30TH ANNIVERSARY OF SMALLPOX ERADICATION
AND THE ESTABLISHMENT OF THE PAHO REVOLVING FUND
FOR VACCINE PROCUREMENT
THE LEGACY OF SMALLPOX ERADICATION AND THE IMPORTANCE OF THE PAHO REVOLVING FUND FOR VACCINE PROCUREMENT IN THE ELIMINATION OF VACCINE-PREVENTABLE DISEASES

Dr. Mirta Roses Periago, Director
Pan American Sanitary Bureau

50th DIRECTING COUNCIL OF PAHO
Washington, D.C., 27 September 2010

The dream of eradicating disease was enunciated by Edward Jenner after his successful attempt at smallpox vaccination. Later, he said that vaccination would free the world from the scourge of this disease. Two hundred years were needed for humanity to realize this dream.

Indisputably, the smallpox eradication program was a catalyst for public health, in which vaccination as a means for preventing disease grew rapidly. The infrastructure developed to support smallpox vaccination became a platform of action for simultaneously administering other vaccines, expanding health services, and beginning the development of the primary health care strategy and the dream of “health for all.”

The smallpox eradication initiative likewise paved the way for the development of epidemiological surveillance systems and the creation of regulatory mechanisms that would make it possible to prevent the international spread of this disease.

Rooted in the legacy left by the experience with smallpox eradication, PAHO had the vision to organize health programs with specific objectives and a supranational scope. Thus, in 1977, the Expanded Program on Immunization (EPI) was launched with a view to guaranteeing vaccines for six priority illnesses at that time: measles, polio, whooping cough, diphtheria, tetanus, and tuberculosis.

The Expanded Program on Immunization is sustained by extensive technical cooperation with the Member States, and the Revolving Fund has been a key element in this.

An essential element in the integral development and success of the Expanded Program on Immunization was the creation of the Revolving Fund for Vaccine Procurement (RF), which began operations in
1979. Over the past 30 years, the Revolving Fund, as a public resource, has facilitated the timely availability of high-quality vaccines at the lowest possible prices for PAHO Member States.

Based on the principles of equity, solidarity, Pan Americanism, and transparency, the Revolving Fund has played a critical role in the success of the immunization program in the Region. The Revolving Fund reflects the great desire and single-minded commitment of the countries of the Americas to improve the health of their people, and with it, the health of the entire Western Hemisphere.

The Revolving Fund belongs to the PAHO Member States, and the Pan American Sanitary Bureau serves as the secretariat in the negotiation and procurement processes on behalf of participating Member States.

The Revolving Fund uses a centralized procurement model, which means that by consolidating the demand of the participating Member States, lower prices can be obtained thanks to economies of scale and the organized predictability of the demand that this represents for producers.

In 1979, when the Revolving Fund began operations, eight Member States made use of it and six antigens were offered. This year, 2010, 40 Member States and Territories are participating and 28 antigens with 61 presentations are being offered by 13 manufacturing laboratories.

An estimated US$ 450 million in vaccine purchases will be made through the Revolving Fund this year, a figure three times that of purchases in 2005. This shows just how fast the Revolving Fund has grown.

Moreover, the Revolving Fund maintains a working capital fund made up of contributions from Member States when they purchase vaccines. At present, there is US$ 70 million in capital, which enables Member States to purchase the necessary vaccines in a timely manner, paying what they owe within 60 days on average. This working capital ensures that suppliers are paid promptly.

However, given the introduction of new and more costly vaccines, this working capital needs to be substantially increased if the Revolving Fund is to provide a timely response to the demand from the Member States.
With the Revolving Fund, Member States have had timely access to a sufficient supply of vaccines, which has enabled them to have the most complete vaccination schedules in the world, attaining high coverage, introducing new vaccines more quickly, and eradicating and eliminating diseases such as polio, measles, and, soon, rubella and congenital rubella syndrome.

For example, for 10 years the vaccination series in most Member States (with the exception of Haiti) has included the pentavalent vaccine, which other regions of the world are just beginning to introduce. According to several studies, the rapid introduction of this vaccine in our Region was due, among other factors, to the opportunity to obtain this vaccine through the Revolving Fund at a single low price. Researchers have called this the “PAHO Effect.”

Another example of the success of the Immunization Program’s integrated approach has been the introduction of new vaccines, such as the pneumococcal conjugate, rotavirus, and human papillomavirus vaccines, through a strong technical, political, and social component in which the Revolving Fund has again played a key role. In our Region, 17 countries already use the rotavirus vaccine, 14 of which procure it through the Revolving Fund, and 17 also use the pneumococcal vaccine, and 12 of these procure it through the Revolving Fund. This has come to pass through resolutions of the PAHO Directing Council and the technical cooperation provided to countries to strengthen epidemiological surveillance, human resources, and the cold chain, and cost-effectiveness studies supported by the ProVac Initiative.

