

Maternal immunization in Latin America: current status and lessons learned

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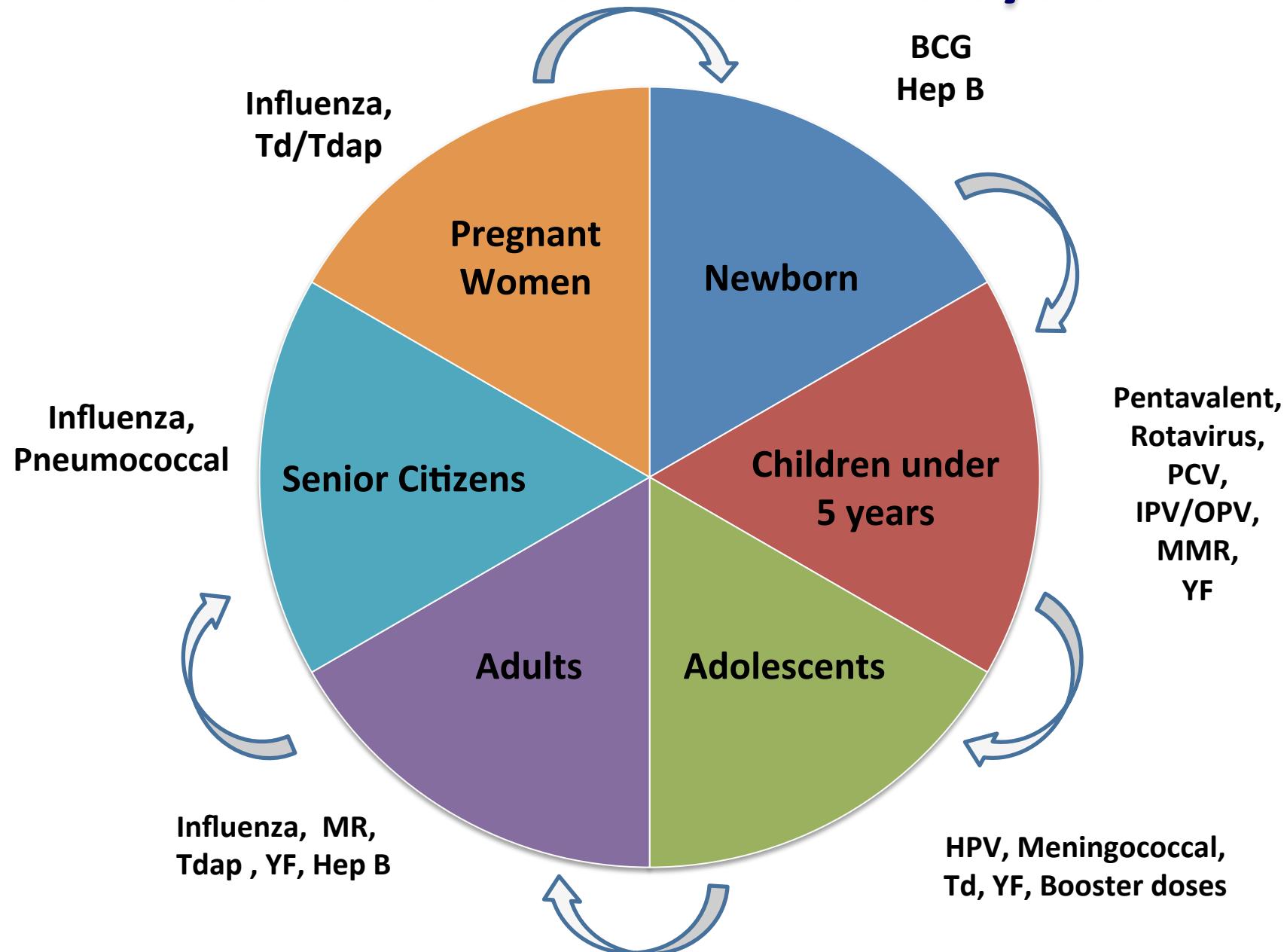


Outline

- Background
- Maternal immunization in LAC
- Lessons learned from vaccine introduction for maternal immunization in Latin America
- Next steps

