Immunization Newsletter

Pan American Health Organization

Volume XXXVI Number 5

Immunize and Protect Your Family

October 2014

Partnership between the Chilean Infectious Disease Society and the Ministry of Health Launches Online Course on Measles and Rubella



Chile has documented that there has been no indigenous transmission of measles and rubella since 1993 and 2008, respectively. Achieving this elimination milestone requires that health professionals, particularly clinicians, commit to timely identifying and reporting suspect measles/ rubella cases and those that are imported or linked to importations. This can be accomplished through surveillance and the appropriate differential diagnosis of febrile rash illnesses (FRI) to rule out or confirm measles or rubella cases. Considering that FRI can have many causes and many physicians do not have the clinical experience of diagnosing cases of measles or rubella, these diagnoses represent a complex challenge.

These facts have prompted the Chilean Infectious Diseases Society (SOCHINF), in collaboration with the Ministry of Health and the Pan American Health Organization (PAHO), to develop an online course to improve FRI reporting and investigation. The course lasts two and a half months, is completely free and provides 50 hours of academic credits. Approximately 160 doctors from all over the country will participate in the course entitled "The challenge of the patient with a rash in the context of measles and rubella elimination in the Americas," which has been actively promoted by Dr. Katia Abarca, one of the members of the National Measles-Rubella Elimination Commission in Chile.

Beneficially, the collaborative efforts behind this online course will also:

- Create a strategic alliance between Chile's Ministry of Health, SOCHINF, and PAHO to sustain the elimination of measles and rubella in Chile.
- Promote the support of scientific societies (SOCHINF) in training and raising awareness about measles-rubella surveillance among physicians.

To find out more, please visit this website (in Spanish): http://www.sochinf.cl/sitio/index.php?id=273

Contributed by: Doris Gallegos, Epidemiology Department, Ministry of Health-Chile; Dr. Roberto Del Aguila, PAHO-Chile; Pamela Bravo, PAHO-Washington, DC

In This Issue

- 1 Partnership between the Chilean Infectious Disease Society and the Ministry of Health Launches Online Course on Measles and Rubella
- 1 Guyana Conducts its First Assessment of Effective Vaccine Management
- 4 Measles/Rubella Outbreak Response Workshop in Uruguay
- **5** Vaccination during Emergency Situations
- 6 Plan of Action for Maintaining Measles, Rubella, and Congenital Rubella Syndrome Elimination in the Region of the Americas
- 7 Measles/Rubella/Congenital Rubella Syndrome Surveillance Data Final Classification, 2013
- 8 Vaccination Week in the Americas Recognized as One of Five Memorable Movements in Public Health

Guyana Conducts its First Assessment of Effective Vaccine Management



On 4-21 July 2014, the first assessment of Effective Vaccine Management (EVM) was carried out in Georgetown (Guyana) to assess good practices on performance quality of the cold chain and vaccine supply chain, syringes, and other supplies for the Expanded Program on Immunization (EPI). The assessment covered the one-year period from 1 July 2013 to 30 June 2014. Using the guidelines in the EVM methodology, sites were randomly selected using the site selection tool. Sample size was determined based on a 90% confidence level and a $\pm 10\%$ precision level for Guyana, taking country context into account. For this assessment, a total of sixteen establishments were randomly selected, with sites categorized as three vaccine stores in district hospitals at the lowest distribution level, and 13 health centers at the service delivery level. The national vaccine store at the primary level was the only non-randomly selected facility, because it is the only primary-level store in the country. The selected facilities correspond to eight of Guyana's ten regions.

