirth.

Experts in maternal and child health say that most of these deaths and illnesses are preventable. The knowledge and the means already exist to save lives and stop the suffering of millions of mothers and children around the world. To highlight this, PAHO/WHO dedicated World Health Day 2005 to healthy mothers and children. The message is that investing in the health of mothers and children is essential for the well-being of individuals, families, and entire societies.





*Pregnancy and childbirth* are critical times for women and children. Worldwide, 15 percent of all mothers experience a life-threatening complication during childbirth. In Latin America, nearly 40 percent of deaths of children under 5 are the result of complications of pregnancy or childbirth.

Most of these problems could be prevented with low-cost, proven interventions. Good prenatal care—with a minimum of four prenatal visits during pregnancy—helps address problems in both mother and baby. Prenatal screening can detect preeclampsia, blood-type incompatibility, diabetes, low birth weight, and birth defects. Counseling mothers-to-be to quit smoking and avoid alcohol helps ensure that their babies are born healthy and stay that way.

The care a mother receives during childbirth is critical for her own health and survival and those of her baby. Having professionally trained help—what public health experts term “skilled attendance at birth”—can mean the difference between life and death for a mother or a child. In Latin America and the Caribbean, three out of four deliveries take place in hospitals or other



Photo © Armando Waak/PAHO





photo © Antonio Suarez Weisz/WHO



Photo © Armando Waak/PAHO

institutions—a much higher proportion than in other developing regions—but many women still give birth at home without trained help. Increasing access to health services for low-income women and those living in rural or remote areas is critical for increasing the proportion of births that are attended by skilled health professionals.

Equally important to safe childbirth are well-equipped facilities that can deal with emergencies or else provide women referrals and help them get to another facility. In Latin America and the Caribbean, eight out of 10 women, on average, have access to essential obstetric care. The challenge is to provide this care to those for whom it is still out of reach.





photo © Antonio Suárez Weisz/WHO



photo © Antonio Suárez Weisz/WHO

*Caring for her children's health* is every mother's most important responsibility. Simple practices such as exclusive breastfeeding and adequate hygiene are essential to ensuring infant health. Support from fathers is critical, too.

But women also need help from health workers to be good mothers. One of the most important public health tools for ensuring child health is immunization. The Pan American Health Organization (PAHO) has worked with countries throughout the region to increase immunization rates. This year, all 35 PAHO member countries participated in Vaccination Week in the Americas, April 23–30, which focused on getting vaccines to children in hard-to-reach areas with traditionally low coverage.





Photo © Armando Wash/PAHO

Another key tool for improving child health is the Integrated Management of Childhood Illness (IMCI) strategy. Ministries of health throughout the Americas are using IMCI to fight the most common causes of childhood illness and death, including diarrhea, respiratory infections, and diseases associated with nutritional deficiencies. The strategy lays out key family and community health practices to empower women, families, and communities to work together to improve child health. The strategy has already saved thousands of lives throughout Latin America and the Caribbean. The challenge now is to scale up implementation of IMCI and extend its benefits to the remotest corners of every country in the Americas.



photo © Cecilia Durand



## Latin America and the Caribbean

have made great strides in improving maternal and child health. Regionwide, both maternal and child mortality have declined significantly in the last half-century.

Yet significant differences remain between and within the countries. Bolivia, for example, has a maternal mortality rate of 230 per 100,000 live births, 10 times higher than Chile's rate. Within Bolivia, maternal mortality ranges from 124 deaths per 100,000 live births in valley areas to 352 per 100,000 in rural areas populated primarily by indigenous people.







Photo © Armando Waak/PAHO

Photo © Willie Heinz/IDB

*The Millennium Development Goals call for reducing child mortality by two-thirds and maternal mortality by three-quarters throughout the world by 2015. The challenge for the Americas is to improve access to and quality of health care for children and mothers in every community, every country, and every region. To achieve these goals, PAHO is promoting the IMCI strategy for child health and a regional strategy to reduce maternal mortality and morbidity. Together with other international and national agencies, professional associations, academic institutions, and nongovernmental organizations, PAHO is working to ensure that, throughout the Americas, every pregnancy and birth is safe and every child has the chance for a healthy life.*



# Kids' Sports for Life

by Paula Andaló

**Promoters of child and adolescent health are taking to the soccer field to get young players thinking about how to live a safer and healthier life.**

photo courtesy of Columbianitos



**T**wo teams square off on a soccer field. The players are all between 8 and 12 years old, but when they kick the ball, they look like miniature Pelés or Lalas. Then one of them falls after being tripped by an opposing player. Within seconds, little fists are flying. The coach halts the game, gathers the kids around him, and sits down with them on the grass. For the next few minutes, he talks with them about violence: Why do they feel so angry? Why do they want to hit someone? What are some ways of resolving a conflict without resorting to fistfights?