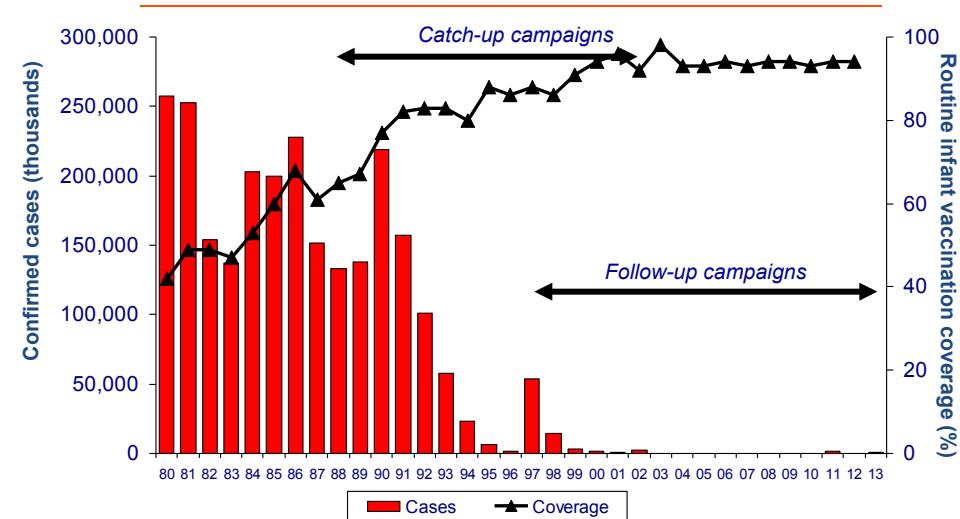


Vaccination Across the Life Cycle



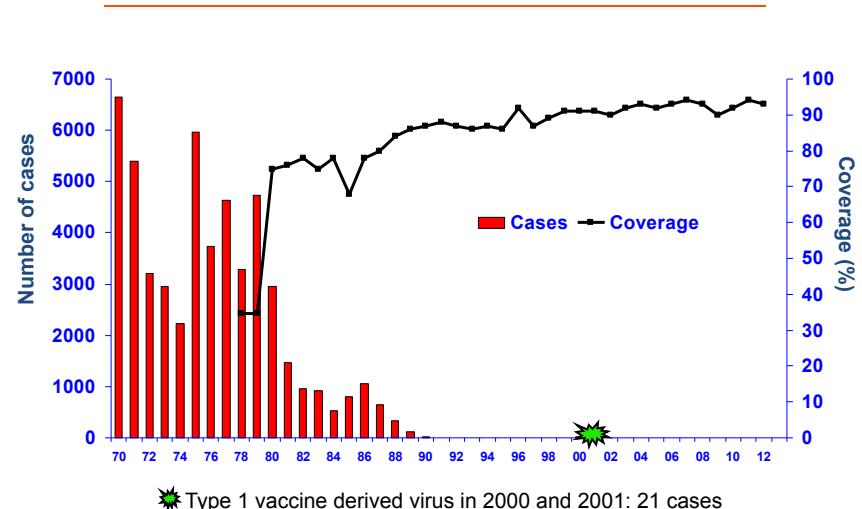
Achievements in the Americas

Measles elimination*



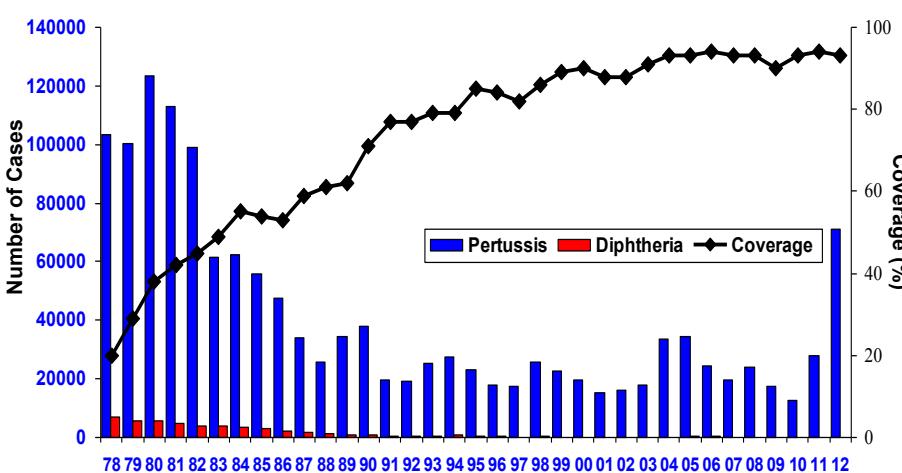
*486 confirmed cases in 2013; data as of 11 April 2014.

