



# EPI Newsletter

## Expanded Program on Immunization in the Americas

Volume XXVI, Number 1

IMMUNIZE AND PROTECT YOUR CHILDREN

February 2004

### Plans to Launch Second Vaccination Week in the Americas, 24-30 April 2004

The first Vaccination Week in the Americas (VWA) was conducted in June 2003 (for background see *EPI Bulletin of April and August 2003*) and was a great success. In September 2003, the Directing Council of the Pan American Health Organization (PAHO) adopted Resolution CD44.R1, supporting the implementation of an annual hemispheric vaccination week. To that end, PAHO's Immunization Unit conducted a workshop in Quito, Ecuador, on 29-30 January 2004, where all countries prepared a regional plan for the vaccination week.

#### Guidelines for the 2004 VWA

The second regional vaccination week will be conducted during the week of 24-30 April 2004 with participation from all the countries of the Region. In addition to critical support from PAHO's Directing Council, consisting of Ministers of Health of all Member States, the VWA will count also on support from MERCOSUR (*Mercado Común del Sur*/Southern Common Market), the health sector from the Andean Region (*Organismo Andino de Salud / ORAS*) and the Central American and Dominican Republic Health Sector (known under its Spanish acronym RESSCAD for *Reunión del Sector Salud de Centroamérica y República Dominicana*).

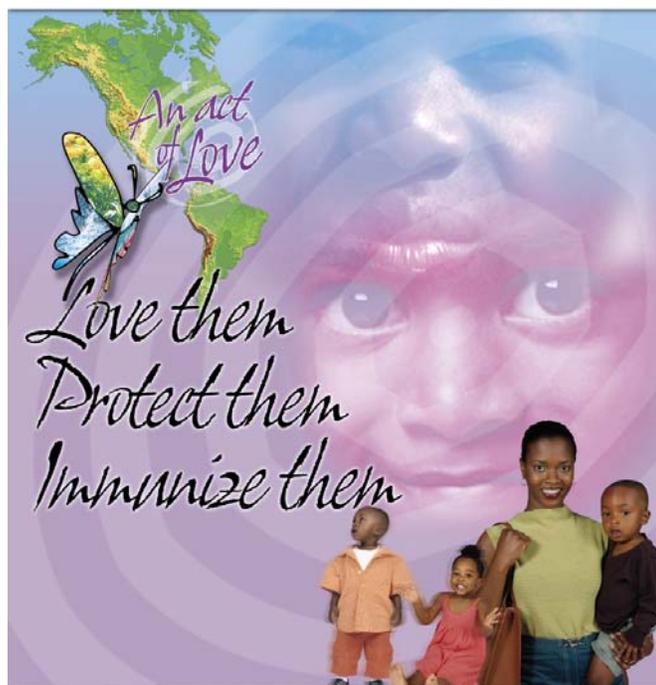
The fundamental principles sustaining the VWA are equity, accessibility, and PanAmericanism. PanAmericanism is

*"the principle on which PAHO was founded and is expressed in Member States' commitment to working together to improve the state of health in areas of common interest and to support those countries in greatest need, directly and indirectly. The recognition that many health problems require a collective effort, and that the health of one's neighbor, as well as public health, are a shared responsibility, is even more relevant in today's world of free trade and movement of people."* (PanAmerican Health Organization, Document CSP26.10: Strategic Plan for the Pan American Sanitary Bureau for the Period 2003-2007. September 2002). The VWA seeks to promote greater access to immunization as well as inter-country cooperation. Its main objectives are to protect groups at risk of epidemics and maintain the EPI as a high priority on the political agen-

das of countries in the Region.

The need to have more timely planning, better evaluation, and costing data are among the lessons learned from

April 24-30 Vaccination week in the Americas  
**Vaccination**



#### In this issue:

Plans to Launch Second Vaccination Week in the Americas, 24-30 April 2004 .....	1
Advances in the organization of the VWA at the US-Mexico border .....	2
Vaccination Success in Haiti in 2003 .....	3

Evaluation of the Vaccination Week .....	3
Perspectives on Measles and Rubella Elimination Initiatives in the Region of the Americas .....	5
PAHO's Revolving Fund Vaccine Prices for 2004 .....	7

## Advances in the organization of the VWA at the US-Mexico border

The role of the US-Mexico Border Health Commission is to promote health and community participation and to confront the major health issues facing the border area. The specific characteristics of the area, such as cultural and linguistic barriers, high unemployment, and denial of services for migrants, are exactly those that the VWA initiative is seeking to resolve in its effort to reduce vaccination inequities. For that reason, the Commission has decided to participate in the VWA.

