Update on the Regional Immunization Program of the Americas

The most recently available data on the situation of vaccine-preventable diseases (VPDs) and the immunization program of the Americas is presented under the framework of the Regional Immunization Vision and Strategy (RIVS).

The RIVS is the Global Immunization Vision and Strategy (GIVS) restructured to accommodate immunization needs and objectives at the regional level. Its goals are to maintain coverage achievements, complete the unfinished agenda and meet new challenges.

The Region is working to present the regional adaptation of the Global Vaccine Action Plan (GVAP) to PAHO’s Directing Council in 2015.

**Maintaining the Achievements**

Coverage levels have remained over 90% throughout the Region and work is ongoing to maintain VPD control and elimination.

**Achievements in the Americas**

- **Measles elimination**
  - Catch-up campaigns
  - Follow-up campaigns

- **Polio Eradication**
  - Type 1 vaccine derived virus in 2000 and 2001: 21 cases

- **Diphtheria and Pertussis**

- **Rubella Elimination**
  - Acceleration Campaign

Available preliminary data for 2013, however, suggests that regional DTP3 and Polio3 coverage may have declined compared to previous years. This situation is being examined.
Addressing the Unfinished Immunization Agenda

Work in this area has revolved around targeting underperforming municipalities and other areas within countries. Latin American countries have identified risk areas based on coverage, VPD surveillance performance, and other socio-demographic and contextual factors. It is of concern that only about half of the ~15,000 municipalities in Latin America and the Caribbean (LAC) reach coverage rates ≥95%. Furthermore, it is also concerning that there are several municipalities, concentrated in a few countries, reporting coverage levels <50%.

Since its creation in 2003, Vaccination Week in the Americas (VWA) has served as a platform to target vulnerable populations every year. In 2014, VWA’s slogan was “Vaccination: Your best shot” in acknowledgment of the FIFA World Cup of Football (Soccer) taking place in Brazil. Finally, an important part of the unfinished agenda is the elimination of neonatal tetanus (NNT) as a public health problem\(^1\) in Haiti. While cases have continued to decline over the years, elimination has proven challenging.

Meeting New Challenges

The introduction of new more expensive vaccines has been one of the main challenges immunization programs of the Americas have faced in recent years. About 90% of the birth cohort in the Region lives in countries that have introduced a pneumococcal conjugate vaccine in their regular program (~60% of the cohort of LAC); ~87% of cohort is living in countries that have introduced rotavirus vaccine (60% of

\(^1\) NNT elimination is defined as <1 case of NNT per 1,000 live births in every municipality.
the cohort of LAC), and ~75% of girls 10-14 years old live in countries that have introduced a human papilloma virus (HPV) vaccine.

**Operational Activities**
Of all the EPI components that the RIVS identifies as components requiring additional strengthening, cold chain and supply chain operations, syringe quality control program, economic evaluations (i.e. the ProVac Initiative), and vaccine effectiveness studies for rotavirus and conjugated pneumococcal vaccines were highlighted as a priority. The Revolving Fund for Vaccine Procurement is an important element of the program, as LAC countries finance >90% of national EPIs with national funds.

Over the last 22 years, PAHO’s Technical Advisory Group (TAG) on Vaccine-preventable Diseases has issued specific recommendations on the presented topics. Some key recommendations in the different topics discussed in this year’s XXII TAG Meeting include the following:

- **Update on Implementation of TAG Recommendations on the Polio Eradication and Endgame Strategic Plan 2013-2018**
  - TAG reiterates the recommendations issued during the extraordinary TAG Meeting on Polio conducted in April 2014 (these recommendations can be found in the Polio section of the 2014 TAG report).

- **Update on Pertussis Vaccination**
  - Although both available pertussis vaccines (aP and wP) elicit a good immune response, evidence suggests aP has a short-lived duration of protection. As such, countries should give preference to the use of wP containing vaccines. Countries using current vaccination schedules with whole-cell pertussis vaccines should continue to do so and countries using aP should actively monitor the risk that waning immunity poses to the population.
  - Countries should ensure homogenous vaccination coverage ≥95% with 3 doses of pertussis-containing vaccines in children aged <1 year; and encourage timely initiation and completion of the schedule. Coverage attained with the 4th dose of the DPT vaccine should be the object of careful recording, monitoring, reporting and evaluation.

- **Status of Human Papilloma Virus Vaccination**
  - TAG affirms the sound and robust evidence base that demonstrates the safety and efficacy of HPV vaccines among adolescent and young women. TAG also endorses the March 2014 and prior GACVS statements related to HPV vaccine safety. As such, TAG continues to encourage countries to adopt HPV vaccines in the routine national immunization schedule to prevent cervical cancer. To harmonize regional and global recommendations on HPV immunization schedules, TAG endorses the April 2014 SAGE recommendations:
A 2-dose schedule with an interval of at least six months between doses is recommended for girls aged <15 years of age. This also applies to girls aged ≥15 years at the time of the second dose. If for any reason the interval between the first and second dose is shorter than 5 full months, a third dose should then be given ≥6 months after the first dose.

The 3-dose schedule (0, 1/2, 6 months) remains recommended for girls aged >15 years (when immunization is initiated) and for immunocompromised individuals of all ages, including those known to be HIV-positive;

These schedule recommendations apply to both the bivalent and tetravalent vaccines.

TAG reaffirms that it is important for countries that are considering the introduction of the HPV vaccine, to carefully plan information systems to collect and analyze coverage data at all levels. Countries that have already introduced an HPV vaccine should strengthen their efforts to characterize vaccination coverage at subnational and national levels.

**Vaccination with Pneumococcal Conjugate Vaccine in Adults**

- TAG endorses the recommendations of the working group, including:
  - The introduction of pneumococcal conjugate vaccines in children continues to be the priority for reduction of pneumococcal disease.
  - Introduction of PCV13 vaccination for healthy adults into immunization programs will depend on the results of studies of efficacy, cost-effectiveness, and herd effect.
  - Countries that have already introduced the 23-valent polysaccharide vaccine for use in adults could use the sequential schedule (conjugate-polysaccharide) for high-risk adults*.
  - Countries that do not use pneumococcus vaccine in high-risk adults* and consider vaccination of this population a priority could include PCV13 in their vaccination schedules, based on immunogenicity studies.
  - Implementation or strengthening of epidemiological surveillance of pneumonias and IPD in adults is a priority for countries.
  - Countries that have already introduced PCV vaccines for children should spell out mechanisms to measure the impact of vaccination on other age groups (herd effect).

- TAG encourages innovative surveillance and assessment approaches to better understand the preventable burden of pneumococcal disease in adults. Interaction with influenza surveillance networks should be further explored.

- Countries should seek to improve PCV vaccination coverage rates in children.

* Adults in high risk groups are adults ≥50 years of age, with the follow conditions: cerebrospinal fluid leak, cochlear implant, sickle cell disease/other hemoglobinopathy, congenital or acquired asplenia, immunocompromised persons, congenital or acquired immunodeficiency, human immunodeficiency virus infection, chronic renal failure, nephrotic syndrome, leukemia,
lymphoma, Hodgkin’s disease, generalized malignancy, iatrogenic immunosuppression, solid organ transplant, and multiple myeloma. This is a special recommendation for individual clinical decision-making.