Polio Eradication

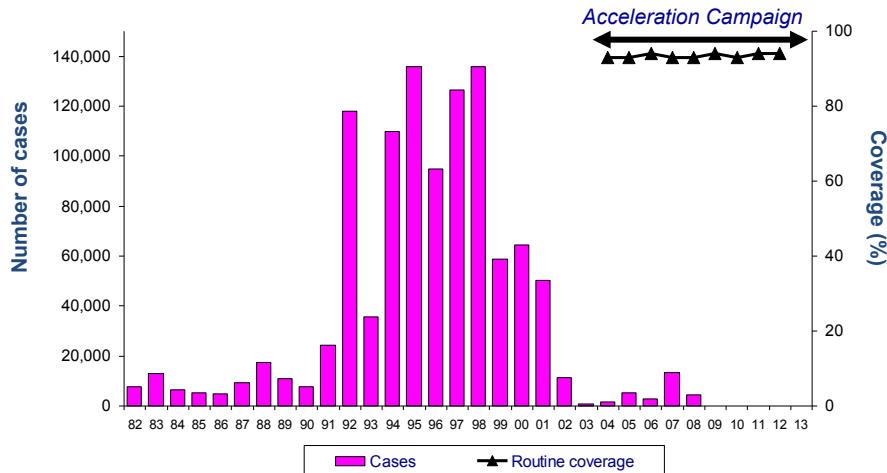


★ Type 1 vaccine derived virus in 2000 and 2001: 21 cases

Diphtheria and Pertussis



Rubella Elimination*



*11 confirmed cases in 2013; data as of 11 April 2014.

Bye-bye, rubella! ¡Adiós rubéola!

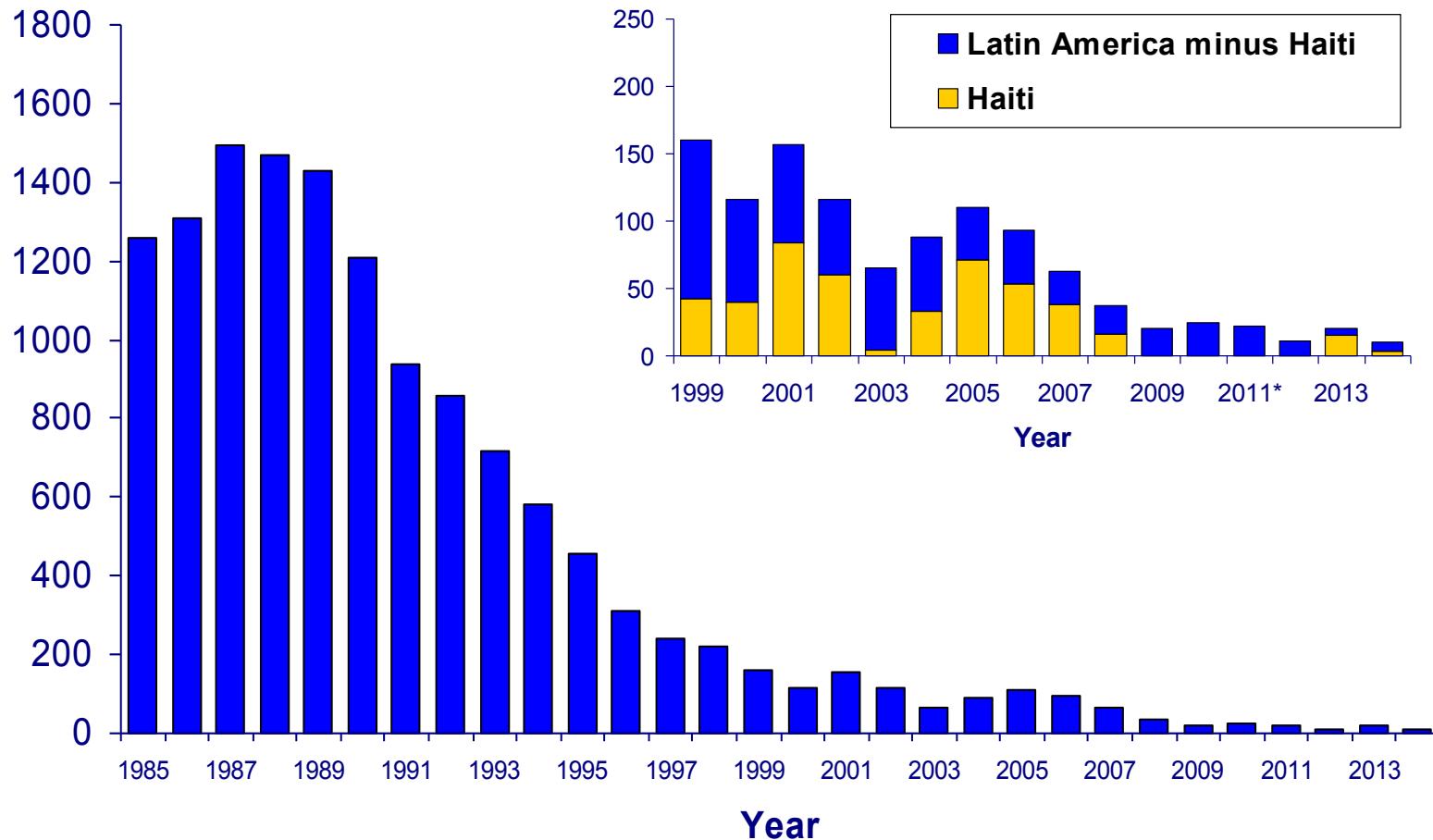
Media coverage on rubella elimination | April 29-30, 2015