The proposal presented by the US-Mexico Border Health Commission and the PAHO Field Office in El Paso, Texas, plans the launching of a vaccination effort over three distinct weeks. The first one will coincide with the vaccination week already programmed. The goal will be to complete vaccination schedules in children aged 0-4 years. Strategies will be defined according to the specific situation of each country and the resources available for

implementation.

Several committees were formed with participation from local institutions and community leaders. They meet on a regular basis to monitor the planning, implementation, and evaluation of these vaccination activities.

The participation of the following sister cities has been confirmed:

- ◆ San Diego, California – Tijuana, Baja California
- ◆ El Paso, Texas & Dona Ana County, New Mexico - Ciudad Juárez, Chihuahua
- ◆ Presidio, Texas – Ojinaga, Chihuahua

Participation of Laredo, Texas and Nuevo Laredo, Tamaulipas is to be confirmed. All Mexican border municipalities will participate in accordance with the guidelines of their national immunization program.

the first VWA. In addition, in order to ensure that immunization schedules are completed, two additional rounds must be planned at local level. Designing and implementing social communication activities at the local level will be critical for the success of the VWA.

### Goals of the 2004 VWA

The goals for this year's Vaccination Week in the Americas will be:

- Reaching children <5 years and women of childbearing age (WCBAs) with no previous contact with the program (0 dose);
- Vaccinating <5 year age group and WCBAs with incomplete immunization schedule;
- Developing micro-plans for completion of immunization schedule after the VWA;
- Maintaining measles elimination in the Region;
- Supporting the implementation of rubella and CRS elimination plans; and
- Strengthening epidemiological surveillance.

### Scenarios for the VWA

Countries with activities programmed during 2004, such as measles follow-up campaigns, supplementary polio vaccination, accelerated control of rubella and CRS, or vaccination of seniors, are encouraged to initiate such activities or end them during the week of 24-30 April.

Other countries of the Region are advised to intensify vaccination among children <5 years and WCBAs. Ideally, intensification efforts should take place throughout the country; however, if this is not possible, each country will have to prioritize the following areas or population groups:

- Municipalities with low coverage;
- Marginal urban areas, particularly those with periurban slums;

- Border areas with high level of migration or other risk factors;
- Indigenous groups;
- Ethnic minorities;
- Hard-to-reach areas;
- Tourist areas;
- High risk groups (health, education, transportation, and sex trade).

According to the different scenarios, countries have established population targets: <5 years, adults, >60 years, WCBAs, and other risk groups (Table 1).

**Table 1. Regional Action Plan**

Region	Target Population*				
	<5 years	Adults	>60 years	WCBAs	Other risk groups
Central America, Latin Caribbean, and Mexico	14,581,942	3,100,000		450,000	
Southern Cone and Brasil	707,505	1,328,674	10,134,668	134,000	428,000
Andean Region	452,266	6,183,477		883,333	1,280,047
English-speaking Caribbean	56,500				
<b>Regional Total</b>	<b>15,578,213</b>	<b>10,612,151</b>	<b>10,134,668</b>	<b>1,467,333</b>	<b>1,708,047</b>

\* Data being updated by the countries.

### Key Organizational Elements

Making the VWA part of the countries' annual operation plans: Each country should design a plan according to its

specific circumstances. A national steering committee should be established, along with committees for implementation and operations in municipalities or selected local areas. A media communication plan should be developed and linked with local authorities. The Inter-agency Committee should convene to review progress transborder coordination, and funding.

**Prioritizing population groups and risk areas:** Socio-economic, epidemiological, and EPI indicators should be taken into account. Among the variables to be used as indicators are coverage data, number of susceptibles, epidemiologically silent areas, municipalities in attack phase and maintenance phase for neonatal tetanus, areas of extreme poverty, and municipalities with malnutrition. Other methodologies available in-country can be applied to prioritize risk groups.