The Revolving Fund has also played a key role in the response to epidemics and risks from vaccine-preventable diseases. The most recent example of this was the response to the influenza A (H1N1) pandemic, in which Member States had access to vaccines against this disease through the Revolving Fund, ensuring the quality of the vaccines and affordable prices. Twenty-four Member States purchased the vaccine through the Revolving Fund, which ensured prevention for the risk groups designated by the World Health Organization (WHO), in particular, pregnant women.

A little over 200 million people in the Americas were vaccinated against influenza A (H1N1), which is around half of all people vaccinated worldwide.
Throughout its history, the Revolving Fund has also contributed substantially to strengthening the operational development of the Immunization Program, as well as epidemiological and laboratory research, which has been fundamental for decision-making on the prevention and control of vaccine-preventable diseases and also provides essential information for vaccine manufacturers.

An example of this is the surveillance of circulating pneumococcal strains conducted by SIREVA (Regional Vaccine System) and epidemiological surveillance in sentinel hospitals in our Region, which enable manufacturing laboratories to know which strains are predominant--information that influences the formulation of the respective vaccine. Another example is post-marketing epidemiological surveillance of events supposedly attributable to vaccination or immunization (ESAVI), which permits rapid detection of risks associated with vaccination activities.

The Revolving Fund has also facilitated quality control measures for vaccines, syringes, and immunization supplies and has helped strengthen national regulatory authorities.

Throughout its history, the Revolving Fund has helped make the vaccine market orderly and sustainable. This has been achieved by working collaboratively with the vaccine industry, offering more predictable demand, transparent rules of operation, and the promotion of competitiveness. Moreover, as a centralized procurement mechanism, it assists producers by having a single “window” for communication and doing business. The Fund has also contributed to the development of the so-called “emerging producers.”

However, the Revolving Fund must move forward, tackle new challenges, and prepare for a better future. The challenges include: a) new, more expensive vaccines with sole suppliers; b) new actors in the field of temporary vaccine financing (e.g. the Global Alliance for Vaccines and Immunization—GAVI); and c) new vaccine market mechanisms (such as the Advanced Market Commitment—AMC).

PAHO communicates and coordinates closely with GAVI, the World Bank as a GAVI implementer, and various stakeholders in order to preserve the principle of timely vaccine access for all Member States, based on the vision of immunization as a public good and the Revolving Fund’s principles and rules.
An estimated 97% of the vaccines administered in the Latin American and Caribbean countries are paid for with public funds, which are guaranteed through national laws and decrees and a broad political commitment from authorities and society. In light of this, any change in Revolving Fund principles and rules would have a serious impact on vaccine prices and, thus, the health of our people.

Studies of the Revolving Fund by external consultants have demonstrated that the Fund is fundamental to guaranteeing timely access, quality, and low prices for vaccines used by Member States. The prices obtained by countries outside the Region for the same vaccines have at times been twice as high, and there would be a 14% difference for a country in the Region that did not use the Revolving Fund. At present, there is no other mechanism similar to the Revolving Fund in the world; however PAHO is collaborating closely with other regions of the world, such as the Eastern Mediterranean (EMRO), to develop the foundations of their Revolving Fund. A procurement mechanism for the African countries is also under study.

In light of these challenges, it is essential to maintain Revolving Fund operations in accordance with its principles and rules, while at the same time making its operations more modern and efficient.

The commensurate efforts of the peoples of the Americas to control and later eradicate and eliminate vaccine-preventable diseases have had their best ally in the Revolving Fund because of its timely and efficient support. Thus, in 1994 the Americas became the first Region in the world to eradicate polio, and then, maintaining that single-minded commitment, the peoples of the Region eliminated measles and are now on the verge of eliminating rubella.

The same determination manifested by the countries of the Region in driving these diseases from our Hemisphere has also been strongly felt in the Pan American Health Organization’s strategic partners, who have contributed to the overwhelming success of the eradication and elimination initiatives, and finally, to continuing to forge a sound Immunization Program.

Like any living organism that survives and prospers, the Immunization Program has undergone several changes, but it has not diverged from its original mandate and purpose. It is evident, then, that the EPI is called to sustain the impressive successes achieved in the field
of immunization, encouraging the peoples of the Americas not to let their guard down and to continue to scale new heights to tackle the challenges that arise in our daily work.

The Region’s most prized possession is the value that its populations and leaders give to vaccination. We must protect and maintain the public’s confidence and to that end, the Revolving Fund’s principles and mechanisms are fundamental. The rigor in determining which antigens to introduce and their schedules, the impartiality in dealings with suppliers and producers, and post-marketing surveillance are key to ensuring that decisions, transactions, and outcomes are transparent. The Revolving Fund has been a powerful tool in reducing inequalities in the Region, since all inhabitants have equitable access to vaccines of the same quality.

“Disease knows no borders.” Wild poliovirus and the measles virus continue to spread by contagion in other regions of the world, increasing the risk of their introduction in our Hemisphere. We must carry on the legacy of earlier generations, sectors, and nations to continue to make the Americas a hemisphere free of vaccine-preventable diseases.