International evaluators from the Ministry of Health of Guyana, the Ministry of Health of Nicaragua, the World Health Organization (WHO), and the Pan American Health Organization (PAHO) participated in the assessment. Volume XXXVI Number 5

October 2014

EVM continued from page 1

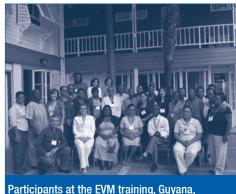
Five working teams were formed that were responsible for data collection and analysis using the complete EVM questionnaire and assessment tool. Each team consisted of an international evaluator and three national health workers. Once data were collected, the EVM tool generated "criteria scores" for the nine global EVM criteria, to determine supply chain and cold chain performance based on each criterion. Furthermore, "category scores" were generated for seven of the eight EVM categories, to obtain an overall map of the nature of the interventions needed to improve EVM criteria scores.

Before beginning the assessment, a four-day national workshop was held to harmonize knowledge and management of the tools and the structured EVM questionnaire. Twenty-two health professionals from the ten regions participated in the workshop.

In general, this first-time EVM assessment resulted in Guyana's vaccine supply chain receiving high scores for most criteria. The primary level received scores over 80% for eight of the nine EVM criteria assessed, a significant result considering that 80% is the minimum score for all criteria. The score for the harmonic mean at the primary level was 88%, ranking it among the top third among the 75 EVM assessments done in the world since 2009. The "equipment" category received a score of 76%. Challenges with temperature monitoring devices were identified as the leading cause of this lower score, which also contributed to the low score for criterion E2 at the primary level. The low score reported for this category indicates the need for an intervention to replace current temperature monitoring devices with ones that use newer technology.

At the lowest distribution level, five of the eight EVM criteria relevant to this level received scores above 80%. The harmonic mean of the score for the lowest distribution level was 79%.

At the service delivery level, with the exception of criteria E2 and E7, all relevant EVM criteria received scores close to or above 80%. The score for the harmonic mean of the service delivery point level was 84%.



Participants at the EVM training, Guyana, July 2014. Photo credit: Nora Lucia Rodriguez, PAHO.

This was the first EVM assessment in Guyana and in the Region of the Americas, and it has enabled the national EPI to identify key strengths and challenges with respect to vaccine management performance. Based on the underlying causes of the challenges and gaps suggested by the scores for each category, the program has developed an EVM improvement plan to sustain the high level of performance attained and address the main challenges. This EVM assessment was the first in Guyana and in the Region of the Americas.

General Introduction to EVM

I. What is EVM?

EVM (Effective Vaccine Management) is a new tool developed by WHO for assessing the quality of a country's cold chain, vaccine supply chain and logistics. A good quality vaccine supply chain is an essential element of an immunization system. A consistent high standard of performance can only be achieved if all the links in this chain are effectively monitored and assessed. If high standards are to be maintained, the monitoring process has to be continuous.

EVM is designed to be used for intensive assessments and also for supportive supervision and strengthening of individual vaccine stores and health facilities after the assessment has taken place.

EVM covers the entire in-country vaccine supply chain and cold chain from the point where vaccines are received from the vaccine manufacturer to the point of delivery of the vaccine to a child. The EVM assessment tool is based on quality management principles and is structured in the following way:

Nine criteria: There are nine overall criteria that the supply chain and cold chain must comply with. These require that:

- E1. Pre-shipment and arrival procedures ensure that every shipment from the vaccine manufacturer reaches the receiving store in satisfactory condition and with correct paperwork.
- E2. All vaccines and diluents are stored within WHO-recommended temperature ranges.
- E3. Cold storage, dry storage and transport capacity are sufficient to accommodate all vaccines and supplies needed for the program.
- E4. Buildings, cold chain equipment and transport systems enable the vaccine and supply chain to function well.
- E5. Maintenance of buildings, cold chain equipment and vehicles is satisfactory.
- E6. Stock management systems and procedures are effective.
- E7. Distribution between each level in the supply chain is effective.
- **E8.** Appropriate vaccine management policies are adopted and implemented.
- E9. Information systems and supportive management functions are satisfactory.

All of these nine criteria apply at the primary level. At the sub-national level and below, criterion E1 does not apply because vaccine is not received directly from the manufacturer at these levels. In addition, at the health facility level criterion E9 does not apply because information systems and support is largely the responsibility of central immunization program management and administrative staff in the higher level stores.