**Designing a social communication plan:** The PAHO communication proposal does not characterize the VWA as another campaign but as a new opportunity to reach non-vaccinated populations. The logo “*Vaccination: An Act of Love*” will continue to be used, along with the one proposed by the US immunization program, “*Protect them, Love them, Immunize them*”. The countries of the Region have agreed that radio messages play an essential role for the adequate dissemination of messages regarding the VWA at local level. PAHO will send the countries several graphic designs to be modified according to local cultural characteristics and necessities, as well as logos from the different participating agencies. In order to evaluate the communication component, a survey of mothers and/or caretakers will be administered in the areas of intervention.

**Promoting inter-agency coordination:** The Inter-agency Coordination Committee (ICC) at the regional level, as well as in each of the countries, plays an essential role towards the achievements of the VWA’s objectives since it provides political, technical, and financial support. Each Ministry of Health will convene the ICC at least twice in order to bring to fruition the contributions from the different agencies present in the country.

## Conclusion

The Vaccination Week in the Americas has become a regional tool, and its main objective is to vaccinate children and women who have never been previously vaccinated, thereby

strengthening the immunization program. The VWA is not just another campaign; it is an opportunity to vaccinate populations traditionally excluded. The VWA allows for the prioritizing of immunization within the political agenda of all countries, the fostering of Pan Americanism, and the revitalizing of transborder activities. The VWA also serves to strengthen the primary healthcare network while reaffirming the goal to diminish inequities with quantifiable results.

## Evaluation of the Vaccination Week

Evaluation of the VWA will be performed by comparing results with corresponding goals established in each country and conducting a population survey on the level of knowledge about the activities at local level. The following indicators will be also used:

- Percentage of children aged 1-4 year vaccinated with 1, 2, or 3 doses of DPT/Pentavalent (to measure 0 dose or delayed schedules)<sup>1</sup>.
- Percentage of vaccinated women of childbearing age with 0 dose of Td before the VWA.
- Percentage of Rapid Coverage Monitoring showing MR vaccination coverage to be less than 95%.
- Percentage of mothers interviewed in selected areas who knew about the VWA.
- Percentage of municipalities with follow-up plan to complete immunization schedules after the VWA.
- Number of suspected measles/rubella and AFP cases identified during community active search and registered in the surveillance system.

In addition, an evaluation of the VWA through an operations survey in marginal areas of large cities will be conducted with participation from CDC. This survey will take place in three countries representative of three sub-regions (Southern Cone, Andean Area, and Central America) and constitute a pilot study for methodology validation.

<sup>1</sup> The denominator of children >1 year will be used because not all countries possess disaggregated data pertaining to children <1 year according to the age at which vaccine was administered.

## Vaccination Success in Haiti in 2003

For the first time in recent history in Haiti, a department reported coverage over 95% among children in the department against tuberculosis, polio, diphtheria, pertussis, and tetanus. This department, Centre (see Figure 1), achieved the 5-year goal for the country in just the first year of the implementation of the 5-year plan. The average coverage for all antigens in the population aged <1 year is shown in Figure 2 for each department in Haiti. Immunization coverage for Centre (“CEN”) is well above that of the other departments and also well above the 2003 target of 60% coverage for the country. In 2003, coverage for measles was reported at 85% in Centre. Although

these data are compiled from administrative reports, the results suggest remarkable progress.

The 5-year plan calls for use of 3 immunization strategies in the routine program:

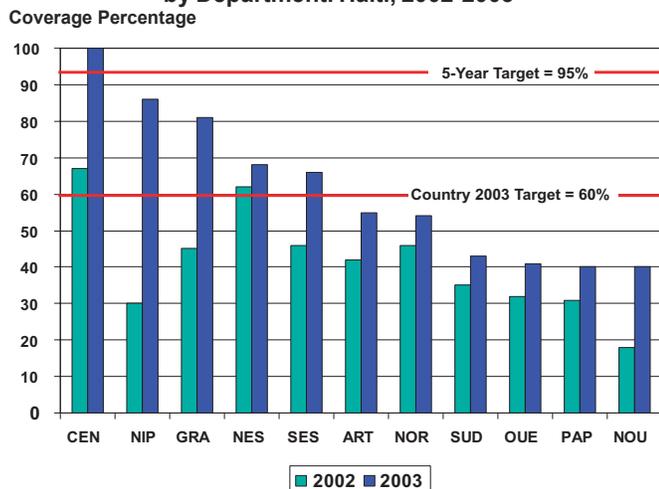
- 1) Vaccination clinics in health institutions;
- 2) Vaccination posts in community locations such as schools, markets, churches, and transportation routes; and
- 3) Door-to-door vaccination brigades in hard-to-reach or underserved areas.

