Immunization Newsletter

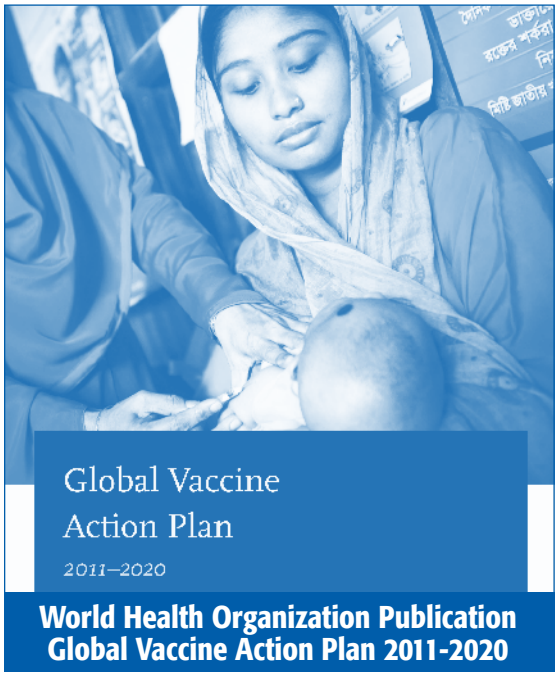
Pan American Health Organization

Volume XXXV Number 1 | Immunize and Protect Your Family | February 2013

Global Vaccine Action Plan (GVAP)

Immunization is considered one of the most effective public health interventions and is credited with preventing 2.5 million deaths each year. Despite tremendous progress in reducing morbidity and mortality due to vaccine-preventable diseases (VPDs) in much of the world, the benefits of immunization have not been extended to all people and many children, adolescents, and adults continue to die or suffer needlessly from VPDs. This problem hinders economic development due to productivity losses, results in high healthcare treatment costs, and disproportionally affects low- and middle-income countries.

As part of continuing efforts to ensure that all people are protected against VPDs, the World Health Organization (WHO) and partners developed the Global Vaccine Action Plan (GVAP).[1] The plan represents an effort to extend the achievements of immunization into the next decade and beyond and to continue encouraging governments to maintain their commitment to protect their populations against VPDs. WHO Member States endorsed the GVAP at the 65th World Health Assembly (WHA), passing Resolution 65.17.



World Health Organization Publication
Global Vaccine Action Plan 2011-2020

The GVAP builds on the WHO's Global Immunization Vision and Strategy Immunization (GIVS), which was launched in 2005 as the first 10-year strategic framework designed to maximize the potential benefits of immunization.[2] The GVAP reinforces existing goals, proposes new cross-cutting strategic objectives and benchmarks for the Decade of Vaccines (2010-2020), and establishes guidelines to monitor and assess the impact of the plan.

More than 1100 individuals from 140 countries and 290 organizations contributed to the development of the plan, and the Monitoring and Accountability Framework is the proposed mechanism to track progress for the immunization programs in the 194 WHO member countries distributed in six regions. Most importantly, the successful implementation of the GVAP will contribute to saving an estimated 24.6-25.8 million lives between 2011-2020.

In the Americas, the GVAP will complement the Regional Immunization Vision and Strategy (RIVS), a plan developed to adapt the GIVS to regional priorities. The reporting mechanisms to measure regional progress on RIVS will be used to monitor the implementation of the GVAP.[3]

The GVAP has seven indicators corresponding to the plan's five major goals (Table 1) and 16 indicators corresponding to its six strategic objectives (Table 2). Data collection for these indicators is expected to be a shared responsibility

See **GVAP** on page 2

[1] Global Vaccine Action Plan 2011-2020. World Health Organization, 2013. Available at: http://www.dovcollaboration.org/action-plan/.

[2] Global Immunization Vision and Strategy. World Health Organization, 2006. Available at: http://www.who.int/immunization/givs/en/index.html.

[3] "PAHO EPI Tables Meet the WHO/UNICEF Joint Reporting Form." Immunization Newsletter. Volume XXVII: No. 1, p. 5.

In This Issue

Meeting of the Polio Laboratory Network in the Americas

While the Americas Region was certified free of the endemic transmission of polio in 1994, the possibility of importations, the continued circulation of wild poliovirus elsewhere in the world, and the existence of vaccine-derived polioviruses (VDPVs) and cases of vaccine-associated paralytic polio (VAPP) highlights the need for strong laboratory surveillance.