3

Requirements and sub-requirements: Each of the nine criteria is broken down into more detailed requirements and sub-requirements. For example criterion E2 (temperature control) has a requirement that:

 Continuous temperature records must be kept, and these records must demonstrate that vaccine has been stored correctly in both permanent and temporary cold stores.

This requirement is broken down further into more detailed sub-requirements:

- Store all vaccines and diluents at the correct temperature.
- Maintain complete temperature records for every freezer room, cold room, vaccine freezer, vaccine refrigerator and refrigerated vehicle.
- Keep temperature records in a safe place for a minimum of three years.
- Carry out an internal review of the temperature records every month.

Indicators: Finally, each of these sub-requirements is assessed by means of an indicator question. For example, the sub-requirement: "Store all vaccines and diluents at the correct temperature" is assessed by asking the vaccine store manager a series of questions, including:

- Can the vaccine store manager(s) or health worker(s) give the correct storage temperature range for each of the vaccines in the schedule?
- Do/Does the vaccine store manager(s) or health worker(s) know which vaccines on the schedule can be damaged by temperatures below 0°C?

Answers to the indicator questions are scored and this scoring is the basis of an EVM assessment.

Seven categories: In each EVM criterion, the indicator questions used to assess the status of requirements and sub-requirements can be grouped into functional categories. These categories are related to infrastructure, processes or knowledge. There are a total of eight EVM categories, out of which seven categories are scored during an EVM assessment. These categories are:

- 1. Category "Buildings" indicates the quality of building infrastructure in each criterion.
- 2. Category "Capacity" provides an indication on the adequacy of storage space available for transportation within the relevant criterion.
- 3. Category "Equipment" gives an indication on the quality of the cold chain equipment and devices used, as compared to the EVM standard.
- 4. Category "Management" indicates the level of the management processes relevant to the criterion.
- 5. Category "Maintenance" indicates how efficient the maintenance of infrastructure or devices has been implemented with the criterion.
- 6. Category "Training" provides an indication on the knowledge of staff with regards to the EVM criteria.
- 7. Category "Vehicles" gives an assessment on transportation.
- The general category is not scored, but it does provide information as to what is in place.

The seven scored EVM categories describe the nature of interventions required for improving the performance of the supply chain criteria. As such, they represent the core activities of the EVM improvement plan. While developing an EVM improvement plan, careful attention should be placed on identifying those categories that have the lowest score in each EVM criterion and planning for the relevant intervention.

2. How is the EVM questionnaire used?

The EVM questionnaire consists of a single common set of indicators. Not all of these indicators apply at every level in the supply chain and cold chain and some indicators are only relevant if certain conditions apply in the individual country context.

The EVM 'levels': The EVM tool assumes that there are four distinct types of stores in a supply chain and cold chain, as follows:

- 1. Primary stores: A primary vaccine store is one which receives vaccine direct from an international vaccine manufacturer or distributors or a local vaccine manufacturer.
- 2. Sub-national stores: An intermediate or sub-national (SN) store is a store which receives vaccine from a primary or higher level intermediate store.
- 3. Lowest distribution level stores: A lowest distribution store (LD) receives vaccine from a primary or a sub-national store and supplies vaccine to one or more health facilities.
- 4. Health facility or service delivery stores: A facility, with or without refrigeration, which receives vaccine from any higher level store and supplies immunization services directly to the people (e.g. health centers, health posts, clinics, hospitals, etc.).

Each of these four levels is assigned a specific subset of the overall indicators. For example, cold rooms are not used at the LD level, so an LD questionnaire will not include any of the cold room-related indicators. In general, the lower down the supply chain, the fewer indicators there are to score.