Within each department, immunization activities are conducted through the coordinated efforts of the Ministry of Public Health and a number of non-governmental health providers. All of these strategies were used successfully in Centre during 2003 and to a lesser degree in the other 4 departments that exceeded the goal of 60% (Nippes, Grand'Anse, Nord'Est, and Sud'Est). Coverage rates for the individual vaccines for both 2002 and 2003 in the department of Centre are presented in Figure 3. From 2002 to 2003, coverage improved almost 50%.

In 2003, national immunization coverage in Haiti improved, but 6 departments still fell short of the first-year goal of complete immunization for 60% of all children aged <1 year for all 4 vaccines used in the country (polio, measles, DTP, and BCG). Average coverage for all vaccines was 53% for 2003 compared with 42% for 2002. This improvement was the result of implementation of the new 5-year strategy, but lack of funding in the first part of the year prevented the strategy from being fully implemented until September 2003. In addition, vaccine shortages occurred in many departments during July-September.

National problems of lack of funds and lack of vaccines were also present in the department of Centre. In addition, this area is the only department in Haiti without access to the sea; it is one of the poorest regions of the country. The department has an estimated population of approximately 560,000 inhabitants (6.5% of total population), including approximately 20,000 children below 1 year of age. Most of the land is mountainous with poor soil for agriculture and many roads are often cut off by flooding and landslides.

**Figure 2. Vaccine Coverage\* by Department. Haiti, 2002-2003**



\* Includes Polio, DTP, and BCG vaccines among children <1 year old

How did Centre manage to achieve such great success in immunization in such a short period of time? Critical to the success was strong leadership from the head of the health department and excellent coordination with highly committed health partners in the field. Efforts focused on primarily two types of activities: 1) supporting immunization at each health institution with training of vaccination personnel, micro-planning, performance evaluation, supervision, and field training; and 2) implementing accelerated routine immunization through

**Figure 1. Location of Department of Centre, Haiti**



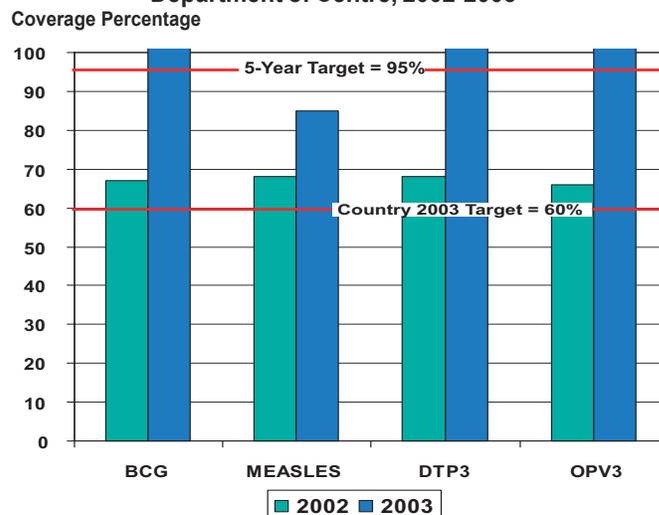
vaccination brigades using both fixed posts and door-to-door activities, especially in areas with difficult access to immunization services. The overall success of this strategy resulted from excellent coordination of these complementary activities by both public and private vaccinators within each of the 12 communes comprising the department of Centre. Coordination from the head of the health department in Centre

was also critical.

The challenge for Haiti now is to adapt this highly successful model from Centre to all of the other departments in the country. Haiti should continue to have door-to-door immunization campaigns for measles and polio in all under-performing departments in the country. All children in departments with very low immunization coverage will be targeted for vaccination during an additional, intensive immunization campaign during the Vaccination Week in the Americas in April 2004.

Note from the Editor: The success in Centre will be a model and benchmark for future immunization activities in Haiti. Hopefully, the current civil strife situation will be resolved so that all children of Haiti can receive immunizations and other medical services.