Without realizing it, the young soccer players have learned a valuable lesson in public health.

Scenes like this are the essence of a program that promotes health among boys in Latin America's ever-popular "soccer schools." The objective is to help the children grow into men whose idea of masculinity is not a threat to themselves or their partners.

Matilde Maddaleno, an expert in adolescent health at the Pan American Health Organization (PAHO), cites data from a 2002 study of nine countries in Latin America. "We found that machismo is still monolithic and that being a 'real man' is seen as more important than being healthy. But at the same time, there are fissures—behaviors that tend toward gender equity—through which we can break those parameters."

Toward that end, Maddaleno and her team launched "Soccer Schools: Playing for Health," a program that trains soccer coaches in low-income neighborhoods to promote health on the playing field.

"The coach is a powerful figure for boys, someone they really respect," says Maddaleno. "That makes him the ideal person to be promoting health."

By late 2004, Maddaleno's program was at work in six countries: Argentina, Brazil, Chile, Mexico, Paraguay, and Venezuela, with more than 200 coaches attending workshops to learn how to take public health messages to the 1,023 preadolescents and adolescents under their tutelage.

By the end of this year, Maddaleno plans to complete an evaluation of the impact of the program. "Once we demonstrate the

program's efficacy, we'll be able to expand it to other sports and design a similar program for girls," she says.

Much of the PAHO initiative is based on a study by Rodrigo Aguirre and Pedro Guell titled "Becoming Men: The Construction of Masculinity in Adolescence and Its Risks." The study argues that "the cultural forms that masculinity takes have negative consequences for public health. Problematic behaviors in the area of health, such as violence, risk of HIV infection, addiction, or early paternity, are related to masculinity."

In Latin America and the Caribbean, the burden of illness for men is 26 percent higher than for women. The social construction of masculinity plays a role in many high-risk behaviors associated with the major sources of this morbidity, including traffic accidents, homicides, unprotected sex, and alcohol-related injuries. The soccer field is one of the key venues where masculine identity is passed from one generation to the next, and experts see it as an excellent place to introduce public health messages.

Not every coach is health-promotion material. "We offered training to coaches with a particular profile, those who consider themselves educators and who have an interest in acquiring new tools and in exploring health topics," says Francisco Aguayo, a clinical psychologist who participated in the project's first stage. "We had some very positive experiences, for example in Asunción and São Paulo, where psychologists and teachers participated in training sessions. They saw these ideas at work in real-life situations with coaches and players."

As part of their training, the coaches receive a kind of operator's manual to guide their work. After the average four-day training period, most say the experience strengthens their abilities to create a climate of acceptance, to present subjects in a compelling way, and to use more participatory methods that foster better communication among children on their teams.

The program has received support from the countries' ministries of health and from sports organizations including FIFA, the international soccer federation. In

Brazil, the Ministry of Sports and Recreation developed its own program in which some 360 government-owned recreation centers offer low-income children the chance to attend soccer school. In the Mexican cities of Hidalgo and Jalisco, 72 coaches from amateur soccer clubs received health-promotion training. In Venezuela, some of the



photo courtesy of La Tercera

**"The coach is a powerful figure for boys, someone they really respect. That makes him the ideal person to be promoting health."**

—*Matilde Maddaleno,*  
*PAHO advisor on adolescent health*

coaches trained were from private schools.

"This project shows that you can transmit positive messages to children without making them feel like you're imposing something on them," says Marco Conde, a Venezuelan soccer coach who works with teenagers at the Central Madeira Sports Club in Caracas.

“I admit it was hard at first. The 20 boys I work with thought it was strange that I talked to them about health in an environment where Latin machismo is a tradition. But later they really enjoyed the experience. I talked with them mostly about sex, because their opinions about drugs, for example, were already pretty well formed.”

The key to success in every case, according to Maddaleno, is the coach’s ability to understand his boys’ needs and what

“In the case of soccer, it serves as a vehicle for messages like these and generates healthy interactions between coaches and players,” says Luis Codina, an adolescent health specialist in PAHO’s country office in Caracas. “The point is not to change behavior directly but rather to open up a world of healthier opportunities.”

The coach who breaks up a fistfight and proceeds to talk about nonviolence as a way of restoring group harmony is a

“This program motivates kids and youths to be more social, more fraternal, to know how to express their feelings and emotions—what they think and what they feel—without fear of being judged harshly,” says Emilio Quijano Porras, a coach from Hidalgo, Mexico. Most trainers say they derive personal benefits as well. Juan Hernández Zavala, another coach from Hidalgo, says the experience “helps us in our own lives, improving our relations



photo courtesy of Colombianitos

subjects they will find most engaging.