Cobertura de prensa sobre la eliminación de la rubéola | 29-30 de abril de 2015

The collage consists of numerous news snippets and headlines from different countries and languages. Key visible elements include:

- INTERNATIONAL BUSINESS TIMES**: "German Measles Completely Eradicated South Americas"
- BBC NEWS**: "Rubella (German measles) eradicated from Americas"
- FORBES**: "TIME HEALTH INFECTION DISEASE Americas Region Becomes World's First to Eliminate Rubella" by Alexandra Sifferlin
- NBC NEWS**: "Rubella Eliminated From The Americas, Thanks To MMR Vaccine" by Donald G. McNeil Jr.
- THE NEW YORK TIMES**: "EVERYWHERE TOGETHER Join the conversation on every screen NBCUniversal"
- THE WASHINGTON POST**: "German measles officially eliminated in North, South America" by Ken Waltz's Washington Newsgram
- USNEWS**: "German Measles Eliminated from Americas"
- EL UNIVERSO**: "VIDA Y ESTILO CONCERNES About Vaccine Safety, Rubella Declared Eradicated"
- EL MUNDO**: "El continente americano, la primera región del mundo libre de rubeola" by Mónica, 29 de abril, 2015
- LA PRENSA**: "Salud y Ciencia" by La Prensa
- LA NACION**: "América, primera región del mundo declarada libre de rubeola" by LA NACION
- THE BMJ**: "Western Hemisphere Wipes Out Its Third Virus"
- EL SOL DE MEXICO**: "Viaja a Tierra Santa"
- THE GUARDIAN**: "German measles declared eradicated from North and South America"
- HUFFPOST**: "HEALTHY LIFE" by Jessie Nitkin
- JORNAL DO BRASIL**: "Contínenete americano é declarado livre da rubéola"
- THE JAPAN TIMES**: "Rubella is gone from the Americas: global health authorities declare victory" by Google Translate
- EL ECONOMISTA**: "L'ÉCONOMISTE FINANZAS TERMÓMETRO EMPRESAS ESTADOS TECNOLOGÍA MULTIMEDIA ARTE IDEAS RANKINGS EL ECONOMISTA TV

Neonatal Tetanus Elimination Americas, 1985-2014



Source: PAHO-WHO/UNICEF Joint Reporting Form (JRF) and country reports

*2011-2012 Haiti not available.

Maternal Immunization Platform

- MI is defined as vaccination:
 - Before pregnancy, during pregnancy and in the postpartum period in order to protect the mother and child
- Protection of:
 - **The mother:** prevention of diseases during pregnancy
 - **The neonate:** passive transfer of antibodies during a period of high vulnerability which does not allow for active immunization (immune window)
- This platform facilitates the integration of maternal and newborn health services and immunization, including newborn Hep B and BCG vaccination.



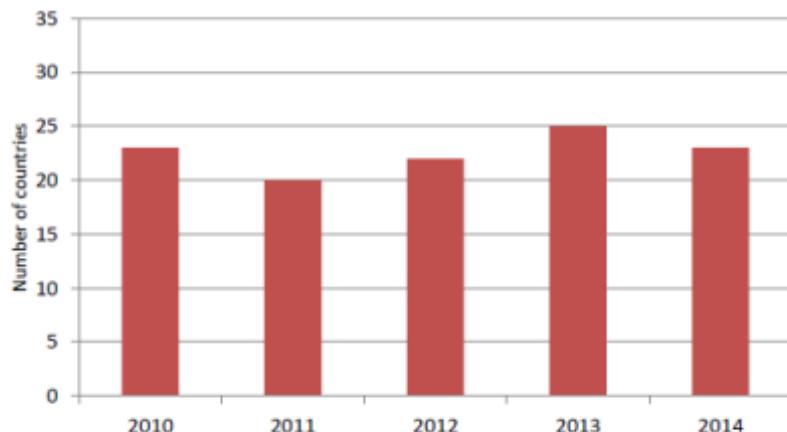
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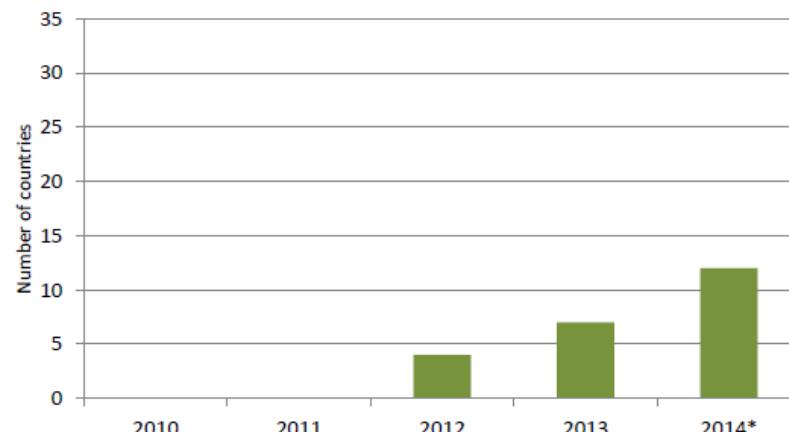
Progress of Maternal Immunization in the Americas

