

# Vaccination

Vaccination Week in the Americas 2009



25 April to 2 May 2009  
Final Report

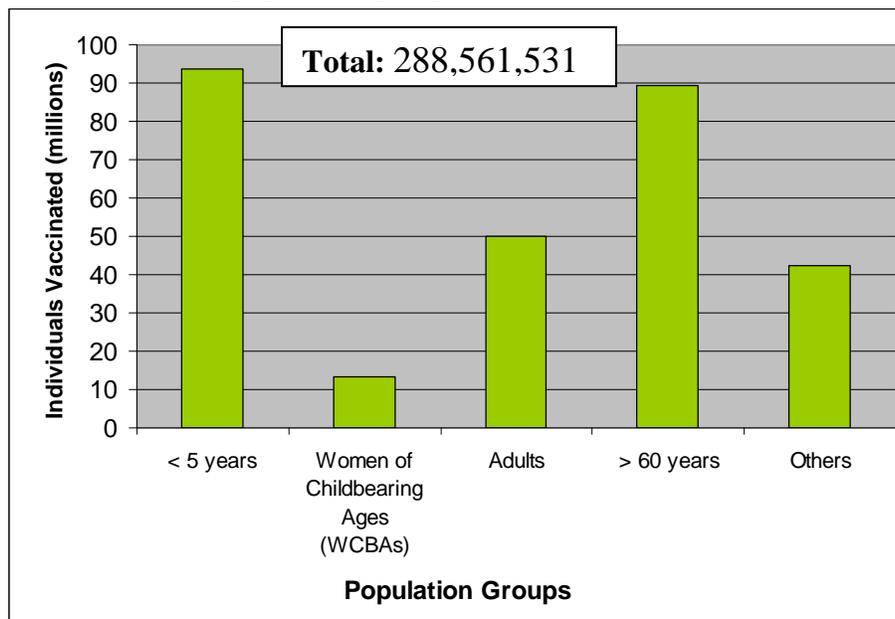


## Background

In 2009, Vaccination Week in the Americas (VWA) was celebrated from 25 April to 2 May. This year marked the seventh anniversary of the initiative, which has become the Western Hemisphere's largest multi-country health effort. Originally endorsed in 2003 through the adoption of Resolution CD44.R by the Directing Council of the Pan American Health Organization (PAHO), the overarching objective of VWA is to strengthen the Expanded Programs on Immunization in the Region by "reaching the unreached," populations with otherwise limited access to regular health services and at heightened risk of contracting vaccine-preventable diseases. In the Americas, such populations can be found in areas such as urban fringes, low coverage municipalities, indigenous communities and rural and/or border zones.

The participation of countries and territories in VWA is flexible, goals and activities for the initiative are chosen in accordance with national health objectives. While some countries choose to conduct large scale vaccination campaigns, others use the initiative as an opportunity to focus exclusively on communication initiatives and health promotion campaigns. Over its tenure in the Region, VWA has come to serve as a driving force in the promotion of Pan Americanism. This has occurred through the organization of multiple bi and tri-national VWA launching events and many vaccination initiatives which have occurred along border zones.