Volume XXXVI Number 5

October 2014

EVM continued from page 3

Context-specific indicators: Many of the EVM indicators are also context-specific. For example, when assessing a health facility that does not have a refrigerator there is no purpose in asking questions about refrigerators. On the other hand, if a health facility does have a refrigerator, these questions are completely relevant. The tool is designed to enable the user to 'switch off' or ignore these non-applicable questions. In the electronic version, this process happens automatically. If a user is filling in a paper version of the questionnaire they have to follow the guidance notes and ignore irrelevant questions.

Type of assessment: An EVM allows two alternative types of assessment:

- 1. Full assessment: A full assessment uses all the indicators that are applicable at a selected level.
- 2. Review assessment: A review assessment uses a sub-set of critical indicators that are applicable at the selected level. The non-critical indicators are excluded. Review assessments are quicker to do and can be used when a rapid evaluation is needed.

<u>Recommendations</u>: An essential part of an EVM assessment is the assessment team's list of recommendations for improvement. Wherever possible, draft recommendations should be drawn up at the time of the assessment and discussed with the person in charge of the facility. The EVM process will only work if vaccine store and health facility staff feel that they are personally involved in the process of improvement.

3. Output from an EVM assessment

There are two outputs from an EVM assessment:

- 1. A completed version of the electronic EVM assessment tool. All data collected in the field are entered into the electronic tool, which will give scores for each facility. These data will be analysed in various ways to produce charts for individual facilities and combined charts for each EVM 'level'.
- 2. An EVM assessment report. This document will summarise the results of the assessment and make key recommendations for improvements.

Measles/Rubella Outbreak Response Workshop in Uruguay

Specialists responsible for the epidemiological surveillance of vaccine-preventable diseases (VPD's) in 19 departments of Uruguay, managers of the Expanded Program on Immunization (EPI) in Uruguay, Border Health personnel, and staff of the National Reference Laboratory met in Montevideo on 30 July - 2 August 2014 to support the implementation of a workshop on measles/ rubella outbreak response in the post-elimination era. The objectives of the workshop were to share updated information on how to respond to measles and rubella outbreaks, including the best practices and the lessons learned from recent country experiences; to improve the skills and abilities of those in charge of epidemiological surveillance in response to measles and rubella outbreaks at the national and sub-national levels; and to provide technical feedback for a PAHO guide on the management of measles and rubella outbreaks in the post-elimination era.

Measles and rubella viruses continue to circulate in other regions of the world, and therefore, the Region of the Americas continues to be at permanent risk of importations. Similarly, outbreak scenarios in the post-elimination era have quite different characteristics, as compared to outbreaks occurring in the pre and near elimination phases. Measures to promptly and effectively respond to measles and rubella outbreaks have varied significantly and countries need to be able to implement interventions quickly and appropriately. This training was the main purpose of this workshop, during which a case study methodology was used to allow for an active and enriching discussion by all participants. Six working groups were formed and each of them was led by an international facilitator, who had previously been trained in the methodology (Measles/Rubella Outbreak Workshop, Cancun, December, 2013). The answers to the questions in each case study



Winners of the simulation exercise lift The Cup as a sign of triumph in Uruguay, August 2014. Photo credit: PAHO-Uruguay.

were presented in plenary sessions by the participants. On the second and final day of the workshop, an outbreak investigation simulation activity was conducted for the participants to apply the knowledge and skills gained during the workshop.

5

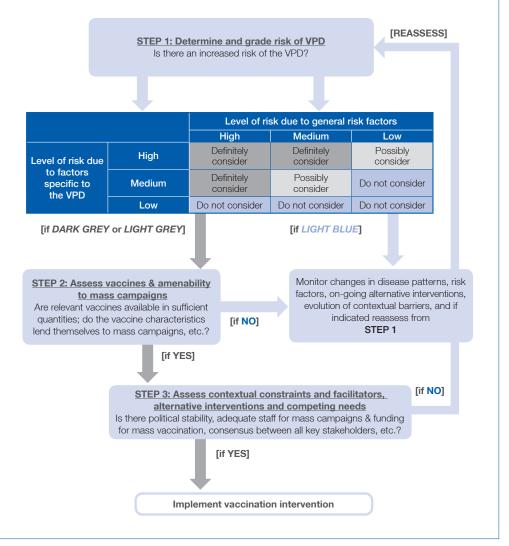
Vaccination during Emergency Situations

In 2013, the Technical Advisory Group (TAG) on Vaccine-preventable Diseases adopted the SAGE Working Group's Framework for Decision-Making on Vaccination in Acute Humanitarian Emergencies and endorsed the recommendations of PAHO's Immunization Program.