On 10-12 September 2012, representatives from the nine of the 11 polio laboratories in the Region met to review the status of the Polio Laboratory Network in the Americas. Representatives from the U.S. Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO), and the Pan American Health Organization (PAHO) also attended the meeting, which was held at the Malbrán Institute in Buenos Aires, Argentina.

In addition to assessing the status of the laboratory network, the main objectives of the meeting included reviewing recent advances in virological and molecular methodologies used in the Global Polio Laboratory Network (GPLN) and discussing issues relevant to the operation and management of laboratories.

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among actors at all levels of the immunization community. In practice, most of the monitoring and impact indicators are based on information that is already routinely collected in the Americas Region, with the exception of vaccination coverage rates by income group and data evaluating the population's confidence in vaccines. Special studies will be conducted to obtain this information and will complement data submitted through the PAHO-WHO/UNICEF Joint Reporting Form (JRF), which will be the main mechanism for monitoring the implementation of the GVAP.

Progress reports on the implementation of GVAP will be a shared responsibility among the national, regional, and global levels of immunization. Member States will continue to use the JRF to provide PAHO with information on the technical and programmatic performance of national immunization programs in March-April of each year. In preparation for completing the JRF, national immunization programs usually begin the process of data analysis at the beginning of each year, reviewing information with other technical areas in the Ministry of Health, immunization partners (interagency coordinating committees), and national immunization technical advisory committees where applicable. ■

Additional information on the impact of the GVAP in Latin America and the Caribbean can be found in the article "What the Global Vaccine Action Plan Means for the Americas" on page 4.

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Following three days of discussion, laboratories agreed to meet performance standards as defined by the GPLN; resume on-site visits from PAHO's regional laboratory coordinator (RLC) in order to allow comprehensive assessments of the laboratories' capabilities and needs; comply with new algorithm targets; ensure that all poliovirus isolates are appropriately screened for VDPVs; and report any wild poliovirus or VDPV detected after sequencing to the national authorities and the RLC within 24 hours.

Laboratories were also encouraged to work with surveillance personnel and authorities to implement environmental surveillance, identify data omissions and verify accuracy of laboratory results in PAHO's weekly Polio Bulletin, monitor the performance of laboratory indicators, and provide timely feedback to each laboratory. ■

**A version of this article has also been published in the WHO's Global Immunization Newsletter: "Meeting of the Polio Laboratories Network". Global Immunization Newsletter. November 2012 (p. 11).*

Table 1: Proposed Goal-Level Indicators and Targets[1]

GOAL	TARGET BY 2015	TARGET BY 2020
Achieve a world free of poliomyelitis	Interrupt wild poliovirus transmission globally (by 2014)	Certification of poliomyelitis eradication (by 2018)
Meet global and regional elimination targets	Neonatal tetanus eliminated in all WHO regions Measles eliminated in at least four WHO regions Rubella/congenital rubella syndrome eliminated in at least two WHO regions	Measles and rubella eliminated in at least five WHO regions
Meet vaccination coverage targets in every region, country, and community	Reach 90% national coverage and 80% in every district or equivalent administrative unit with three doses of diphtheria-tetanus-pertussis-containing vaccines	Reach 90% national coverage and 80% in every district or equivalent administrative unit with all vaccines in national programmes, unless otherwise recommended
Develop and introduce new and improved vaccines and technologies	At least 90 low-income and middle-income countries have introduced one or more new or underutilized vaccines	All low-income and middle-income countries have introduced one or more new or underutilized vaccines Licensure and launch of vaccine or vaccines against one or more major currently non-vaccine preventable diseases Licensure and launch of at least one platform delivery technology
Exceed the Millennium Development Goal 4 target for reducing child mortality	Reduce by two thirds, between 1990 and 2015, the under-five mortality rate (Target 4.A)	Exceed the Millennium Development Goal 4 Target 4.A for reducing child mortality

[1] These proposed indicators will be presented to the WHO EB and World Health Assembly for final review in 2013. The Strategic Advisory Group of Experts on immunization will also consider the development and addition of indicators to monitor equity in access to vaccines between countries, and integration of immunization systems into broader health systems, respectively.