**Figure 1.** VWA Results by population group 2003-2009\*



Source: Country Reports to FCH-IM, PAHO

\*As of 24 August 2009

**Table 1.** Summary of Goals and Achievements of Vaccination Week in the Americas, 2003-2009\*

| Goals                                   | 2003          | 2004       | 2005                             | 2006                             | 2007                                   | 2008                                   | 2009*  |
|---|---------------|------------|----------------------------------|----------------------------------|--|--|--|
| Rubella elimination                     |               | ECU, ELS   | PAR                              | BOL                              | CUB, DOR, ELS, GUT, MEX, HAI           | ELS, MEX                               | DOR, SUR   |
| Measles follow-up campaigns             | BOL, MEX, PAR | HON, NIC   | ARG, SUR                         | URU, COL, MEX, VEN               | COR, DOR, NIC, PAN, PAR                | ECU, GUT, HAI, HON, MOT, NIC, PAN      | PAN  |
| Polio eradication                       | MEX, VEN      | VEN        | COL, CUB, DOR, HON, VEN          | CUB, DOR, ELS, GUT, HON          | HON, MEX, CUB, NIC                     | ECU, GUT, HON, NIC                     | CUB, DOR, MEX  |
| Yellow fever risk reduction             | VEN           | VEN        | COL, PER, VEN                    | COL, PER                         | BOL, ECU, PER, PAR                     | COL, PAR, SUR                          | SUR, VEN   |
| Influenza prevention                    |               | BRA, CHI   | BRA, PAN                         | ARG, BRA, CHI, PAN, PAR, URU     | ARG, BRA, COR, COL, CHI, GRA, PAN, PAR | BRA, CHI, COL, PAR                     | BRA, DOR, ELS, PAN, URU, VEN   |
| Completion of schedules                 | VEN           | CUB        | GUT, BAH, COL                    | PER                              | COL, DOR, HON, NIC, PAN, PAR, PER, VEN | ANG, ELS, GRA, GUY, NIC, PAR, SUR, VEN | ANG, ARG, BOL, DOR, ELS, GUT, GUY, HAI, HON, MEX, NIC, PAN, SUR, VEN |
| Tetanus control                         | MEX, VEN      |            | COL, PAN                         | ECU, PAR                         | COR, NIC, PAR                          | BOL, COL, CUB, JAM, MOT, NIC, SCN      | DOR, ELS, GUT, HAI, HON, MEX   |
| Introduction of new vaccines            |               | DOR        | GUT                              | PAN                              | COR, GREN, PAN, VEN                    | CHI, ELS, PAN, URU                     | PAN  |
| Interventions in indigenous communities |               |            | BRA                              | BRA                              | BRA, PAR                               | BRA, BOL, COL                          | BOL, GUY   |
| Achievements                            | 2003          | 2004       | 2005                             | 2006                             | 2007                                   | 2008                                   | 2009*  |
| Population vaccinated                   | 16,283,888    | 43,749,720 | 38,172,925                       | 49,219,552                       | 47,694,804                             | 59,740,221                             | 33,700,421   |
| Participating countries and territories | 19            | 35         | 36 (12 with awareness campaigns) | 39 (16 with awareness campaigns) | 45 (8 with awareness campaigns)        | 45 (12 with awareness campaigns)       | 44   |
| Countries with integrated activities    | 0             | 4          | 5                                | 7                                | 6                                      | 10                                     | 6  |
| Mobilization of resources               | 77,040        | 1,400,000  | 737,865                          | 400,000                          | 435,280                                | 304,535                                | 301,431  |

Source: Country Reports to FCH-IM, PAHO, \*As of 24 August 2009

## VWA 2009

### *a. Launching events*

The Regional launch of VWA 2009 took place in the South American Chaco, the border area shared between Argentina, Bolivia, and Paraguay, and one of the transnational priority areas as identified by the Pan American Alliance for Nutrition and Development. Due to the large geographic distances and the rural landscape of the Chaco region, three separate, successive events were celebrated. On the morning of 26 April, the first event was held in Mariscal Estigarribia, Paraguay, followed by an afternoon celebration in Yacuiba, Bolivia. On the morning of 27 April, a third event was held in Tartagal, Argentina.

All three launching events in the South American Chaco counted on the participation of the highest level authorities, including the President of the Republic of Paraguay, Fernando Lugo<sup>1</sup>; the Spanish, Japanese and United States ambassadors to Paraguay<sup>1</sup>; Representatives from Japanese International Cooperation Agency (JICA) and the United States Agency for International Development<sup>1</sup>; the Ministers or Vice-Ministers of Health of all three countries and other high level governmental health authorities; PAHO's Director, Dr. Mirta Roses Periago; the Regional Director of the United Nations Children's Fund (UNICEF), Mr. Nils Kastberg; the Regional Director of the Joint United Nations Programme on HIV/AIDS (UNAIDS), Dr. César Nuñez; high level authorities from United Nations Development Programme (UNDP) and the United States Centers for Disease Control and Prevention; and many community leaders and local residents.

Throughout the rest of the Region, multiple other multi-national and national VWA launching events also occurred. This year, border celebrations also took place between the United States (celebrating National Infant Immunization Week) and Mexico, El Salvador and Honduras, and Honduras and Nicaragua (Figure 2), among others. While some national launching events were held in capital cities, others took place in remote locations. In Guyana, two national launching events were held in areas which required that national EPI staff travel multiple hours, utilizing roads, rivers and small aircraft to be able to attend. In Costa Rica, VWA was celebrated with a Vaccination Week train, which traveled through neighborhoods of the city of San José throughout one morning. At each of the train stops, different cultural acts were performed and health information was distributed. A formal ceremony was also enacted at a stop in the middle of the route.