**Figure 3. Vaccine Coverage for Department of Centre, 2002-2003**



# Perspectives on Measles and Rubella Elimination Initiatives in the Region of the Americas

## Background

During the 38<sup>th</sup> Meeting of PAHO's Directing Council, held in September 1995 in Washington, D.C., the Ministries of Health of the Americas unanimously approved the Measles Eradication Plan of Action, calling for the eradication of measles by the year 2000. The hemispheric interruption of indigenous measles transmission has been achieved as a result of intensified vaccination efforts guided by surveillance activities and the active search of cases in health centers, schools, and high-risk communities. The meeting in November 2002 of the Technical Advisory Group (TAG) on Vaccine-preventable Diseases recognized that the full implementation of PAHO's recommended strategy for measles eradication, endorsed by all Ministries of Health in all countries of the Americas, has remained the cornerstone of the efforts in interrupting indigenous measles virus transmission.

## Eradication Strategies

As part of the measles eradication goal, the development and/or improvement of national surveillance capabilities was emphasized, which include technical, logistical, training, and management aspects. These efforts helped health managers in measuring the impact of vaccination programs and in identifying areas that require additional technical cooperation. Vaccination coverage levels have exceeded 80% throughout the Region.

Enhanced measles surveillance throughout the Region was expanded and integrated with rubella surveillance. Following the lead of the Caribbean community, many countries have intensified activities to control rubella and prevent CRS. Data from the measles surveillance system confirmed widespread circulation of rubella in many countries. This was further documented by data collected throughout the Region by integrated measles and rubella surveillance systems. Accordingly, all but two countries have introduced

measles, mumps, and rubella (MMR) vaccination into their routine immunization schedule. The remaining two countries, the Dominican Republic and Haiti, are planning to introduce the rubella vaccine into their regular programs in 2004 and 2005 respectively.

Integration of measles and rubella surveillance is a major tool to meet the challenge of rubella and CRS elimination. Other strategies involve vaccinating both men and women, improving the follow-up of pregnant women who contracted rubella or had contact with a rubella case during pregnancy, and collecting samples for viral isolation.

## Activities and Opportunities

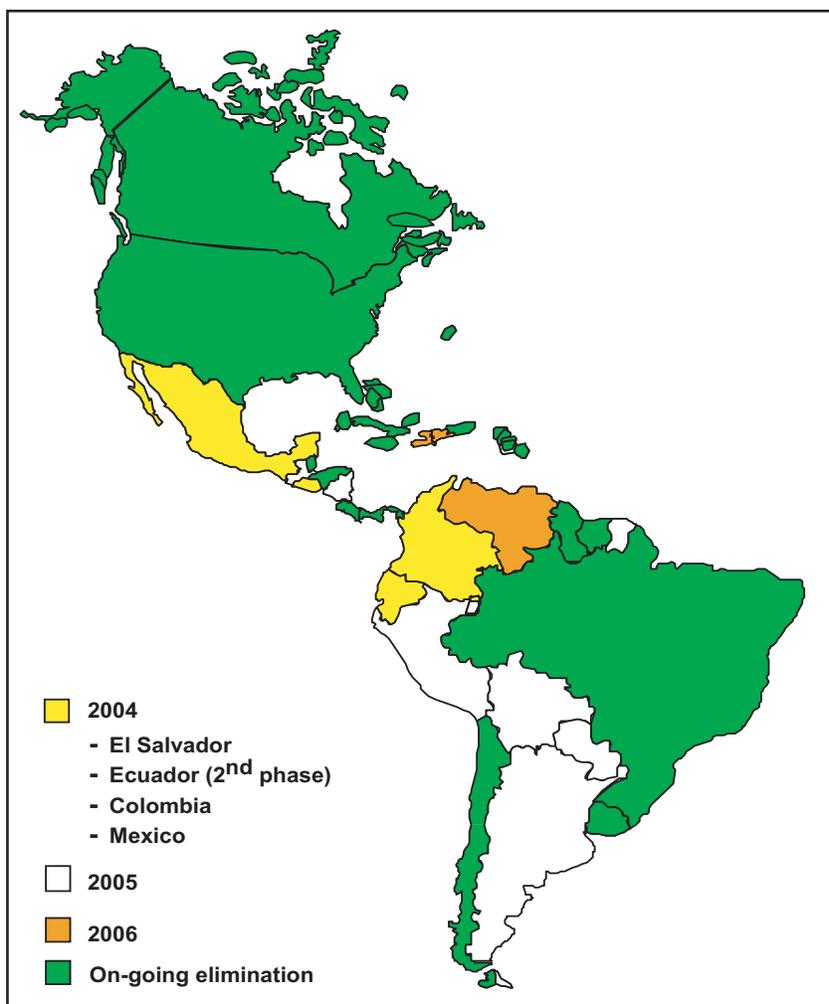
Data suggest that the last indigenous confirmed case of measles was reported in November 2002. Taking into consideration the historic achievements in measles elimination, PAHO's 44<sup>th</sup> Directing Council passed Resolution CD44/R1 in September 2003 urging Member States to eliminate rubella and CRS by the year 2010.