Table 2: Proposed Strategic Objective-Level Indicators

STRATEGIC OBJECTIVE

1
ALL COUNTRIES COMMIT TO IMMUNIZATION AS A PRIORITY.

INDICATORS

- Domestic expenditures for immunization per person targeted
- Presence of an independent technical advisory group that meets defined criteria

2
INDIVIDUALS AND COMMUNITIES UNDERSTAND THE VALUE OF VACCINES AND DEMAND IMMUNIZATION BOTH AS A RIGHT AND A RESPONSIBILITY.

INDICATORS

- Percentage of countries that have assessed (or measured) confidence in vaccination at subnational level[2]
- Percentage of un- and under-vaccinated in whom lack of confidence was a factor that influenced their decision[2]

3
THE BENEFITS OF IMMUNIZATION ARE EQUITABLY EXTENDED TO ALL PEOPLE.

INDICATORS

- Percentage of districts with 80% or greater coverage with three doses of diphtheria-tetanus-pertussis containing vaccine
- Reduction in coverage gaps between lowest and highest wealth quintile and another appropriate equity indicator

4
STRONG IMMUNIZATION SYSTEMS ARE AN INTEGRAL PART OF A WELL-FUNCTIONING HEALTH SYSTEM.

INDICATORS

- Dropout rate between first dose and third dose of diphtheria-tetanus-pertussis containing vaccines
- Sustained coverage of diphtheria-tetanus-pertussis containing vaccines 90% for three or more years
- Immunization coverage data assessed as high quality by WHO and UNICEF
- Number of countries with case-based surveillance for vaccine-preventable diseases that meet quality standards

5
IMMUNIZATION PROGRAMMES HAVE SUSTAINABLE ACCESS TO PREDICTABLE FUNDING, QUALITY SUPPLY AND INNOVATIVE TECHNOLOGIES.[3]

INDICATORS

- Percentage of doses of vaccine used worldwide that are of assured quality

6
COUNTRY, REGIONAL AND GLOBAL RESEARCH AND DEVELOPMENT INNOVATIONS MAXIMIZE THE BENEFITS OF IMMUNIZATION.

INDICATORS

- Progress towards development of HIV, TB, and malaria vaccines
- Progress towards a universal influenza vaccine (protecting against drift and shift variants)
- Progress towards institutional and technical capacity to carry out vaccine clinical trials
- Number of vaccines that have either been re-licensed or licensed for use in a controlled-temperature chain at temperatures above the traditional
- Number of vaccine delivery technologies (devices and equipment) that have received WHO pre-qualification compared to 2010

[2] Provisional indicator to be finalized based on outcomes of pilot assessment in selected regions
[3] The report on progress will also include a narrative report on progress with vaccine supply, pricing, and procurement.

What the Global Vaccine Action Plan Means for the Americas

As signatories of the Global Vaccine Action Plan (GVAP), countries in Latin America and the Caribbean (LAC) have made a commitment to work toward reaching the five goals set forth in the plan. In most cases, this means continuing work that has already been started and aligning regional initiatives for the elimination and control of vaccine-preventable diseases (VPDs) with global initiatives. Given the success of immunization programs in the Americas, the GVAP also highlights the importance of sharing lessons learned and best practices from the Americas Region in immunization with other countries in the world.

Aligning GVAP with RIVS

Established in 1977, the Expanded Program on Immunization (EPI) in the Americas has achieved tremendous success in reducing VPDs and in producing sustainable, self-sufficient immunization programs. In this respect, one key component of the EPI's success has been inter-country collaboration and willingness to participate in regional immunization strategic plans and initiatives (e.g., regional polio, measles, and rubella elimination).

In 2007, the Pan American Health Organization (PAHO) developed the Regional Immunization Vision and Strategy (RIVS) 2007-2015. The RIVS calls upon Member States to maintain the achievements of vaccination, address the unfinished immunization agenda, and face new challenges. PAHO's Directing Council, composed of ministers of health of all countries in the Americas Region, formally endorsed the RIVS in 2010 and charged PAHO and countries with ensuring that its goals are achieved.[1]

Goals of the RIVS coincide largely with the goals of the GVAP. While some objectives differ slightly (e.g., RIVS: "improve coverage levels in low-performing districts" vs. GVAP: "meet vaccination coverage targets in every community"), the underlying principles shared by the documents are similar, and difficulties in transitioning from one plan to the other are not anticipated.