Of particular note, for the first time in 2009, the Americas Region and the European Region conducted a joint activity to commemorate both VWA and its sister week, European Immunization Week (EIW). The activity, a technical immunization meeting, took place between Suriname and French Guyana, an overseas department of France, with the support of the French government and the French ambassador to the Organization of the American States. Topics discussed during the meeting included collaboration in joint vaccination surveys, joint work in surveillance and the exchange of epidemiological surveillance data, use of one uniform international vaccination card, and

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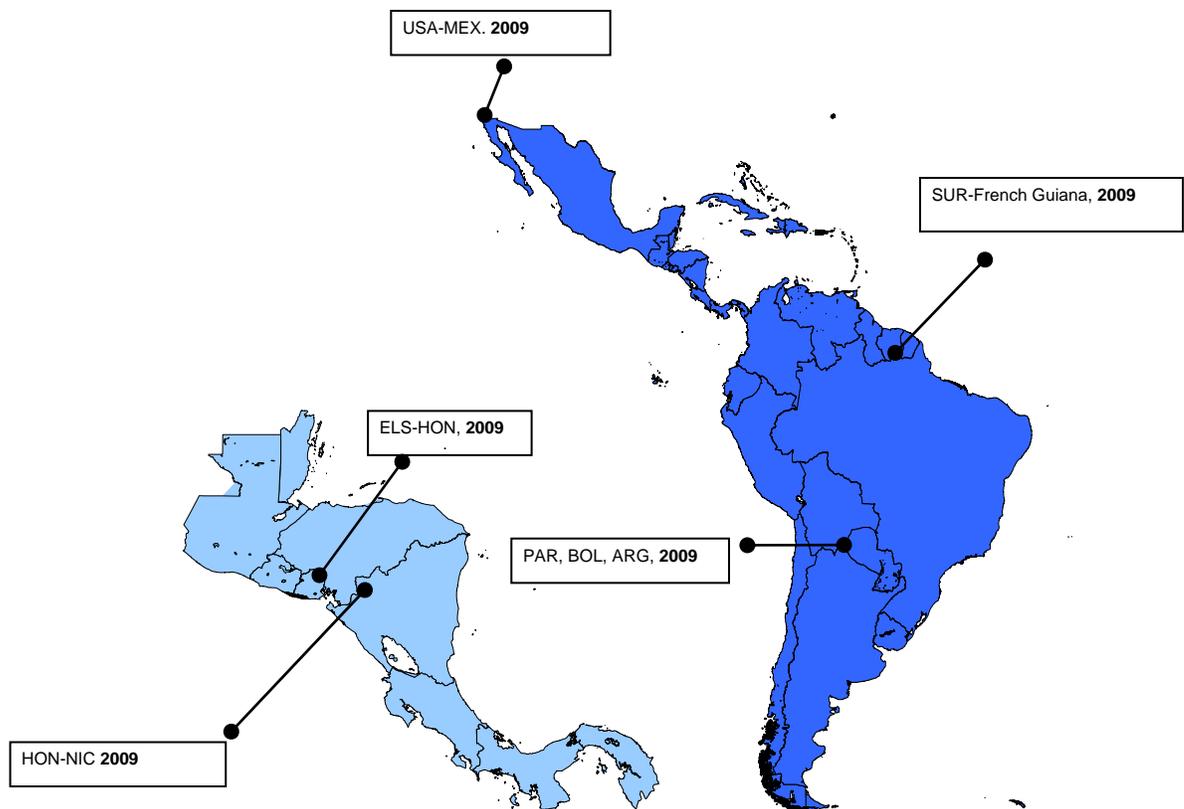
<sup>1</sup> Mariscal Estigarribia event only

other joint activities regarding new and underutilized vaccines. During this meeting, formalization and expansion of the bi-lateral relationship between Suriname and French Guyana were recommended and future cross border collaborative work was also discussed.

"We have cultural, ethnic and language differences but we have a common language that is solidarity. Borders are not a barrier to achieve a true Latin American integration."

-Minister of Health of Bolivia, Dr. Ramiro Tapia Sainz , VWA launching event in Yacuiba, Bolivia

**Figure 2.** Selected VWA multi-national launching events, 2009



## ***Vaccination Results***

In 2009, countries and territories engaged in a wide variety of vaccination campaigns, with a regional goal of immunizing approximately 30 million people. Results of these activities can be categorized according to the Regional Immunization Vision and Strategy; namely protecting the achievements, completing the unfinished agenda, and facing new challenges in immunization. Selected results are summarized below.