Countries using Td vaccine in pregnant women in the Americas, 2010-2014



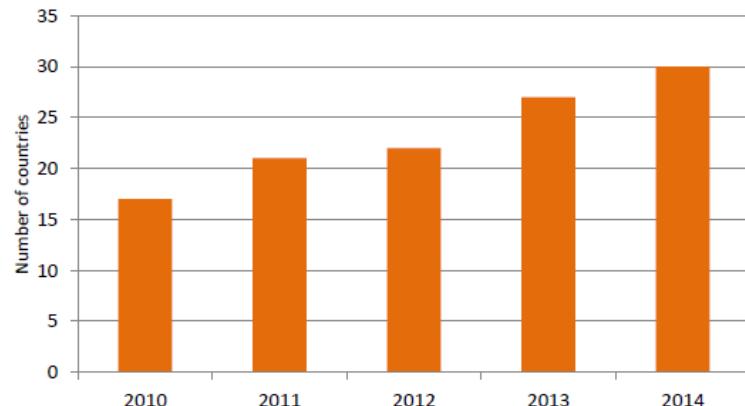
Source: Country reports through the PAHO-WHO/UNICEF Joint Reporting Form (JRF), 2015.

Countries using Tdap vaccine in pregnant women in the Americas, 2010-2014



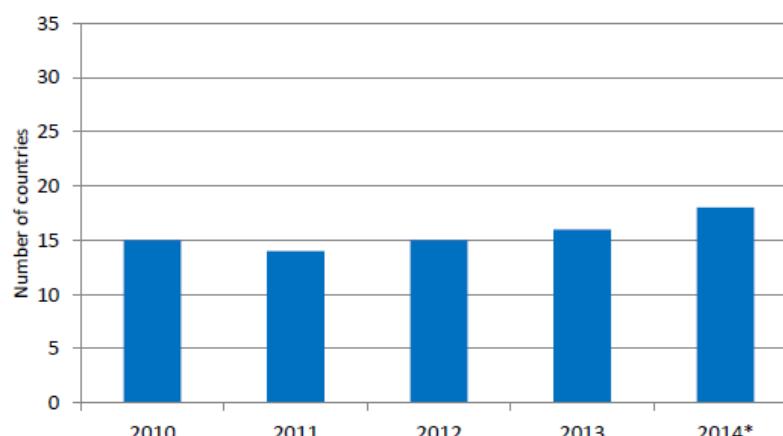
Source: Country reports through the PAHO-WHO/UNICEF Joint Reporting Form (JRF), 2015
*2014 Preliminary data.

Countries using seasonal influenza vaccine in pregnant women in the Americas, 2010-2014



Source: Annual brochure "Immunization in the Americas", 2011-2014 and country reports through the PAHO-WHO/UNICEF Joint Reporting Form (JRF), 2015.

Countries using Hep B vaccine in newborns in the Americas, 2010-2014



Source : Country reports through the PAHO-WHO/UNICEF Joint Reporting Form (JRF), 2015.
* Including Canada, where 3 of the 13 provinces/territories administer Hep B birth dose.