In fact, the GVAP serves to revitalize the immunization agenda of the Americas. The plan focuses on vaccination both as an individual right and a shared responsibility, tackles hesitancy to vaccination through interdisciplinary cooperation among governments, media outlets, and other partners, and emphasizes the importance of immunization programs as an integral component of strong health systems. Additionally, GVAP provides an opportunity to promote regional vaccine production, making possible sustainable, affordable, and high-quality vaccines—an important issue in the Americas due to the high disease burden of rotavirus, pneumococcus, and human papillomavirus (HPV) and the high price of vaccines to protect against these pathogens.

In signing World Health Assembly (WHA) Resolution 65.17, countries committed to reporting on an annual basis to regional committees on progress made in implementing the GVAP. PAHO is already aligning reporting practices to the information needs for monitoring progress towards achieving the goals and objectives of the GVAP. Countries of the Americas already report immunization and VPD data to PAHO. To minimize the reporting burden of countries, PAHO is working to ensure that all data needed to monitor the GVAP indicators are part of the information annually requested through the PAHO-WHO/UNICEF Joint Reporting Form on immunization (JRF).[2] In 2013, variables on vaccine hesitancy were included and coverage data by municipality was also requested for the first time. PAHO and other Regional Offices of the World Health Organization (WHO) will report to WHO Headquarters, where data to inform progress towards benchmarks will be consolidated. In turn, the WHO Director General will report to the Strategic Advisory Group of Experts on immunization (SAGE), the WHO Executive Board, and the WHA.

Opportunities also exist to align ongoing activities with the GVAP. For example, many countries in the Region of the Americas are working to raise immunization coverage levels in low-performing districts by designing interventions tailored to the challenges identified in these areas. This project directly relates to Strategic Objective 3 of the GVAP, which calls for the benefits of immunization to be equitably extended to all people and requires that operational research be conducted to generate information on the causes of undervaccination. In accordance with RIVS and the GVAP, PAHO has worked in the last year to develop surveying tools to assess missed opportunities for vaccination (MOVs) in health facilities. The goal of this activity is to design data-driven interventions to bring the benefits of immunization to those who need it most.

Countries will continue to discuss how to best implement and monitor the GVAP during the Technical Advisory Group (TAG) meeting on vaccine-preventable diseases in July 2013.

Sharing Lessons Learned and Best Practices with the World

Countries in the Americas were among the first developing countries to eliminate polio, measles, and rubella, to reach high coverage rates through routine immunization, to widely use legislation to protect budget lines for immunization, and to introduce new vaccines against rotavirus and pneumococcal disease into their routine childhood immunization programs. As a result, the Americas Region is in a unique position to help developing countries elsewhere with challenges related to disease reduction and elimination, new vaccine introduction, immunization program management, and the development of legislation and policy that protects vaccination as a public good.

PAHO and countries have shared experiences in a variety of forums, including meetings, country visits, and peer-reviewed articles in medical journals. The GVAP highlights the importance of continuing these activities and exploring whether other opportunities exist for collaboration.