“The most interesting part is when coaches learn to take advantage of a particular moment to insert the subject of health. For example, the day before an Americas Cup game, one coach asked his students if they thought their favorite players could have sexual relations the night before the game. The question opened up a lively debate that allowed the coach to introduce the subject of safe sex,” she says.

In a Lanus, Argentina, soccer school, one training session opened with the coach ordering his players to run five laps around the field to warm up. He then used the opportunity to remind the boys that if they smoked, they might not be able to do even two laps. That led to a discussion of the risks of tobacco use.

## Coaches can be agents of change, helping children to see healthier alternatives to negative reactions and behaviors.

perfect example. Adults can build bridges to make children see alternatives to negative reactions and behaviors.

In the six countries where the program is under way, coaches have managed to talk on the soccer field about subjects that would have once seemed unthinkable in this context: gender equity, the rights of children, and nondiscrimination, among others. The 1,000-plus boys who participate in the program have played against girls’ teams and with boys of different skill levels, and have learned to resolve conflicts without ending up with a black eye.

with our children and families.”

Maddaleno and her colleagues acknowledge they are working to counter values and attitudes that tend to be deeply rooted. The challenge is twofold: on the one hand, to give coaches the health promotion tools they need to become agents of change;

and on the other, to make boys understand that there are alternative, and perhaps better, ways of becoming men. For the program’s supporters, achieving this on any scale would be scoring a goal for better quality of life.

*Paula Andalo is a freelance journalist who lives in Miami, Florida, USA.*





photo © Eddie Arroyo/PAHO

## Sports celebrities boost health

**It's game night** in Washington, D.C., and the Wizards—the U.S. capital city's home basketball team—is set to play the San Antonio Spurs. As the cheerleaders emerge, the fans settle into their seats, nearly filling the arena. A giant screen overhanging the court flashes a message: "When you choose violence, everyone loses." Throughout the game, public service announcements (PSAs) about youth violence appear on the overhead screen and on a giant digital band circling the inside of the arena.

The evening is one of a series of "health awareness game nights" sponsored by the Washington Wizards and the Pan American Health Organization (PAHO) in a partnership to promote healthy lifestyles to basketball fans. PSAs filmed for each game night feature key Wizards players and the team's coach promoting messages including "youth violence solves nothing," "every mother and child counts," and "healthy environments for children."

In the same way that they make great promoters of consumer products, sports celebrities can be powerful spokespersons for health. In Latin America and the Caribbean, Brazilian soccer stars Pelé and Ronaldo and Colombia's popular Formula-One racer Juan Pablo

**In the same way that sports celebrities make great promoters of consumer products, they can also be powerful spokespersons for health.**

Montoya are among those who have lent their voices to PAHO public health campaigns.

Other celebrities who are promoting healthy lifestyles through sports include Patricia Janiot, senior anchor for CNN Spanish. Her Little Colombians foundation has a pilot community program that promotes positive values and healthy lifestyles in at-risk chil-

dren. The objective is to raise self-esteem and help children grow into healthy youths and adults.

Recognizing the value of sports for human health and development, the United Nations declared 2005 the International Year of Sport and Physical Education. World tennis champion Roger Federer of Switzerland was named U.N. spokesperson for the year and is promoting sports as a tool for bridging cultural and ethnic divisions and for improving quality of life for people around the world.

"Sport can play a role in improving the lives of whole communities," says U.N. Secretary-General Kofi Annan. "I am convinced that the time is right to build on that understanding, to encourage governments, development agencies and communities to think how sport can be included more systematically in the plans to help children, particularly those living in the midst of poverty, disease and conflict."

# Gift Blood Is the Safest Blood

by Peter Carolan and Marcela Garcia

Last Word

**Voluntary, altruistic blood donation has proven to be safer than paid or replacement donation. Yet most countries of Latin America and the Caribbean continue to rely on the latter. Reversing this trend is the most important blood safety issue facing the region today.**

An Argentine colleague at the Pan American Health Organization (PAHO) recalls the day her elderly father was hospitalized in Buenos Aires. “They told him he needed to get five donors to give blood for an emergency operation. I went with my husband. When they found out I was O-negative, universal donor, they asked if they could take more. I said, ‘Take all you want!’ I thought, thanks to my donation, my father would get the blood he needed for a second chance.”

It happens every day, in dozens of countries in Latin America and the Caribbean. Hospitals with chronic blood shortages tell their patients they must recruit friends and family members to donate blood before the patient undergoes a procedure. Known as “family replacement” donation, the practice is seen as essential. Unfortunately, it is not very safe. Like blood from donors who are paid, blood from replacement donors has proven to be less safe than blood from those who donate for nothing more or less than the general public good.