For the current year, El Salvador, Ecuador, Colombia, and Nicaragua have programmed mass vaccination campaigns targeting both men and women. Mexico will continue with its vaccination activities according to risk groups. Brazil, a country that has already conducted vaccination campaigns targeting women, will begin routine rubella vaccination efforts among men. In 2005, Argentina, Bolivia, Paraguay, and Peru will conduct vaccination campaigns targeting men and women. In

2006, Guatemala, Venezuela, the Dominican Republic, and Haiti will conduct their own campaigns (see Figure 1).

Rubella elimination by 2010 presents many opportunities. It contributes to the strengthening of surveillance and health services directed at newborns. It allows for improved services

**Figure 1. Planned vaccination campaigns for the elimination of rubella and CRS, by country and by year.**



and follow-up for children born with congenital malformations and handicaps. It helps build bridges between children health services and special education services. It generates increased interest in women's health and brings health services closer to the adult population, particularly adult men. As a consequence, rubella elimination also produces savings for the health system, helps with the integration of health services, while contributing to the strengthening of their infrastructure and quality. Another key element is that the experience gained through adult vaccination will help establish new mechanisms for the introduction of future adult vaccines, for example against HIV and Human Papillomavirus (HPV).

### Program and Surveillance Strengthening

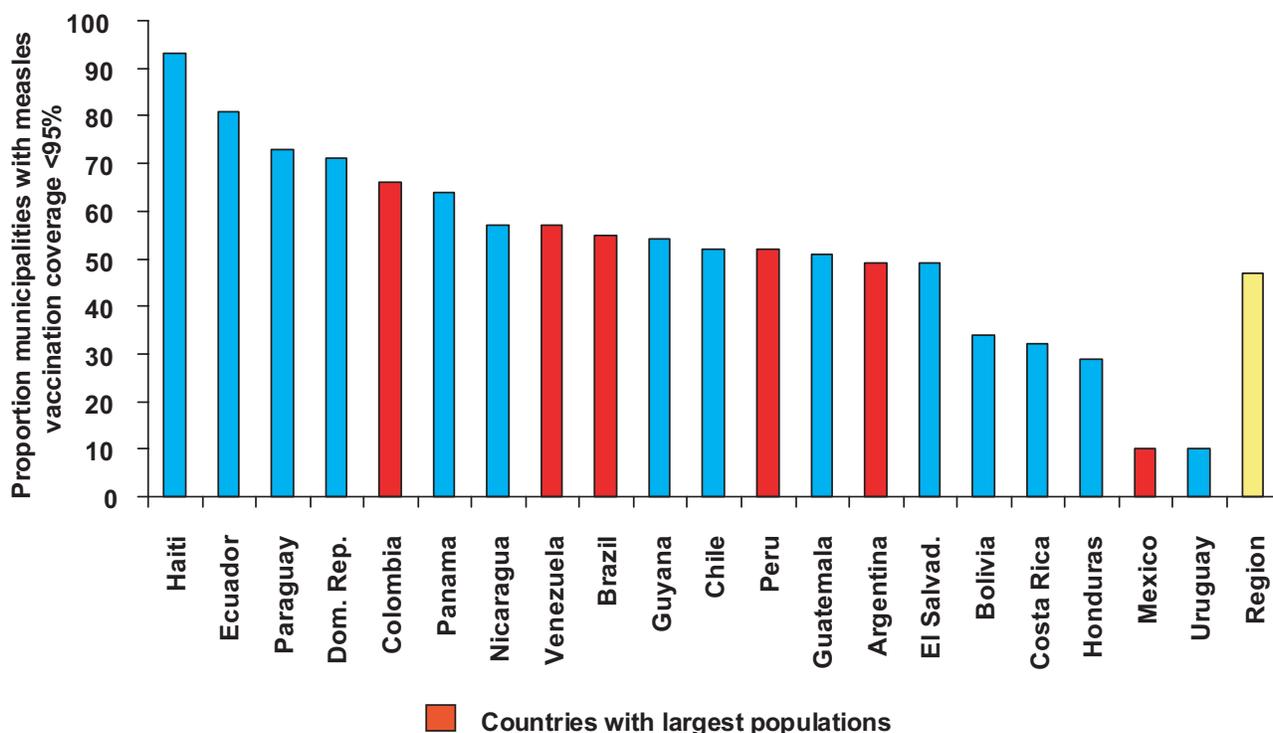
Increased efforts are needed to strengthen the Region's