This framework for decision-making on vaccination in acute humanitarian emergencies was developed for national authorities and partner agencies to use and it proposes a standardization of the decision-making process in 3 steps. These steps are shown in the diagram to the right:

The Pan American Health Organization/ World Health Organization's (PAHO/WHO) Comprehensive Family Immunization Unit (FGL-IM) recommends the following:

- Ensure that all displaced people and/or people in shelters (adults and children), including health workers in the shelters and international humanitarian responders (such as personnel of international organizations and philanthropic church members), are vaccinated against measles/rubella and polio.
- Attempt to maintain routine vaccination with the basic vaccination schedule, since a reduction in coverage in the medium-term



could result in a resurgence of vaccine-preventable diseases that have already been controlled and/or eradicated, such as measles, rubella, polio, whooping cough, diphtheria, and tetanus.

- 3. Evaluate damage to the cold chain and the loss of biologicals and supplies (syringes).
- 4. Implement the temporary use of cold boxes to ensure the conservation of vaccines in the affected areas and their distribution, provided that there is ice available.
- 5. Implement the use of photovoltaic refrigerators for vaccine storage and ice production, guaranteeing sufficient batteries.
- 6. Initiate recovery of the cold chain (purchase of refrigerators, thermos, thermometers)
- 7. If the cold chain allows it, immediately re-stock vaccines utilized routinely by national immunization programs.

Conditions during disasters and humanitarian emergencies favor an increase in the incidence of diarrheal diseases (associated with sanitation and water quality) and respiratory diseases (associated with overcrowding). As part of an initial needs assessment, immunization activities (especially vaccination with measles-rubella containing vaccine) should be evaluated along with other emergency health interventions. Generally, mass immunization during natural disaster situations is not indicated and could divert limited human resources and materials from other more effective and urgent measures. Immunization campaigns could give a false sense of security, leading to the neglect of basic measures of hygiene and sanitation, which are more important during the emergency. Also, campaigns under difficult situations are not exempt from risks. However, when warranted, vaccination activities can save lives.

Mass vaccination would be justified when the recommended sanitary measures do not have an effect and if there is evidence of the progressive increase in the number of cases with the risk of an epidemic. Volume XXXVI Number 5

October 2014

EMERGENCY continued from page 5

PAHO recommends that country health officials and partner humanitarian agencies follow the three steps proposed by the Framework for Decision-making for Vaccination in Acute Humanitarian Emergencies, endorsed by WHO's SAGE:

- Assess the epidemiological risk posed by each potentially important vaccinepreventable disease within a given context;
- Evaluate the properties of each vaccine to be considered for intervention; and
- Prioritize the importance of vaccination in relation to other urgent public health interventions, carefully considering key ethical principles and prevailing contextual factors.

In general, vaccines with the following characteristics could be considered useful in this situation:

 Vaccines of proven efficacy, high safety and low reactogenicity;

- Vaccines that are easy to apply (singledose) and logistically feasible to maintain within the cold chain (storage available);
- Vaccines that confer rapid and long-lasting protection for people of all ages;
- Vaccines that are WHO prequalified, affordable, and that are available in sufficient quantities to guarantee the supply for the entire population at risk.

PAHO recommends that the use of these vaccines only be considered based on a careful assessment of pros and cons and under deliberation of the (poten

tially negative) operational, logistical and communication issues, following the steps described in the Framework¹.