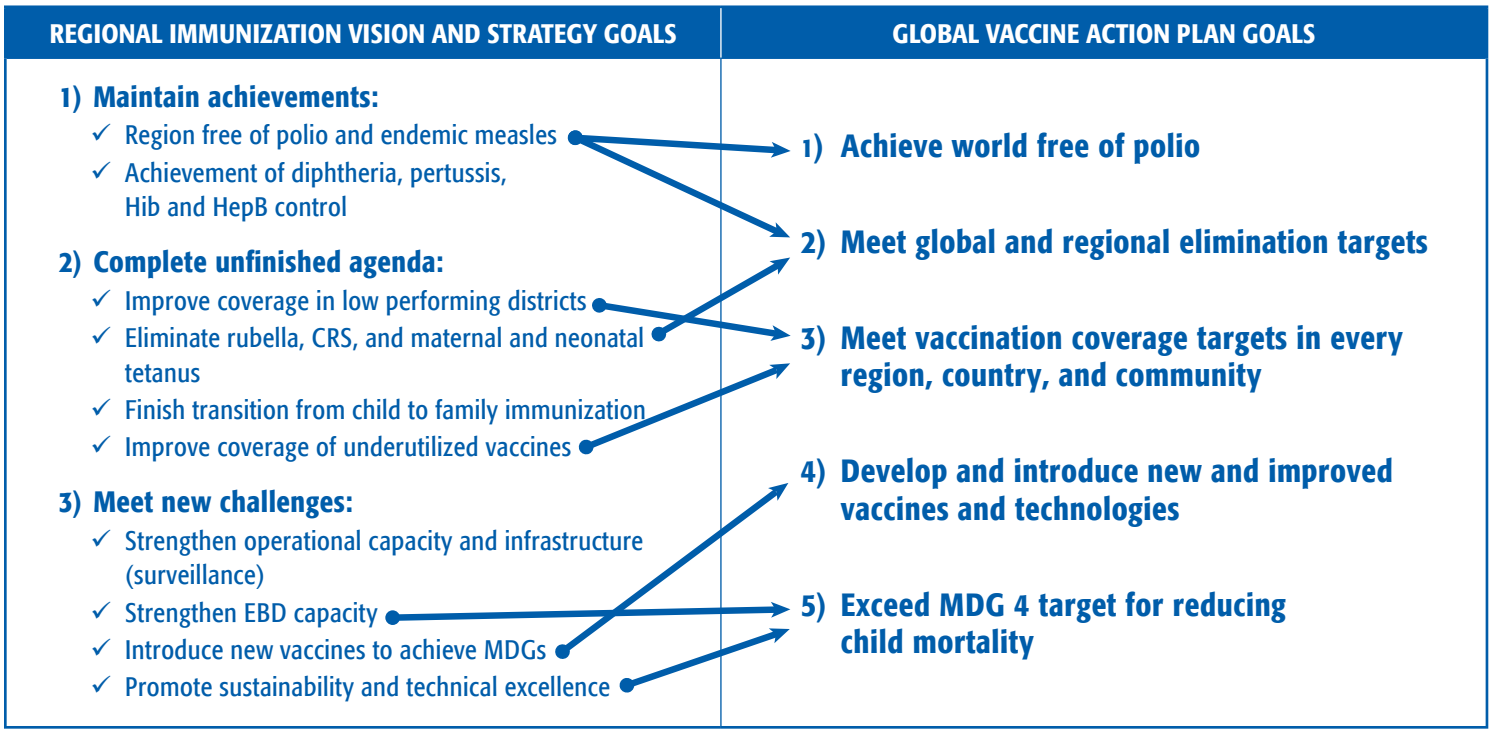
One such opportunity relates to the GVAP's Strategic Objective 1, which calls on countries to strengthen the national capacity of governments to develop evidence-based policies on immunization. Established in 2006, PAHO's ProVac Initiative shares similar goals. ProVac has developed vaccine program costing tools and data collection surveys to aid countries in making evidence-based decisions on new vaccine introduction. In 2012, due to ProVac's success in LAC, an international working group was established to share the Initiative's tools and study methodologies with countries across the globe.[3] The GVAP underscores the importance of ProVac continuing to help countries in other WHO regions replicate the success of many LAC countries in making evidence-based decisions.

LAC countries may also help other countries achieve the GVAP by sharing lessons learned from Vaccination Week in the Americas (VWA). Since its inception in 2003, VWA has resulted in the vaccination of more than 410 million people and has provided valuable opportunities to promote immunization within the government and among the public.[4] In this respect, VWA is relevant to the GVAP's Strategic Objective 2, which necessitates that individuals and communities understand the value of vaccination and regard immunization services as both a right and a responsibility. While PAHO and LAC

See **WHAT GVAP MEANS FOR THE AMERICAS** on page 5

[1] Pan American Health Organization. *Resolution CD50.R14.* 50th Directing Council, Washington, D.C., United States (2010).
[2] "PAHO EPI Tables Meet the WHO/UNICEF Joint Reporting Form." Immunization Newsletter. Volume XXVII: No. 1, p. 5.
[3] "The ProVac International Working Group begins its first country study of the two-year pilot phase." Global Immunization Newsletter. June 2012; Vol VI (p. 9).
[4] Pan American Health Organization: Vaccination Week in the Americas (website). [http://new.paho.org/vwa/].

Proposed Strategic Objective-Level Indicators



Private and Public Health Sectors Collaborate in Measles and Rubella Surveillance in Chile*

The Emergency Plan of Action to Maintain the Americas Free of Measles, Rubella, and Congenital Rubella Syndrome (CRS) includes a specific recommendation to improve disease surveillance in the private sector. Additionally, the Pan American Health Organization's (PAHO) Technical Advisory Group (TAG) on vaccine-preventable diseases highlighted the private sector's important role in maintaining disease elimination in 2009.

