In Haiti, the immunization program has been historically weak and vaccine-preventable diseases (diphtheria, pertussis, tetanus, neonatal tetanus) continue to be a public health concern. Since 2000, reported coverage levels for DTP3 have fluctuated between 39-79%, with 53% coverage reported for 2008 and 68% for 2009. Vaccination campaigns against polo and measles have maintained these diseases at bay; the last outbreak of vaccine-derived poliovirus occurred in 2000-2001 and the last case of measles in 2001. In 2007, Haiti launched the largest national vaccination campaign in its history, targeting five million people nationwide, which represented 53% of the country’s population. The campaign included the provision of vaccines against polio, measles, rubella, in addition to an anti-helminthes treatment and vitamin A supplements; the diphtheria and tetanus vaccine was offered in major cities. An independent survey undertaken by the U.S. Centers for Disease Prevention and Control (CDC) estimated the coverage at 80%, which signified a major improvement in vaccination coverage.

When the earthquake hit Haiti, national immunization activities originally planned to address a diphtheria outbreak in various departments, including the metropolitan area, were interrupted. Furthermore the earthquake created the conditions of a major threat for outbreaks of vaccine-preventable diseases, such as measles, diphtheria, tetanus and whooping cough: concentrations of large populations in temporary overcrowded camps; the influx into Haiti of thousands of expatriates from all over the world, including from regions where the level of vaccination coverage is not yet adequate; the destruction of many of the health facilities participating in the Expanded Program on Immunization (EPI), while many others were provisionally out of use; deterioration of the already weak capacity of the EPI at national and departmental levels to support and follow up on activities.

In 2011, PAHO/WHO, along with key partners such as UNICEF, is supporting the MSPP to reestablish the National Immunization Program and resume the large-scale efforts at improving national vaccination coverage which it began in 2007. In this regard a key step is the elaboration of a multi-year plan for the EPI, aiming at strengthening the EPI; maintaining the country free of polio, measles and rubella; eliminating neonatal tetanus as a public health problem; introducing new vaccines; and increasing vaccination coverage for the Haitian population.

**Activities carried out:**

**In the aftermath of the 2010 earthquake:**

PAHO/WHO worked closely with the MSPP and UNICEF to develop a National Post-Disaster Vaccination Plan, which included:

- Technical cooperation in the development and implementation of the plan.
- Appeal and Emergency Response Relief Fund for Haiti.
- Purchase and distribution of vaccines, supplies and equipment.
- Funding operational costs of immunization centers.
- Creation of PAHO/WHO satellite field offices in Leogane and Jacmel, aside from the PAHO/WHO main office in Port-au-Prince, in order to provide support to intermediate level.
- Immediate delivery of Td/TT vaccines and tetanus antitoxin to health facilities treating injured persons and performing emergency surgeries after the earthquake (through PROMESS, the National Center for the Supply of Essential Medicines).
- Two phase vaccination campaign with vaccines against measles-rubella as well as diphtheria, tetanus and whooping cough for children under 7 years of age and diphtheria and tetanus for older children and adults, in addition to Vitamin A supplements and albendazole:
  - Phase 1: Targeted displaced populations living in temporary settlements in over 850 sites in the areas most affected by the earthquake including municipalities of metropolitan area (Port-au-Prince, Petionville, Carrefour, Delmas, Tabarre and Cite Soleil), west department (Croix de Bouquet, Léogane, Gressier Grand Goave and Petit Goave) and south east department (Jacmel). The focus was primarily on children, but vaccines were offered to all people living in the displacement camps. By early June of 2010, over 900,000 people had been vaccinated, approximately 62% of the total population in these settlements (over 80 % of under five).
  - Phase 2: Provided a similar vaccination “package” (except that an oral polio vaccine was used and not vitamin A supplements) to all people living in the affected areas, not just those in displacement camps.
- Revitalization of routine EPI activities, both at the institutional and community outreach levels, in all the municipalities of the affected departments, building upon the momentum of the Vaccination Week of the Americas.
- Field visit by PAHO Director, Dr. Mirta Roses, to Fond Parisien, Haiti and Jimani, Dominican Republic in May of 2010 to launch vaccination activities in support of the Vaccination Week of the Americas.
Activities carried out: (continued)

Other 2010-2011 technical cooperation activities:

- Reinitiating normal EPI routine activities all over the country, with funding remaining from the Expanded Immunization Program Support Project (Projet d’Appui au Programme Élargi de Vaccination - PAPEV) which began in 2007 with Canadian Government support and an additional US$ 2 million given by the Canadian International Development Agency (CIDA). This includes EPI support and follow up activities (e.g. supervision, supply, monitoring) with the National Directorate of the EPI, departmental health authorities and with all EPI involved health facilities.

- Using the November 2010 Child Health Week as an opportunity to close the gap for unvaccinated children under the age of five as part of the nationwide delivery of an integrated package of health and nutrition interventions, prioritizing urban and rural localities with difficult access to health services.

- Provided technical cooperation, together with UNICEF to the MSPP for the development of an EPI Multi-Year Strategic Plan, from 2011-2015, which will strengthen routine EPI activities through innovative strategies (like contracting with partner NGOs), introduce new vaccines (Pentavalent, Pneumococcal and Rotavirus) and shift the emphasis towards a family health perspective, with a mix of routine activities and vaccination campaigns.

- Other partners involved in the EPI multi-year plan are: the US Centers for Disease Control and Prevention, the Canadian International Development Agency, UNICEF, USAID, GAVI, Brazil, Cuba, Spain and Japan. Their joint commitment is expected to mobilize the US$ 100 million funds required for the implementation of the plan over five years.

Challenges and next steps:

- Maintain the present momentum of the EPI with the next government and continue the collaboration with all partners who are keen to strengthening the program and broadening its ambitions.

- Strengthen vaccine and cold chain management while introducing much more expensive and volume consuming vaccines.

- Finding a sustainable solution to the financing of propane gas for the cold chain.

- Finding a sustainable solution to the financial compensation needed for community health workers who are ensuring immunization outreach delivery.

- Maximizing NGO support to health facilities through contractual mechanisms.

- Capitalizing more on Vaccination Week in the Americas and Child Health Week to catch-up unvaccinated children, update vaccination schedules and provide additional vaccine doses as needed.

The priorities of PAHO/WHO support for the next year will be:

- Validation of the EPI Multi-Year Strategic Plan.

- Submission of an application to GAVI for the introduction of new vaccines, which also requires a vaccine management and cold chain evaluation and strengthening plan.

- Supporting the logistics and follow up activities of the EPI program at all levels (central, departmental, and institutional).

- Organizing activities for the 2011 Children’s Health Week as an opportunity to provide vaccinations within an integrated health and nutrition package in hard to reach areas.

- Preparing and organizing a Polio and Measles-Rubella nationwide catch-up immunization campaign, targeting children up to 9 years of age.

- Strengthen surveillance of vaccine-preventable diseases.