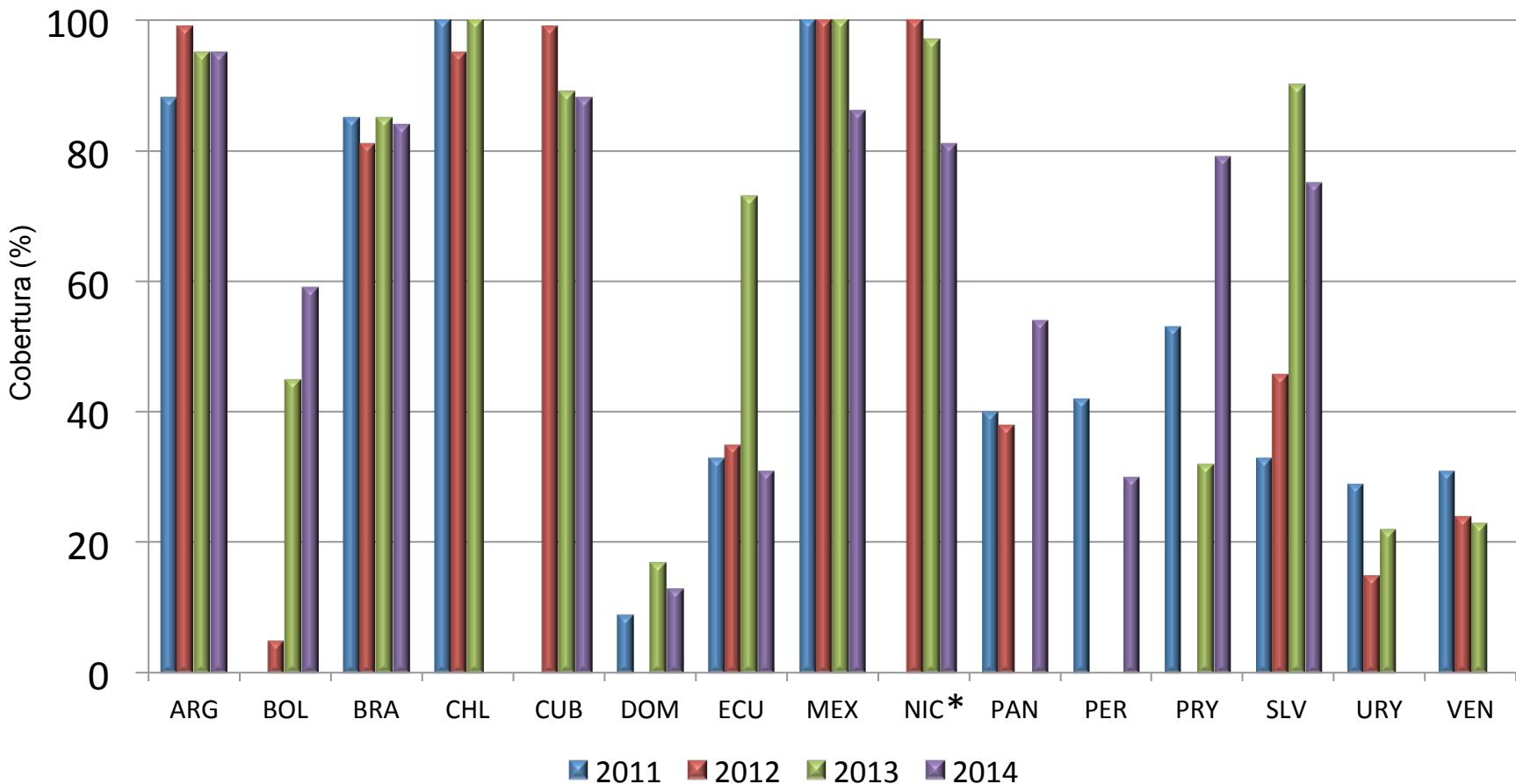
Countries and Territories in the Americas with Policies for seasonal influenza vaccination, 2004-2014

| Number of countries with: | 2004 | 2008 | 2014 |
|---|------|------|------|
| Policies for influenza vaccination | 13 | 35 | 40 |
| <i>Vaccination of pregnant women</i> | 3 | 7 | 29 |
| Vaccination of healthy children | 6 | 22 | 25 |
| Vaccination of children with chronic diseases | - | - | 5 |
| Vaccination of the elderly | 12 | 33 | 38 |
| Vaccination of persons with chronic diseases | 9 | 24 | 35 |
| Vaccination of health care workers | 3 | 32 | 38 |

- Information on countries only targeting children with chronic diseases was not disaggregated
Source: Country Reports to PAHO (JRF), MOH web pages, PAHO/WHO Surveys

Data was not collected from the French Departments (French Guiana, Guadeloupe, Martinique)