To enhance cooperation between private and public health sectors in Chile, representatives from four large private clinics from the Metropolitan Region, a private laboratory, the Chilean Ministry of Health, the National Health Institute, the Chilean Navy, and PAHO met in Santiago, Chile on 4 December 2012.

The meeting's objectives were to develop a regional strategy for disease surveillance based on best practices and lessons learned from the private sector; clarify data development practices and processes in the private sector; define information gaps and research needs related to private sector surveillance in Chile; estimate the number of suspected and confirmed cases reported to the national system through private clinics and laboratories; and review evidence-based recommendations from Chile on the best steps for strengthening private sector participation in disease surveillance in the Region.

Based on the main findings of the meeting, surveillance in Chile is effective and has successfully involved private clinics in detecting and monitoring suspected measles and rubella cases. Indeed, strategies exist for coordinating and integrating surveillance systems in the private and public sectors. Furthermore, the country's legal framework for surveillance is well defined, hospitals have internal infection control rules for suspected cases (airway isolation), and physicians play an essential role in detecting and reporting possible measles and rubella cases.

It is hoped that the successful collaboration between the public and private sectors in Chile can be replicated in other countries in the Americas where the surveillance of vaccine-preventable diseases is a priority.■

**A version of this article was also published in the WHO's Global Immunization Newsletter: "Private Health Sector Meeting for Measles/Rubella Surveillance in Chile." January 2013 (p. 5).*

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countries have already shared best practices in community involvement and social mobilization with other WHO Member States, thereby contributing to the first-ever World Immunization Week (WIW) in 2012, the Region looks forward to additional opportunities to help countries elsewhere publicize and promote immunization.

Lastly, many LAC countries have developed nom inal immunization registries to facilitate coverage monitoring.[5] These registries help countries to identify areas where target coverage levels have not been reached, implement corrective measures, and ultimately achieve Strategic Objective 3 of the GVAP. Moving forward, PAHO will explore how country experiences in developing nominal registries might be translatable to other countries in the world. ■

[5] "Immunization Registries in Latin America and the Caribbean: Progress and Lessons Learned." Immunization Newsletter. Volume XXXIV: No. 6, p. 1.

The Development of a Regional Framework for Monitoring Coverage and Evaluating the Impact of HPV Vaccination*

On 8–9 November 2012, the Pan American Health Organization (PAHO) convened an expert meeting to develop a regional framework for coverage monitoring and impact evaluation of human papillomavirus (HPV) vaccination in Buenos Aires, Argentina. The Malbrán Institute, Argentina's National Institute for Infectious Diseases, hosted the meeting in response to a request made by the regional Technical Advisory Group (TAG) on vaccine-preventable diseases in July 2011.

Eighteen experts from four Latin American countries (Argentina, Bolivia, Brazil, and Colombia), the U.S. Centers for Disease Control and Prevention (CDC), the Australian HPV vaccination program and cancer registry, the World Health Organization (WHO), and PAHO participated in the meeting. The objectives of the meeting were to examine the report of a 2009 WHO meeting on a similar subject; share existing country plans and experiences; identify national opportunities for the surveillance of HPV-related diseases and HPV diagnostics; and outline the steps necessary for the completion of a regional framework.

In addition to listening to presentations from experts, participants contributed to two working groups on HPV monitoring and impact evaluation. Several countries in the Region are transitioning toward nominal immunization registries. These registries present valuable opportunities for data collection on HPV vaccination, coverage monitoring, and long-term impact evaluation.

Experts also had the opportunity to identify endpoints for impact evaluation of HPV vaccination in the short, medium, and long terms. During the first semester of 2013, the group of experts intends to develop generic protocols for monitoring the identified endpoints and a concept note for establishing a regional HPV laboratory network. The proposal for a regional framework for coverage monitoring and impact evaluation of HPV vaccination will be presented to the TAG in July 2013. ■

**A version of this article was also published in the WHO's Global Immunization Newsletter: "Expert Consultation for the Development of a Regional Framework for Coverage Monitoring and Impact Evaluation of HPV Vaccination." November 2012 (p. 10).*

PAHO Holds Workshop to Systematize HPV Vaccination Experiences of Countries in Latin America*

On 30-31 October 2012, representatives from six countries (Argentina, Bolivia, Brazil, Colombia, Honduras, and Panama) participated in a workshop to systematize human papillomavirus (HPV) vaccination experiences in Santa Cruz, Bolivia. These countries were among the first in the Americas Region to universally adopt HPV vaccine into their national schedules. Professionals from the International Planned Parenthood Federation, the World Health Organization (WHO), and the Pan American Health Organization (PAHO) also attended the meeting. The workshop was the first organized by PAHO exclusively on HPV vaccination since May 2009.

