



## Impact of Rotavirus Vaccination in the Americas

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The rotavirus disease is an important public health problem, associated with severe diarrheas, vomit and fever in children aged <5 years at the global level. It is more severe than other diarrheas and is associated with severe dehydration hospitalization, choc and death. An estimated 95% of children aged between 3 and 5 years will be affected by rotavirus. According to WHO, rotavirus diarrhea leads to 453,000 deaths annually in children aged <5 years. In Latin American and Caribbean countries, before the introduction of the vaccine, there were 75,000 hospitalizations, one million medical visits and 10 million rotavirus diarrhea cases.

As of June 2015, 17 countries (Argentina, Brazil, Bolivia, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Nicaragua, Mexico, Panama, Peru, Paraguay, and Venezuela) and one territory (Cayman Islands) in Latin America and the Caribbean have introduced the rotavirus vaccine, meaning that 92% of the birth cohort live in countries with vaccination schedules that include the rotavirus vaccine. There are two vaccines available: the monovalent human rotavirus vaccine G1 [P8] (RV1 Rotarix®, GSK), it requires two doses (at 2 and 4 months); and the pentavalent bovine-human, reassortant vaccine G1-G4 [P8] (Rotateq®, Merck); it requires three doses (at 2, 4 and 6 months).

Regarding vaccine effectiveness, a meta-analysis (De Oliveira et al, 2015) found that rotavirus type 1 varied, depending on the control group, between 63.5% and 72.2%. The effectiveness was higher in children <12 months ranging from 75.4% to 81.8%. In children aged >12 months it ranged from 56.5% to 66.4%. In Brazil, there was an estimated reduction of 130,000 hospitalizations and 1,500 deaths from diarrhea in a period of three years following vaccine introduction (Do Carmo et al). Other impact studies in El Salvador, Nicaragua and Panama showed a reduction of 48% (Yen et al, 2011), 23% (Orozco et al, 2009) and 37% (Molto et al, 2011) respectively in hospitalizations for diarrhea. There are many rotavirus vaccine effectiveness and impact studies in Latin America and all have consistently shown that the vaccine significantly reduces hospitalizations and death from diarrhea. It is estimated that approximately 8,600 deaths due to rotavirus were avoided in 2013 in the 15 countries that have introduced rotavirus type A in Latin America and the Caribbean.

## Argentina's Ministry of Health, Medical Experts, Homeopathy and Ayurveda Unite in Favor of Vaccines

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# PAHO Immunization GIN Articles



(GLOBAL IMMUNIZATION NEWSLETTER)

In light of the increasing amount of groups that do not adhere to vaccination and subscribe to complementary medicines, Argentina's national health portfolio facilitated a meeting with academic referents of Homeopathic and Ayurvedic medicine in order to share visions and reach agreements, with the objective of favoring the population's access to primary disease prevention through vaccination, considering both an individual and collective benefit.

On 24 July 2015, members of Argentina's Ministry of Health, the National Immunization Commission (CoNaiN), and experts of the Ayurveda and Homeopathic academic institutions signed a declaration asserting vaccines as a valid health tool that has made global smallpox eradication possible, limited poliomyelitis to two countries, eliminated rubella and congenital rubella syndrome in the Region of the Americas, kept Argentina measles-free since 2000, and controlled numerous diseases. They declare that there is no opposition to primary disease prevention through vaccination among alternative treatments, and that vaccines are accepted and emphasized by the majority of professionals with alternative approaches. They commit to share information and foster environments to work towards a consensus.

Ayurvedic medicine is recognized by the WHO and has a favorable view on vaccines. They are a source of research and practice in the training of Ayurvedic physicians and pediatric specialties, as well as a part of Ayurvedic nurse training. The vaccines in the official schedule of India's Ministry of Health are administered in Ayurvedic hospitals.

The principles of homeopathy are also not opposed to vaccines. This branch of medicine, created in the 18th century by Dr. Samuel Hahnemann, is based on the principle of similarity: when a substance is capable of producing certain symptoms in a healthy individual, it is also capable of curing the same symptoms in a patient, when administered in small doses. Therefore, vaccines are consistent with homeopathic medicine. Dr. Samuel Hahnemann praised and supported vaccination against smallpox, stating that the vaccine contained a "natural similarity" with the disease and recognized its merits as a health vector.



*From left to right: Dr. Jorge Luis Berra, Director of the Ayurveda Prema Health Foundation; Dr. Federico Kaski, Secretary of Promotion and Health Programs; Dr. Daniel Gollan, Argentina's Minister of Health; and Dr. Pedro Scala, Director of the Homeopathy*

For more information on this congruence of pro-vaccination perspectives (in Spanish), please visit the following link:

[http://www.msal.gov.ar/dinacei/index.php?option=com\\_content&view=article&id=470:instituciones-academicas-de-ayurveda-y-homeopatia-apoyan-la-vacunacion-como-herramienta-sanitaria&catid=6:destacados-slide470](http://www.msal.gov.ar/dinacei/index.php?option=com_content&view=article&id=470:instituciones-academicas-de-ayurveda-y-homeopatia-apoyan-la-vacunacion-como-herramienta-sanitaria&catid=6:destacados-slide470)



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## PAHO Regional Meeting on Polio

*Cristina Pedreira, Gloria Rey, and Liz Thrush*

The Pan American Health Organization (PAHO) held a Regional Meeting on the Polio Eradication and Endgame Plan in Bogotá, Colombia, from 17 to 19 August 2015.

Dr. Jose Fernando Valderrama, representing the Ministry of Health of Colombia, gave the welcoming words and officially opened the meeting, accompanied by Dr. Gina Watson, Representative of the Pan American Health Organization (PAHO) in Colombia, Dr. Michel Zaffran, Coordinator of the Expanded Programme on Immunization at the World Health Organization (WHO), and Dr. Cuauhtémoc Ruiz Matus, Chief of the Comprehensive Family Immunization Unit at PAHO.

In total, 122 participants attended the meeting representing 29 countries in the Region, the Regional Certification Commission for the Polio Endgame in the Region of the Americas (RCC), PAHO/WHO, WHO, UNICEF, CDC, the Task Force for Global Health, and the Bill and Melinda Gates Foundation.



*Group Photo: PAHO Regional Polio Meeting*

During the meeting, global and regional progress on the implementation of the *Polio Eradication & Endgame Strategic Plan 2013-2018* was discussed, with emphasis on the guidelines for the switch from trivalent oral polio vaccine (tOPV) to bivalent oral polio vaccine (bOPV) and poliovirus containment in laboratories.

On the second day of the meeting, working groups were formed to evaluate progress on the development of the national switch plans, and discuss strengths, gaps, and possible solutions to overcome the challenges related to switch preparation. Of the 23 countries that attended the meeting and are participating in the switch (six countries that attended in the meeting do not use OPV and therefore do not need to participate in the switch), four countries have completed their national switch plan and 19 countries are in process of completing the plan by the end of September 2015.

The final report of the meeting that includes a summary of each topic and final recommendations and agreements is available at [www.paho.org/polio](http://www.paho.org/polio).