Influenza Vaccination Coverage in Pregnant Women, LAC, 2011-2014

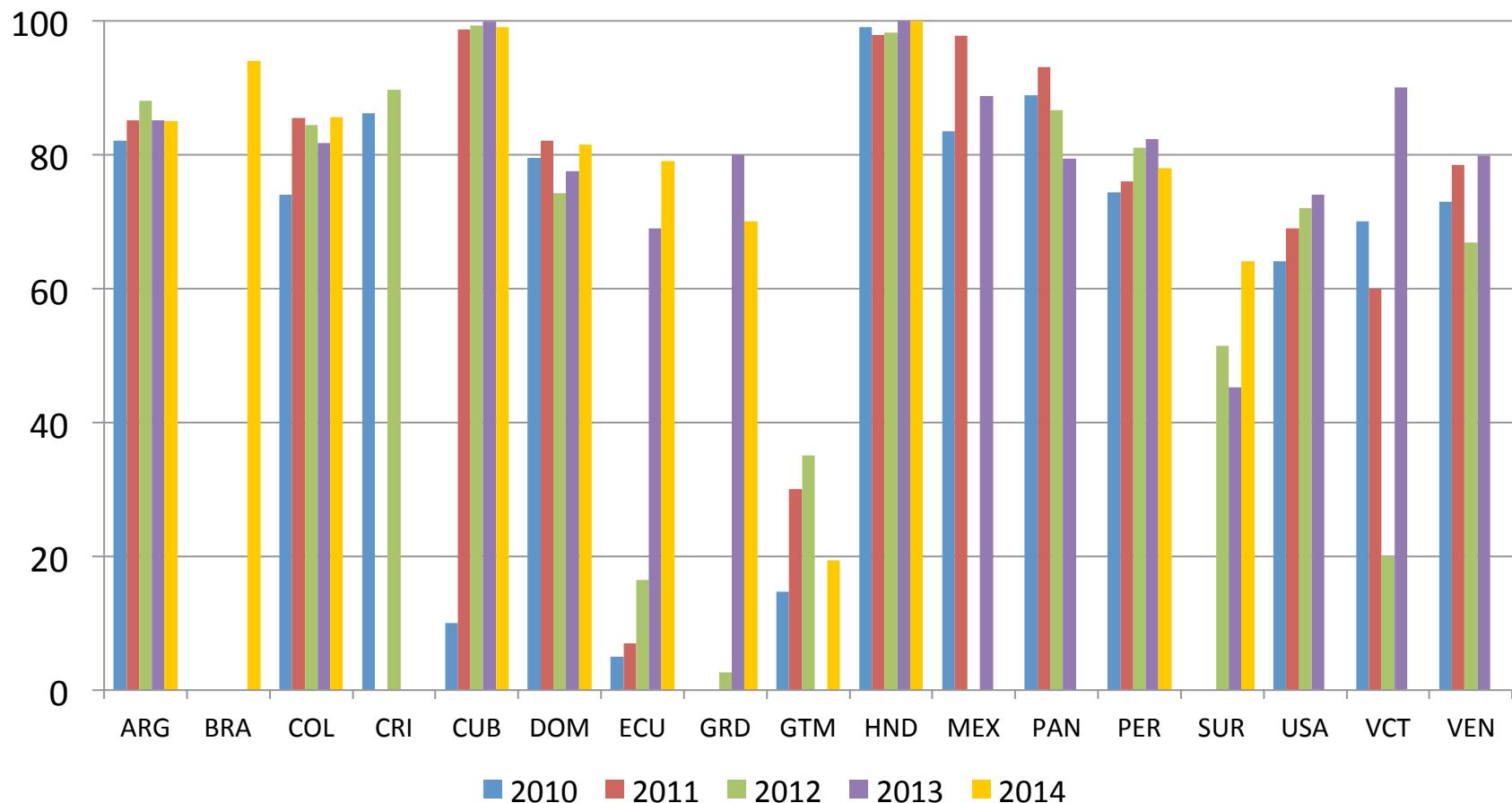


Source: Country reports through PAHO-WHO/UNICEF

Joint Reporting Forms (JRFs)

* PW at high risk until 2013

Hepatitis B Vaccination in Newborns in Latin America and the Caribbean, 2010-2014



Source: Country reports through PAHO-WHO/UNICEF
Joint Reporting Forms (JRFs)

PAHO's Maternal Immunization Working Group

Members of the Working Group

- WHO (Justin Ortiz, Philipp Lambach)
- CDC (Joe Bresee, Sara Mirza, Jennifer Liang, Sarah Schillie)
- Emory University (Saad Omer)
- CLAP (Bremen de Mucio)
- FLASOG (Ricardo Fescina)
- EPI Honduras (Ida Molina)
- EPI Argentina (Carla Vizzotti)
- Cincinnati Children's Hospital (Mark Steinhoff)
- Santa Casa de Sao Pablo University (Cassio de Moraes)
- **TAG Member (Anushua Sinha)**



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Regional Maternal Immunization

Vaccines recommended (TAG/SAGE)

| Vaccine | Pre-pregnancy | Pregnancy | Post-partum |
|--------------------------|-------------------|---|---|
| Tetanus/ diphtheria | Yes, ideal moment | Yes, 2 doses, if she was not previously vaccinated. | Yes, to complete schedule |
| Inactivated influenza | | Yes, ideal moment | Yes if she was not vaccinated during pregnancy, to protect the newborn. |



Vaccines Recommended during Pregnancy in Special Situations Only

| Vaccine | Pre-pregnancy | Pregnancy | Post-partum |
|--------------------------------------|---------------------------------------|--|-------------------------------------|
| Tdap | | Yes, during outbreaks (ideal moment between 27-36 weeks of gestation) | Yes |
| Hepatitis B | Yes, ideal moment | Yes, IF she didn't complete schedule and IF high risk situation (eg. More than 5 sexual partners during last 6 months, STD, IDU, partner + for HBsAg) | Yes, to complete schedule: 3 doses. |
| Hepatitis A | | Yes, during outbreaks. | |
| Yellow fever | Yes, ideal moment (in endemic areas). | Yes, prior to travel to endemic areas with current outbreak, with prior risk/benefit analysis. | |
| IPV | | Yes, prior to travel to endemic areas with current outbreak | |
| OPV | | Yes, prior to travel to endemic areas with current outbreak | |
| Rabies | | After high risk exposure. | |
| Meningococcus conjugate | | Yes, during outbreaks. | |
| Meningococcus Polysaccharide (MPSV4) | | Yes, during outbreaks. | |