Objectives of the workshop included sharing national and subnational experiences in the introduction and implementation of HPV vaccine; identifying strengths and weaknesses of the managerial, operational, and logistical processes specific to immunization programs; determining opportunities for integrating cervical cancer prevention with adolescent health programs; and defining lessons learned for other countries in the Americas considering the introduction of HPV vaccine.

After listening to standardized presentations from each country, participants contributed to three working groups that discussed 1) vaccination strategies and tactics, 2) data collection and estimation of HPV vaccination coverage, and 3) the intgration of HPV vaccination with cervical cancer prevention and control programs and health programs for young people (including communication with adolescents, parents, and the community).

Details from the country presentations and the conclusions of the working groups will be published shortly. Preliminary conclusions indicated that all countries use a combination of delivery strategies to reach adolescents; that the transition toward nominal immunization registries (often in an electronic format) in several countries is beneficial for estimating HPV vaccine coverage rates; and that integration of HPV vaccination with other health program activities is mainly limited to communication initiatives shared by both programs. ■

Countries and Territories Using HPV Vaccine, Region of the Americas

YEAR	HPV
2006	USA
2007	CAN
2008	PAN
2009	-
2010	-
2011	ARG, MEX, PER*
2012	COL
2013	PAR, TRT, URU
TOTAL	**10 COUNTRIES**

Territories are not included.
*Currently HPV vaccine use on hold.

**A version of this article was also published in the WHO's Global Immunization Newsletter: "Workshop to Systematize HPV Vaccination Experiences of Early-adopter Countries." November 2012 (p. 8).*

Table 1. Prices for Vaccines Purchased through the PAHO Revolving Fund, 2013 (prices in US$)

Vaccine		Doses per vial	Average price per dose
BCG	Bulgaria origin	10	$0.1385
	India origin	10	$0.1150
Td Adult		10	$0.1005
DT Pediatric		10	$0.1115
DPT		10	$0.1970
Tdap Triple Acellular Adolescent/Adult		1	$8.8794
DTaP Triple Acellular Pediatric		1	$10.8000
DTaP-IPV-Hib (Vial +PFS)		1	$10.0000
DTP-Hepatitis B-Hib (pentavalent)	Lyophilized	1	$2.5200
	Liquid	1	$2.8499
	Liquid	10	$2.2000
DTP-Hib	Lyophilized	1	$2.6500
	Liquid	10	$3.4500
Hepatitis A	Adult	1	$11.0000
	Pediatric	1	$7.1000
Hepatitis B (Recombinant)	Adult	1	$0.4800
		10	$0.1902
	Pediatric	1	$0.2500
Hib Lyophilized		1	$1.9500
Human Papillomavirus	Bivalent	1	$13.0800
	Quadrivalent	1	$13.7900
Influenza Seasonal Northern Hemisphere	Adult-Canadian Origin	10	$3.7000
	Adult-French Origin	10	$3.5000
	Adult-Korean Origin	10	$3.2000
	Adult-British Origin	10	$2.9800
	Pediatric-Korean Origin	20	$1.3500
	Pediatric-French Origin	20	$1.7500

Vaccine		Doses per vial	Average price per dose
Meningococcal A+C Polysaccharide		10	$1.5000
Meningococcal C Conjugate		1	$19.5000
Measles/Rubella		1	$1.7000
		10	$0.5240
Measles/Mumps (Zagreb Strain)/Rubella		1	$2.0500
		5	$0.9900
		10	$0.9760
Measles/Mump (Jeryl-Lynn Strain)/Rubella		1	$6.0000
Measles/Mumps (Urabe Strain)/Rubella		1	$3.6000
Pneumococcal Conjugate Pediatric (10-valent)		1	$14.1200
Pneumococcal Conjugate Pediatric (13-valent)		1	$15.8400
Pneumococcal Polysaccharide Adult (23-valent)		1	$6.6000
		5	$6.5000
Polio, Oral (Glass)		20	$0.1467
Polio, Oral (Plastic)		10	$0.3000
Polio, Inactivated, Belgium Origin		1	$4.1400
Polio, Inactivated, Holland Origin		1	$2.9000
Rabies Human Use (Vero Cells), French Origin		1	$10.6000
Rabies Human Use (Purified Chick Embryo Cell Culture), Indian Origin		1	$10.5000
Rotavirus, Liquid	2-dose Immunization Schedule	1	$6.5000
	3-dose Immunization Schedule	1	$5.1500
Varicella		1	$9.9000
Yellow Fever	Brazilian Origin	10	$0.8500
	French Origin	10	$1.1000

