



Measles, Rubella & CRS Rubella Watch

Rubella Watch is an electronic publication disseminated bimonthly by the Immunization Project of the Pan American Health Organization (PAHO), Regional Office for the Americas of the World Health Organization (WHO). *Rubella Watch* is a supplement to the *Immunization Newsletter* published by PAHO. The purpose is to provide you with the most up-to-date information on the measles, rubella and congenital rubella syndrome (CRS) elimination initiative currently underway in the Americas.

The goal: maintain measles, rubella, and CRS elimination in the Americas!

News from January-February 2010

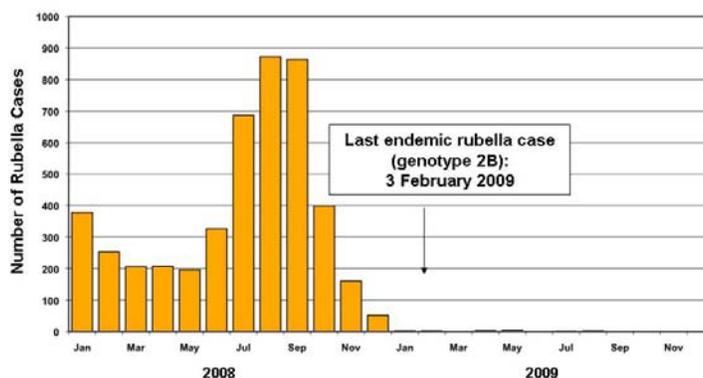
First Anniversary of the Interruption of Endemic Rubella Virus Transmission in the Americas!

The rash onset date of the last confirmed endemic rubella case in the Region of the Americas was 3 February 2009 in Buenos Aires Province. This suggests that the Region has achieved the elimination goal set for 2010 considering that more than a year has passed since an endemic rubella case has been confirmed in the Americas.

In 2008, a total of 4,536 confirmed rubella cases were reported in the Region, of which Argentina and Brazil accounted for 98% (countries that initially vaccinated only women in previous mass rubella vaccination campaigns). Following the outbreaks active case searches were implemented, focusing activities in

epidemiologically silent municipalities, to identify secondary cases and to follow-up contacts of cases. In addition, integrated measles/rubella surveillance and vaccination activities were intensified to rapidly detect and respond to suspected cases and to prevent secondary spread by reducing the number of susceptible people to measles and rubella viruses. In 2009 a 99% decrease in confirmed rubella cases was observed from the previous year (Figure 1). As of epidemiological week (EW) 7/2010 only the United States has reported a rubella case, confirmed as an importation from Kenya.

Figure 1. Monthly Distribution of Confirmed Rubella Cases, The Americas, 2008-2009*



*Data until 24 February 2010. Data reported by US for 2009 is provisional.

Source: Country reports to FCH/IM, PAHO.

Post Disaster Vaccination Response and Surveillance of Vaccine-preventable Diseases in Haiti

Haiti, a country that has suffered years of natural disasters, was struck by an earthquake on 12 January 2010. Considering that the epicenter of the earthquake was 17 km from the capital Port-au-Prince, this event resulted in the displacement of hundreds of thousands of people who have taken residence in temporary settlements provided by the Haitian government.

Endemic measles virus transmission was interrupted in Haiti in 2001. Reports from the national authorities indicate 54% coverage with measles-containing vaccine among one-year-old children (2008). In an effort to maintain elimination the country implemented a *catch-up* campaign with measles-rubella containing vaccine (MR) targeting the age group 1-19 years from November 2007-November 2008 reaching coverage >80%. The risk of a measles outbreak will depend upon the reintroduction of the measles virus into the population.