The responsibility of first-level monitoring and reporting has moved to the local level. However, central health authorities will need to increase national capacity for supervising and monitoring the work of district authorities.

As a by-product of the measles initiative, national immunization programs and surveillance infrastructure have been greatly strengthened. National health authorities are determining the required infrastructure to conduct surveillance for other vaccine-preventable diseases of public health importance, such as hepatitis B, *Haemophilus influenzae* type b, yellow fever, and most recently rotavirus.

The endorsement of a regional vaccine initiative by all Heads of State in the Americas has placed PAHO's technical cooperation with countries in the area of immunization and

**Figure 2. Proportion of municipalities with measles coverage <95% among children aged 1 year. Region of the Americas, 2002**



national immunization programs and surveillance infrastructure as a means of sustaining coverage levels, accommodating the introduction of new vaccines, and ensuring that all recommended EPI vaccines reach populations living in remote areas, as well as underserved population groups in urban areas. Special emphasis must be placed on ensuring that national immunization programs are capable of sustaining the achievements of measles elimination and can guarantee the success of the new rubella and CRS elimination initiative.

The shift in decision-making to local entities as part of the ongoing decentralization processes in the Americas represents a formidable challenge to the uniform delivery of immunization programs in all areas of a country and to the implementation of current and future elimination strategies.

vaccines at the highest political level. PAHO collaborated with several partners in the Region, including the First Ladies of the Americas on the goal of measles eradication from the Americas; the countries' legislative branch to establish laws that ensure national financing of recurrent costs of vaccines and other inputs; the private sector to ensure their inclusion into immunization and surveillance activities; and municipal governments to guarantee the implementation of immunization programs.

In 2003, the importations of the measles genotype H1 from Asia into Chile and Mexico underscored the real risk of importations from other regions. The importation to Chile failed to result in secondary transmission and demonstrated high population immunity, clearly due to the impact of the

measles elimination initiative in the Region. However, efforts need to be applied in Mexico where the importation has resulted in 44 cases in 2003 and 15 more in 2004. This outbreak has highlighted several important issues for maintaining the achievements of the measles elimination initiative in the Americas. The countries of the Americas will always be at risk for importations and subsequent outbreaks. The data from Mexico suggest that the importation of measles virus did not result in widespread transmission, largely due to high coverage. To reduce the risk of widespread transmission after

importation, as happened in Venezuela in 2002, countries must maintain high levels of measles vaccination coverage in all municipalities. Monitoring measles vaccination coverage in all municipalities and targeting those with <95% coverage for special vaccination activities remain essential strategies in all countries (see Figure 2). That, coupled with the implementation and maintenance of high-quality surveillance, will be the first line of defense to prevent widespread transmission when importations occur.

### **Revision of the plans of action for the elimination of rubella and congenital rubella syndrome in the Region of the Americas**

A workshop was held on 28 January 2004 in Quito, Ecuador, to review the plans of action for the elimination of rubella and congenital rubella syndrome in the Region of the Americas. EPI Managers, professionals in charge of epidemiological surveillance, and members of PAHO's Immunization Unit met to measure progress to date and standardize the actions to be carried out. Countries were divided into four groups according to their progress level:

Group I: Countries that introduced rubella vaccine 20 years ago.

Group IIA: Countries that have conducted immunization campaigns (men and women) to eliminate rubella.

Group IIB: Countries with partial immunization activities (by cohort, by gender, by risk group, or by geographical area).

Group III: Countries that have yet to conduct immunization activities towards rubella elimination.

The participants reviewed the development, monitoring, and evaluation of the plans of action. The forecasting of vaccine needs and the vaccine procurement process through the Revolving Fund were two other components examined.