Priority consideration would be given to vaccines currently used in national programs, especially the measles-rubella and polio vaccines to prevent the reintroduction of the viruses, yellow fever when urban spreading is possible and tetanus toxoid or tetanus-diphtheria vaccine early in the disaster to prevent tetanus cases after a mass injury event. To read recommendations on specific vaccines, please see the 2013 TAG Report², Annex A.

> World Health Organization

¹ Vaccination in acute humanitarian emergencies: a framework for decision making. WHO/IVB/13.07. October 2013. Available at http:// www.who.int/hac/techguidance/tools/vaccines_in_humanitarian_emergency_2013.pdf?ua=1

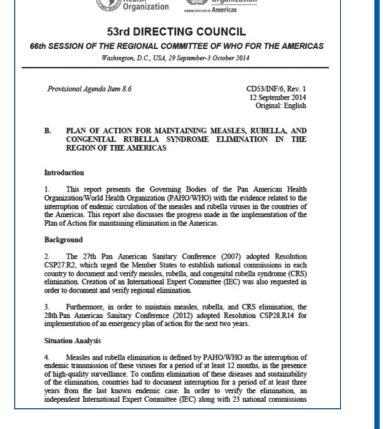
² PAHO's 2013 TAG Report, available online at http://www.paho.org/immunization/TAG-Reports

Plan of Action for Maintaining Measles, Rubella, and Congenital Rubella Syndrome Elimination in the Region of the Americas

In 2014, the 53rd Directing Council presented an information document during the 66th session of the Regional Committee of the World Health Organization (WHO) for the Americas, the "Plan of Action for Maintaining Measles, Rubella and Congenital Rubella Syndrome Elimination in the Region of the Americas," as part of the section of Progress Reports on Technical Matters. The Plan of Action includes:

- Background
- Situation Analysis
- Sustainability of Measles, Rubella and CRS Elimination
- Call to Action (Next Steps) for the Member States
- Action by the Directing Council

To access the entire document, please visit the following link (http://www.paho.org/hq/index.php? option=com_content&view=article&id=9774&Itemid =41062&Iang=en)



Pan American Health

7

Measles/Rubella/Congenital Rubella Syndrome Surveillance Data Final Classification, 2013

Country	Total Measles/ Rubella Suspect Cases Notified	Confirmed Measles			Confirmed Rubella			Congenital Rubella Syndrome Cases (CRS)	
		Clinical	Laboratory	Total	Clinical	Laboratory	Total	Suspected	Confirmed
Anguilla	0	0	0	0	0	0	0	0	0
Antigua & Barbuda	0	0	0	0	0	0	0	0	0
Argentina	338	0	0	0	0	0	0	116	0
Aruba									
Bahamas	2	0	0	0	0	0	0	0	0
Barbados	3	0	0	0	0	0	0	0	0
Belize	75	0	0	0	0	0	0	0	0
Bermuda	0	0	0	0	0	0	0	0	0
BES*								0	0
Bolivia	189	0	0	0	0	0	0	42	0
Brazil	5631	9	211	220	0	0	0	123	0
Canada			83ª	83		2	2		
Cayman Islands	0	0	0	0	0	0	0	0	0
Chile	174	0	0	0	0	0	0	114	0
Colombia	2436	0	1	1	0	0	0	372	0
Costa Rica	2430	0	0	0	0	0	0	0	0
Cuba		0	0	0	0	0	0	0	0
	1137								
Curaçao	0	0	0	0	0	0	0	0	0
Dominica	1	0	0	0	0	0	0	0	0
Dominican Republic	184	0	0	0	0	0	0	0	0
Ecuador									
El Salvador	331	0	0	0	0	0	0	0	0
French Guiana	1	0	0	0	0	0	0	0	0
Grenada	0	0	0	0	0	0	0	0	0
Guadeloupe	2	0	0	0	0	0	0	0	0
Guatemala	317	0	0	0	0	0	0	5	0
Guyana	48	0	0	0	0	0	0	0	0
Haiti	372	0	0	0	0	0	0	50	0
Honduras	148	0	0	0	0	0	0	68	0
Jamaica	183	0	0	0	0	0	0	0	0
Martinique	0	0	0	0	0	0	0	0	0
Mexico	5398	0	0	0	0	0	0	0	0
Montserrat	1	0	0	0	0	0	0	0	0
Nicaragua	185	0	0	0	0	0	0	37	0
Panama	155	0	0	0	0	0	0	2	0
Paraguay	461	0	0	0	0	0	0	2	0
Peru	476	0	0	0	0	0	0	0	0
Puerto Rico								0	0
Sint Maarten (Dutch part)	0	0	0	0	0	0	0	0	0
St. Kitts & Nevis	1	0	0	0	0	0	0	0	0
St. Lucia	0	0	0	0	0	0	0	0	0
St. Vincent & the Grenadines	1	0	0	0	0	0	0	0	0
Suriname	30	0	0	0	0	0	0	0	0
Trinidad & Tobago	4	0	0	0	0	0	0	0	0
Turks & Caicos	0	0	0	0	0	0	0	0	0
United States			187ª	187		9	9		1
Uruguay	7	0	0	0	0	0	0	0	0
Venezuela	577	0	0	0	0	0	0	3	0
Virgin Islands (UK)	0	0	0	0	0	0	0	0	0
Virgin Islands (US)								0	0
Total	18897	9	482	491	0	11	11	934	1