Vaccines Contraindicated during Pregnancy

| Vaccine | Pre-pregnancy | Pregnancy | Post-partum |
|---------|--|-----------|---|
| Rubella | Yes, ideal moment (avoid conception for 4 weeks) | No | Yes, if not vaccinated during pre-pregnancy |
| Measles | | | |
| Paperas | | | |
| HPV | Yes, ideal moment | No | |



Vaccines Recommended for the NEWBORN

| Newborn Vaccines | Birth dose |
|---------------------|--|
| BCG | As soon as possible after birth. |
| Hepatitis B | Ideally before the first 24 hours after birth. |



Survey among 14 countries to document experience and lessons learned from vaccine introduction for maternal immunization in Latin America



Decision-making for maternal vaccine introduction

| NiTAGs | EVIDENCE REQUIRED |
|---|--|
| Most countries have NiTAGs supporting the MoH for vaccine introduction (13/14) | Technical, operational and Financial resources to evaluate feasibility and sustainability |
| <ul style="list-style-type: none">– Experts in the field,– Representatives of scientific societies including OB-GYN,– EPI– Maternal health areas/ programs | <ul style="list-style-type: none">– Disease burden per potential target group (surveillance),– Severity of illness (surveillance),– cost-effectiveness and cost-benefit analyses– national statistics, surveys and national studies.– Vaccine safety and efficacy data• WHO/ PAHO's TAG recommendations |

Modalities of coordination between EPI and MCH areas

- Official communications
- Update of existing guidelines, protocols.
- MoH primary health care services
- interprogrammatic work at all levels.



Operational aspects of maternal immunization

- Led by EPI and coordinated with
 - Existing maternal health programs .
 - MCH, health services for trainings, monitoring and evaluation, supervision.
 - Health promotion and communication departments for social communication campaigns.
 - Corresponding departments and various levels for Information systems. (lack of clear denominators)
- Vaccine delivery is done through health services and outreach activities and specific vaccination campaigns (Td/Flu)
- EPI in charge of vaccine procurement through the Revolving Fund.



Influenza Vaccination in Brazil 2013

| Target* | Doses | Vaccination coverage |
|-----------------------------|------------------|----------------------|
| Children (6mo to <2yrs) | 4.258.925 | 97,42% |
| Healthcare workers | 3.702.590 | 108,48% |
| Pregnant women* | 1.842.224 | 84,28% |
| Post-partum women ≤45 days* | 403.027 | 100,00% |
| Indigeneous populations | 530.624 | 88,09% |
| Elderly | 18.359.823 | 87,89% |

Total: 36.672.606

91,44%

Fonte: <http://pni.datasus.gov.br>, acesso em 07/08/2013 às 16h



Melhorar sua vida, nosso compromisso



Protegé a tu bebé
desde la panza



Vacunate contra la **GRIPE**
y la **TOS CONVULSA**



ProNaCEI
Programa Nacional de Control de
Enfermedades Inmunoprevenibles



**Ministerio de
Salud**
Presidencia de la Nación

Social Communication Campaigns

Graphic
Material

- Preventative material for SARI, material for pregnant women

MoH
website

- Constantly updated

Training

- Close work with the media

MoH
free
hotline

- In order to answer the public's questions and concerns



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| Enablers | Obstacles |
|--|--|
| Maternal health policy (prioritization of maternal health, MDG's) | Resistance of OB-GYN to recommend vaccinating pregnant women. |
| Close collaboration and communication with scientific societies/associations and NiTAGs, | Emerging anti-vaccine groups. |
| High access to antenatal care in many countries | Insufficient research on safety and efficacy in pregnant women |
| Adequate planning and training of healthcare workers and service providers | Some healthcare providers and some users' unfounded fear of vaccination during pregnancy not being safe. |
| Social communication plans | Lack of active promotion of the maternal vaccination policy. |

Next steps

- Strengthen **collaboration efforts** among Agencies, Universities and institutions related to maternal and child health
- Strengthen **AEFI active surveillance**, through Sentinel Hospitals
- Disseminate **recommendations** on maternal immunization
 - in coordination with scientific societies and NITAGs
- **Create alliances** with the media and scientific societies to reach different audiences. **Count on maternal immunization champions**
- Promote the **integration** of immunization with other maternal health services
- Promote **studies** on safety, antibody interference, KAP among others