Table 2. Prices for Syringes Purchased through the PAHO Revolving Fund, 2013 (prices in US$)

Disposable Syringes, Plastic with Attached Needle

Size	Packed per case	Price per unit *
1cc 22G x 1 ½"	1400	0.0319
	2000	0.0320
	3600	0.0380
1cc 23G x 1"	1400	0.0319
	2000	0.0311
	3600	0.0380
1cc 25G x 5/8"	1400	0.0319
	2000	0.0320
	3600	0.0380
1cc 26G x 3/8"	3600	0.0420
5cc 22G x 1 ½"	1600	0.0365

Auto-disable Syringes, Plastic with Attached Needle

Size	Packed per case	Price per unit *
0.5cc 22G x 1 ½"	3000	0.0630
0.5cc 23G x 1"	1300	0.0408
	3000	0.0510
0.5cc 25G x 5/8"	1300	0.0408
	3000	0.0510
0.1cc 27G x 3/8"	1300	0.0490

*Prices FCA (Free Carrier) for each syringe.

Source: For up-to-date vaccine prices, please visit: www.paho.org/revolvingfund (click on "Vaccine Prices, 2013" – under the 'Revolving Fund Related Documents' column).

The *Immunization Newsletter* is published every two months, in English, Spanish, and French by the Comprehensive Family Immunization Project of the Pan American Health Organization (PAHO), Regional Office for the Americas of the World Health Organization (WHO). The purpose of the *Immunization Newsletter* 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 possible solutions to those problems.

An electronic compilation of the *Newsletter*, "Thirty years of *Immunization Newsletter:* the History of the EPI in the Americas", is now available at: www.paho.org/inb.

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.

ISSN 1814-6244
Volume XXXV Number 1 • February 2013

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110 1902 - 2012

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Trinidad and Tobago Introduces HPV Vaccine into National Program*

The Ministry of Health of Trinidad and Tobago recently introduced a vaccine against the human papillomavirus (HPV) into the country's National Immunization Program (NIP). The vaccine, HPV4, protects against four strains of HPV, including the two that account for most cases of cancer due to HPV infection. Dr. Faud Khan, the country's Minister of Health, officially launched the vaccine in a ceremony late last year.

In 2013, the NIP plans to vaccinate a cohort of 20,000 adolescent girls aged 11-12 years against the potential risk of cervical cancer. The initial administration of HPV4 to this target population began in January and should be completed by the end of November 2013. Health officials estimate that uptake will be 80%.

Vaccination of pre-adolescent girls against HPV is accomplished in a school-based program. In Trinidad and Tobago, such programs have been successful in delivering vaccines in the country's immunization schedule to children in the primary school system. However, since almost half of the cohort intended for HPV vaccination attends secondary schools, this would be the first time students at secondary schools are immunized through the program.

The Ministry of Health publicized the introduction of HPV4 by conducting first-sensitization sessions with the media personnel and relevant national stakeholders. Following the launch of the campaign, a radio station aired a two-hour program on cervical cancer, screening, treatment, and prevention. To complement these efforts, promotional posters and brochures on HPV vaccination were distributed to health care providers and in health facilities throughout the country.

Numerous training and sensitization sessions were also conducted for nurses, physicians, principals, parent-teacher associations, and religious groups. Media communication efforts included newspaper advertisements and a list of frequently asked questions on the Ministry of Health's website.■

Representatives from the National Parent Teacher Association, Family Planning Association, and staff from the Ministry of Health of Trinidad and Tobago

Contributed by: Yitades Gebre, PAHO/WHO and Gwendolyn Snaggs, Ministry of Health, Trinidad and Tobago.

**A version of this article was also published in the WHO's Global Immunization Newsletter: "Trinidad and Tobago Rolls Out HPV Vaccination Programme for Adolescent Girls." February 2013 (p. 3).*