...No information provided; (a) Imported cases or cases related to importation

Source: ISIS, MESS systems and country reports *Bonaire, St. Eustatius and Saba

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 XXXVI Number 5 • October 2014

Editors: Carolina Danovaro and Hannah Kurtis Associate Editors: Cuauhtémoc Ruiz Matus and Octavia Silva

©Pan-American Health Organization, 2014. All rights reserved.

Immunization Newsletter

Volume XXXVI Number 5

October 2014

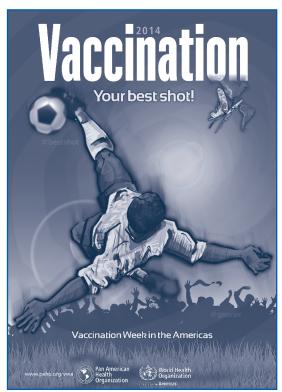
Pan American Health Organization

8

Vaccination Week in the Americas Recognized as One of Five Memorable Movements in Public Health

In early 2014, The Guardian UK published an article acknowledging five global public health movements to remember, one of which was the Pan American Health Organization's own Vaccination Week in the Americas. The other public health movements recognized in the list included: *Helping each other act responsibly together (Heart) to reduce HIV, Zambia, 1990s-2000s; Oral rehydration therapy for diarrhoea, Bangladesh, 1979; World Vision India HIV awareness campaign for people with a disability, 2009; and Wazazi Nipendeni (Love me, parents), Tanzania, 2012.*

The following descriptive text accompanies the section in the list dedicated to Vaccination Week in the Americas: "After a measles outbreak in Venezuela and Colombia in 2002, health ministers in the Andean states (Chile, Argentina, Bolivia, Peru, Ecuador, Venezuela and Colombia) planned a coordinated effort to prevent future outbreaks. The first Vaccination Week in the Americas was 2003 and since then more than 465 million people of all ages have been vaccinated against diseases such as measles, rubella, yellow fever, diphtheria, tetanus, polio and influenza. The media campaigns for the week include endorsements from popular Latin American celebrities." This article, along with information about the other global public health movements recognized, can be found on The Guardian UK's website (http://www.theguardian.com/global-development-professionals-network/ 2014/jun/06/five-memorable-movements-in-public-health).





Comprehensive Family Immunization Unit

525 Twenty-third Street, N.W. Washington, D.C. 20037 U.S.A. http://www.paho.org/immunization