In this edition:

- First Anniversary of the Interruption of Endemic Rubella Virus Transmission in the Americas!.....1
- Post Disaster Vaccination Response and Surveillance of Vaccine-preventable Diseases in Haiti.....1
- Status of National Commissions to Document and Verify Measles, Rubella, and CRS Elimination.....3
- Maintaining Measles and Rubella Elimination: Follow-up Campaigns in 2010.....3
- TCC Sets the Stage for a Bi-national Launching between French Guiana and Suriname for VWA.....4
- Workshop for the Implementation of the ESAVI Surveillance System for the H1N1 Vaccine.....4

In order to prevent the reintroduction of endemic virus, a rapid vaccination response and intensification of surveillance activities was required. The Ministry of Public Health and Population (MPHP), with support from the Pan American Health Organization/World Health Organization (PAHO/WHO), the American Red Cross (ARC), the Centers for Disease Control and Prevention (CDC), the United Nations Children's Fund (UNICEF), and the United Nations Foundation (UNF) quickly developed a post disaster vaccination plan, which included vaccination activities to be implemented in 2 phases:

The objectives of the vaccination plan are:

- Vaccinate children aged 6 weeks – 8 months with DTP.
- Vaccinate children aged 9 months – 7 years with DTP and MR as well as provide vitamin A supplementation and albendazole (>2yrs).
- Vaccinate children aged ≥ 8 years, adolescents and adults, with Td.

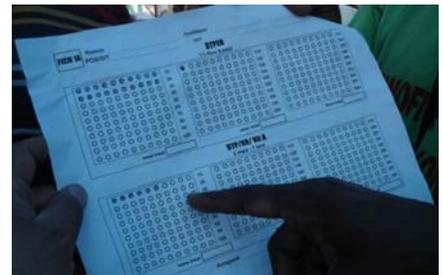
The vaccination is scheduled to occur in two phases:

- The first vaccination phase targets an estimated 250,000 children <8 years and 1.2 million older persons living in temporary settlements in the Metropolitan Area of Port-au-Prince and surrounding communes in the *l'Ouest* Department and Jacmel in the *Sudest* Department.
- A second vaccination phase will be implemented once the situation stabilizes to include the mass vaccination of all the population living in the affected areas in order to vaccinate those not reached during the first phase, as well as to provide a second dose to those already vaccinated.

As of 16 March 2010, it is estimated that approximately 400,000 persons have been vaccinated. At the conclusion of the vaccination in each temporary settlement, rapid coverage monitoring will be implemented to guarantee high vaccination coverage. Additionally, vaccination posts are being located in strategic points to complement the current vaccination rounds in the more than 300 settlements.

In order to support vaccination activities and strengthen surveillance to rapidly detect and investigate suspected cases of vaccine-preventable disease (VPD) (with a focus on the rapid detection of outbreaks), PAHO is coordinating an interagency taskforce comprised of personnel from PAHO, UNICEF, and CDC to support these efforts in the field. In addition the efforts of the field team will support the strengthening of the information system and the analysis of epidemiological data on VPDs to assist in monitoring surveillance indicators.

As of 15 March 2010, a total of 14 suspected measles cases have been reported from the 47 sentinel sites established in the country. Four cases did not meet standard case definitions and were discarded. Specimens were obtained for the remaining 10 suspected cases; all have been processed with negative results for both measles and rubella.



Photos (clockwise from top left): Image of a collapsed structure in Port-au-Prince; temporary settlements set up in Port-au-Prince's national stadium; health worker reviews a vaccination registry; Haitian people awaiting vaccination; young Haitian boy recently vaccinated; health workers wear recognizable shirts displaying the names of partners involved in post disaster vaccination response.

Photo credit: Dr. Carlos Castillo Solórzano

Status of National Commissions to Document and Verify Measles, Rubella, and CRS Elimination

In 2007 Resolution CSP27.R2 requested the formation of an International Expert Committee (IEC) responsible for documenting and verifying the interruption of endemic measles and rubella viruses in the Region of the Americas. In addition, the Resolution urged PAHO Member States to establish national commissions to collect and analyze the required data to support this process.

On 14 May 2008, Costa Rica became the first country of the Region to sign an executive decree to create a national commission for documenting elimination. Two meetings of the commission have been held to date. During the first meeting the members were sworn in and a review of the various components of the documentation and verification process was completed. During the second meeting country specific challenges were identified, including the analysis of “hot” cases and the verification of high homogeneous coverage >95% in all cantons. The next meeting of the national commission in Costa Rica will take place on 5 April 2010.