Countries agreed to prepare national plans for rubella and CRS elimination before 28 February 2004 in order to comply with the requirements of Resolution CD44/R1 adopted during PAHO's 44th Directing Council. The plans of action will serve as tools that managers can use to prioritize, coordinate, and implement activities. They will also help managers to better forecast the demand in MR/MMR vaccines and allow them to better manage costs and resources.

---

## **PAHO's Revolving Fund Vaccine Prices for 2004**

The table on page 8 shows the 2004 prices for vaccines purchased through the PAHO Revolving Fund for Vaccine Procurement. The Revolving Fund was established by PAHO in 1979 for the purchase of vaccines, syringes/needles, and cold chain equipment for countries in Latin America and the Caribbean.

A number of vaccines continue to experience a price increase when compared to 2003. Vaccine price increases are most notable for yellow fever (+23%), DT Adult (+13%), and MMR (+7%). To help correct this trend, PAHO is teaming with Member Countries and suppliers to improve vaccine forecasting through an efficiency review. Its objective is to improve

the management of changes in forecasts from countries and in supply from vendors on a continuous basis. This will help to control price increases, and avoid "stock-out" situations and oversupply of national inventories. At the same time, the study will assist with forecasting related to the inclusion of new vaccines in the countries' national programs.

At the Preparatory Workshop for the 2004 Vaccination Week in the Americas (see page 2), in Quito, Ecuador, three strategies were identified for improving the efficiency of the Revolving Fund: Demand forecasting, procurement process, and customer service. These strategies are key management functions for the success of process management and improving customer services to the countries.

At the Quito Meeting, EPI managers provided valuable feedback and help in defining a preliminary plan, including requests to update the PAHO Revolving Fund guidelines, streamline the invoicing process, and revise the PAHO 173 (Vaccine Order Form), which reflects the annual forecast-

ing requirements. The shared vision is to strengthen the strategic alliance between participating countries, suppliers, and PAHO to ensure that all the children of the Region are being vaccinated through the national immunization programs.

**Table 1. Prices for Vaccines purchased through the PAHO Revolving Fund. 2004**

Vaccine	Doses per vial	FCA* price per dose
BCG	10	\$0.0940
DPT	10	\$0.0980
DT (Adult)	10	\$0.0550
DT (Pediatric)	10	\$0.0700
DPT Hib Lyophilized	1	\$3.1000
	10	\$2.6000
DPT/Hep B Hib	1	\$3.8500
Hib Lyophilized	1	\$3.0000
Hepatitis B 10MCG Recombinant Pediatric	1	\$0.4164
Hepatitis B 20MCG Recombinant	1	\$0.5500
	10	\$0.2700
Measles (Edmonston)	1	\$0.8500
	10	\$0.1300

Vaccine	Doses per vial	FCA* price per dose
Measles/Rubella	1	\$1.1000
	2	\$0.8000
	10	\$0.4770
Measles/Mumps (URABE)/Rubella=MMR	1	\$1.6000
	10	\$1.1949
Measles/Mumps (LENINGRAD/ZAGREB)/Rubella=MMR	1	\$1.4000
	10	\$0.9000
Polio (Plastic Vial)	10	\$0.1416
	20	\$0.1300
Rabies Human Vero Cell	1	\$8.8000
TT	10	\$0.0460
Yellow Fever	5	\$0.6500
	10	\$0.8700

\*FCA = Free Carrier

The EPI Newsletter is published every two months, in Spanish, English and French by the Immunization Unit of the Pan American Health Organization (PAHO), Regional Office for the Americas of the World Health Organization (WHO). Its purpose is to facilitate the exchange of ideas and information concerning immunization programs in the Region, in order to promote greater knowledge of the problems faced and their possible solutions.

References to commercial products and the publication of signed articles in this Newsletter do not constitute endorsement by PAHO/WHO, nor do they necessarily represent the policy of the Organization.



**Pan American Health Organization**  
 Pan American Sanitary Bureau  
 Regional Office of the  
 World Health Organization

ISSN 0251-4729

Editor: Jon Andrus  
 Associate Editors: Béatrice Carpano and Kathryn Kohler

**Immunization Unit**  
 525 Twenty-third Street, N.W.  
 Washington, D.C. 20037 U.S.A.  
<http://www.paho.org> (Search: EPI Newsletter)