Reports to the World Health Organization’s (WHO’s) Global Database on Blood Safety consistently show higher prevalence of HIV and other blood-borne pathogens among paid and replacement donors than among “altruistic” donors. A study by the former head of Ecuador’s national blood program found that the blood from banks that rely entirely on replacement donors was 12,000 times more likely to test positive for HIV or hepatitis B or C than blood from banks that had at least 60 percent altruistic donors.

Despite this kind of evidence, in Latin American and Caribbean countries, at least half—and as much as 90 percent or more—of available blood continues to come from family replacement donors. Reversing this trend is the most

important blood safety challenge facing the region today.

Why is blood from altruistic donors so much safer? Every blood bank asks potential donors a series of screening questions to find out if there is any reason to doubt that their blood is safe. The problem is that both replacement and paid donors tend to hide risky behaviors from blood bank personnel. Paid donors don’t want to hurt their chances of earning some cash, while replacement donors may feel pressure to comply with family requests to give blood but be embarrassed to admit risky behaviors to blood bank personnel. In some cases, families have trouble recruiting donors and end up paying donors with cash. In contrast, voluntary donors whose only motivation is to give the gift of blood have no reason to give false answers to screening questions.

The world’s richer countries have abandoned both paid blood donation and family replacement. Yet developing countries still rely heavily on replacement donation. Their problem, of course, is getting enough blood. According to WHO and the International Federation of Red Cross and Red Crescent Societies, a country needs to collect blood from the equivalent of 3–5 percent of its population yearly to maintain an adequate blood supply. The United States and Canada collect blood from about 4.6 percent and 3.3 percent, respectively. On average, Latin American and Caribbean countries collect blood from only 1.4 percent of their populations.

PAHO and the Red Cross federation are working to help countries in Latin America and the Caribbean address the problem of chronic blood shortages and reliance on family replacement donation. These efforts face important challenges:

*Attitudes of potential donors:* Many people in the region believe that giving blood can make a donor gain or lose weight. Others think giving blood means giving away part of one’s life. PAHO has supported sociocultural research to develop social marketing campaigns that are culturally sensitive and aimed at the lowest-risk populations.

*Blood bank practices:* Lack of training and the absence of structured questionnaires can lead blood bank staff to turn away potential donors for reasons that are not always valid. Moreover, because the safest donors are repeat donors, altruistic donors must be treated with courtesy and respect. Well-trained staff are essential for making donors feel safe and comfortable.

*Blood bank outreach:* Mobile teams are needed to collect blood in workplaces, social clubs, churches, and other meeting places. Indeed, there are very good reasons to take blood collection out of the hospital environment, creating blood banks that are more accessible and donor-friendly.

Latin America and the Caribbean have made great strides in blood safety in recent years. Widespread screening has significantly reduced the risks of transfusions throughout the region. The challenge now is to make sure that every country has a safe, ample, and timely supply of blood available to all its inhabitants. Working together—PAHO, the Red Cross, ministries of health, and others—to promote voluntary, repeated altruistic donation will go a long way toward achieving that goal.

---

*Peter Carolan is senior officer for blood at the International Federation of Red Cross and Red Crescent Societies. Marcela Garcia is technical officer for laboratories and blood services at PAHO.*

---





# Thank You

June 14 - World Blood Donor Day

Celebrating your gift of blood

14 de junio - Día Mundial del Donante de Sangre

Celebramos su regalo de vida

14 junho - Dia mundial do doador de sangue

Celebrando seu presente de vida

14 juin - Journée mondiale du donneur de sang

Célébrons votre don du sang

# Gracias

# Obrigado

# Merci

## Mark the date

To promote greater reliance on altruistic blood donation in the Americas, the Pan American Health Organization and the International Federation of Red Cross and Red Crescent Societies are organizing the 10th International Colloquium on Recruitment of Voluntary, Non-remunerated Blood Donors in Santiago, Chile, in March 2006. Participants will share knowledge and best practices in the area of recruitment and retention of voluntary blood donors and discuss strategies to encourage altruistic blood donation. For more information, contact [garciama@paho.org](mailto:garciama@paho.org).

<http://www.paho.org/>





Photo © Armando Waak/PAHO

Indigenous girls gather in their village in Xingu Park, in Brazil's Amazon Basin. The girls were among some 7,000 indigenous children across Brazil who were designated as a special target group for this year's Vaccination Week in the Americas campaign, held April 23–30. With support from the Brazilian Army, Navy, and Air Force, as well as universities and local governments, Brazil's Ministry of Health delivered vaccines to 677 villages in 18 Special Indigenous Health Districts in 16 states. The vaccines will protect the children against 13 childhood diseases.

This year's Vaccination Week in the Americas was the third regionwide immunization initiative coordinated by the Pan American Health Organization (PAHO). The effort places priority on reaching children who live in remote and difficult-to-reach areas and those with traditionally low rates of vaccine coverage. All 35 countries of the Western Hemisphere participated in the last two campaigns.