Currently Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Nicaragua, and Uruguay have formed national commissions. Seventeen additional countries have begun the process to establish commissions and the 8 remaining countries are encouraged to initiate the process in 2010.

The process to document measles, rubella, and CRS elimination by the national commissions, in collaboration with national immunization programs, should be finalized by the first quarter of 2012. This will provide ample time for the IEC to evaluate the evidence to verify elimination at the regional level by demonstrating that endemic measles and rubella virus transmission has been interrupted for at least 3 continuous years in the Americas.

Maintaining Measles and Rubella Elimination: Follow-up Campaigns in 2010

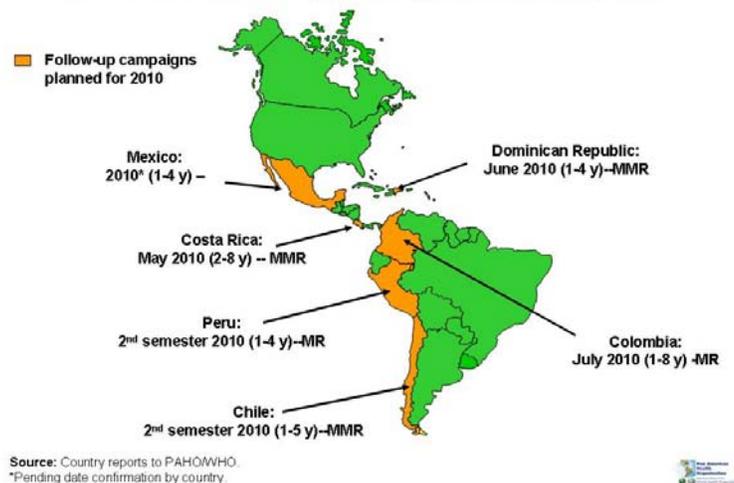
As the Region celebrates the first anniversary of the interruption of endemic rubella virus transmission one of the keys to maintaining measles and rubella elimination will depend upon achieving high coverage with measles-rubella (MR) containing vaccine in the routine program and in follow-up campaigns.

During 2010 six countries have committed to implementing high-quality follow-up campaigns. Collectively more than 20.6 million children, ranging from 1 to 8 years of age depending upon the country (Figure 2), will be protected against measles and rubella through campaigns in Chile, Colombia, Costa Rica, the Dominican Republic, Mexico,¹ and Peru. Regional experience has demonstrated that although countries strive to achieve coverage $\geq 95\%$ in the routine program, pockets of unprotected cohorts remain. An analysis of protected cohorts is carried out to support countries in the identification of populations susceptible to measles and rubella and to tailor interventions to reach even the most vulnerable populations.

The interruption of endemic measles and rubella virus transmission in the Western Hemisphere has been made possible through the continuation and intensification of measles/rubella supplementary immunization and surveillance activities. However, it remains imperative that countries of the Americas do not become complacent given the remarkable success achieved in measles, rubella, and CRS elimination. Countries should continue to guarantee a second opportunity with MR containing vaccine to ensure high population immunity and contribute to the prevention of secondary spread following importations to the Region.

The interruption of endemic measles and rubella virus transmission in the Western Hemisphere has been made possible through the continuation and intensification of measles/rubella supplementary immunization and surveillance activities. However, it remains imperative that countries of the Americas do not become complacent given the remarkable success achieved in measles, rubella, and CRS elimination. Countries should continue to guarantee a second opportunity with MR containing vaccine to ensure high population immunity and contribute to the prevention of secondary spread following importations to the Region.

Figure 2. Maintaining Measles/Rubella Elimination by Ensuring a Second Vaccination Opportunity, The Americas, 2010



¹ Pending confirmation by the country.

TCC Sets the Stage for a Bi-national Launching between French Guiana and Suriname for Vaccination Week in the Americas



A bi-national launching will take place along the border between French Guiana and Suriname, highlighting increasing collaboration between the countries.

As a result of the Technical Cooperation Among Countries project entitled, "South American borders free from measles and rubella" (South American TCC) the border area between French Guiana and Suriname will provide the backdrop to one of the regional launchings of *Vaccination Week in the Americas 2010 (VWA)*, which will take place from 24 April-1 May. The launching event is scheduled for 27 April and will count on the participation of PAHO Director, Dr. Mirta Roses Periago, as well as high level health authorities from the French Ministry of Health.

In addition to this launching, national health authorities from both countries are preparing a series of workshops targeting health workers in border areas to share immunization practices. Due to the continuous displacement of border populations, immunization of a child does not always occur in the child's country of origin; often immunization activities are carried out in neighboring countries. This presents additional challenges in the registration and follow-up of vaccination activities (administration of second, third, and booster doses).

The main objective of the workshops is to familiarize health workers in the use and interpretation of the vaccination record/card from their neighboring country, given that the cards are printed in different languages (Dutch, Portuguese, and English in the case of Suriname and French in the case of French Guiana). Workshops are scheduled to take place during VWA in four border cities: Albina and Apatou in Suriname and Maripasula and Saint Laurent in French Guiana. In addition, the two countries have committed to strengthening the reporting and sharing of epidemiological information and vaccination coverage data.

Despite language barriers, the South American TCC constituted a mechanism of articulation that resulted in the identification and discussion of common problems related to immunization and the exploration of joint solutions. This project has also made it possible to strengthen the coordination and communication between staff members and technical health personnel at the local (border areas) and national levels, which will benefit future immunization projects.

Workshop for the Implementation of the ESAVI Surveillance System for the H1N1 Vaccine

Lessons learned and best practices from the measles, rubella, and CRS elimination initiatives in the Americas underscore the need to strengthen collaboration between ESAVI surveillance personnel from the National Immunization Program (NIP) and pharmacovigilance representatives from the National Regulatory Authority (NRA). The introduction of the pandemic (H1N1) 2009 vaccines in the Region provides an opportunity to improve coordination between the two programs to support the integration of ESAVI surveillance systems in the Americas.

Nearly 52 staff members from 16 Latin American countries congregated in Havana, Cuba, from 26-28 January with the objective of strengthening the coordination and communication between the NRA and the NIP.

During the workshop, participants reviewed the current epidemiological situation of influenza A (H1N1), vaccine availability and vaccination activities implemented in other countries in the world, priority groups targeted with vaccination, and the ESAVI most frequently reported at the international level. According to the data provided to date from over 20 countries where more than 100 million doses have been administered, the ESAVIs most frequently reported are local reactions such as pain and reddening at the injection site. One of the serious events reported frequently (although less than the expected rate) has been anaphylaxis. Furthermore, deaths and symptoms of *Guillain-Barré Syndrome (GBS)* have been reported; however, according to preliminary research findings no association with the vaccination has been demonstrated.

For this reason PAHO/WHO plans to update and disseminate guidelines for monitoring ESAVIs potentially related to the pandemic (H1N1) 2009 vaccine. The guidelines will address the collection, analysis, and presentation of H1N1 vaccine safety data and information on the safety of vaccination of pregnant women. In addition, the guidelines will include updated protocols for monitoring GBS and anaphylaxis.

Furthermore, the ESAVI Surveillance Information System was presented, which will be made available to countries by PAHO/WHO. The system is a web-based application that facilitates the integration of vaccine safety surveillance into the following components: ESAVI Monitoring, Supply Management, and Quality Control.

PAHO coordinated a telephone conference with representatives from the NRA and personnel from the NIP responsible for ESAVI monitoring in each country to support vaccine safety monitoring. The conference was held on Thursday, 11 March and included a brief presentation from Costa Rica, Mexico, and Panama on vaccination activities with pandemic (H1N1) 2009 and an update on ESAVIs.



Participants proudly display materials from the workshop on the ESAVI surveillance system.

Photo credit: Fernando Revilla

Upcoming Events

Study Tour to the Americas: Visit of Chinese Delegation to Brazil and Washington, D.C. to Share Experiences in Measles, Rubella, and CRS Elimination

15-17 April – Sao Paulo and Brasilia, Brazil

19-20 April – Washington, D.C.

Editor: Dr. Carlos Castillo-Solórzano

Associate Editors: Christina Marsigli and Pamela Bravo