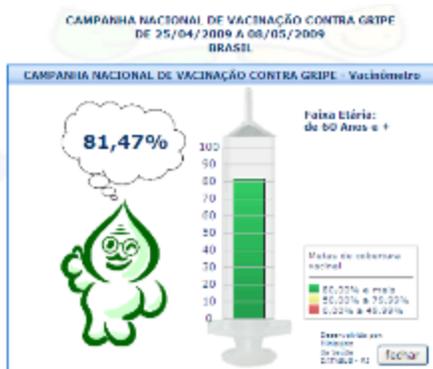
1. Protecting the achievements: polio eradication, measles elimination, diphtheria and hepatitis B control, and completion of vaccination schedules.
  - Cuba, the Dominican Republic, Mexico and Nicaragua all engaged in vaccination efforts to maintain the **eradication of polio** in the Americas during VWA 2009. From 24-30 April, Cuba rolled out the second stage of their National Polio Vaccination Campaign; 342,784 children aged one month to three years received their second polio dose and 136,558 children aged 9 years were vaccinated with a booster dose.
  - In the Dominican Republic, 432,133 doses of polio vaccine were administered to children aged less than three years. Focus was placed on immunizing children living in disadvantaged and/or hard to reach zones with a lack of available health services.
  - In Mexico 9,286,544 children aged less than 5 years were vaccinated with polio
  - In Nicaragua, the polio vaccine was targeted towards all children less than 5 years of age, regardless of their vaccination history. More than 650,000 doses were applied, accomplishing 99% of Nicaragua's national goal.
- Anguilla, Argentina, the British Virgin Islands, Bolivia, the Dominican Republic, and Guyana, all administered **hepatitis B** vaccine during VWA 2009. Many of these vaccination activities targeted occupational risk groups for vaccination, which are described in more detail in section e.
- In 2009, multiple countries and territories worked to **complete vaccination schedules** as part of their VWA activities.
  - Bolivia conducted a national intensified vaccination campaign, administering all of the childhood vaccines, with a special focus on reaching indigenous families living in the Altiplano and Chaco regions. The country administered more than 60,000 doses of both pentavalent and polio vaccine to children under one year of age; approximately 20,000 doses of each antigen corresponded to the third dose and final dose for this age group.
  - In Guatemala, the country administered more than 7,500 third doses of both pentavalent and polio vaccine to children aged less than one year, and in El Salvador, more than 18,000 third doses of these two vaccines were given to children in this age group.

- In Venezuela, VWA was extended to run through the month of May. The country administered approximately 31,000 doses of both polio and pentavalent vaccine, 18,543 doses of rotavirus vaccine, 33,716 doses of yellow fever vaccine and 34,510 doses of MMR vaccine to complete schedules in those aged one year or younger.

2. Completing the unfinished agenda: improving vaccination coverage against yellow fever, influenza, rubella and CRS, and maternal and neonatal tetanus in high-risk, isolated, border, and indigenous populations.

- Bolivia, Guyana, Suriname and Venezuela all administered the **yellow fever** vaccine during VWA this year. In Bolivia, 25,254 doses of vaccine were applied to children aged between one and two years, as part of the national vaccination schedule. In Guyana, more than 6,000 doses of yellow fever vaccine were administered in five of the country's ten regions. Suriname's yellow fever activities targeted individuals older than 12 months of age living in the hinterland without proof of prior vaccination, as well as high risk profession groups living in the coastal area. A total of 12,657 individuals were vaccinated. In Venezuela, in addition to the over 33,000 doses of yellow fever vaccine administered to children as part of the regular program activities, the country applied approximately 19,000 doses of vaccine to individuals aged 2-59 years living in risk areas.

- As in prior years, Brazil took advantage of VWA to undertake a massive **seasonal influenza** vaccination campaign, targeting its population aged over 60 years. Brazil vaccinated 15,828,506 individuals this year, achieving approximately 81% coverage. Uruguay also administered more than 54,000 doses of seasonal influenza vaccine to a wide variety of risk groups including children aged 6 months to 4 years, adults aged over 65 years, individuals with chronic disease, health workers and bird farmers. This campaign occurred alongside a pneumococcal vaccination campaign, which targeted elderly adults, smokers and those with chronic conditions and other ailments making them more susceptible to



Contribution, Brazil

infection.

- In Suriname, in the context of **achieving rubella elimination** and **maintaining measles elimination**, vaccination occurred in the border areas with Brazil and Argentina. As a result of these activities, ninety-nine percent of the target population was reached and vaccinated as needed, and eight border municipalities achieved 99% coverage with the MMR vaccine.

- Bolivia, El Salvador, Guatemala, Haiti and Mexico were among the countries that completed vaccination activities to prevent **maternal and neonatal tetanus** during VWA 2009. Bolivia vaccinated more than 194,000 women of childbearing



Map of Haiti, with highlighted areas illustrating the departments in which the Td vaccination campaigns took place.

ages (WCBAs) with the Td vaccine. El Salvador also vaccinated more than 300,000 WCBAs with this vaccine, in addition to men and older women, administering a total of 618,326 doses of Td, while Guatemala administered more than 18,000 doses of Td to WCBAs. In Haiti, a total of 230,547 doses of Td vaccine were administered, including the vaccination of 100,634 WCBAs. Haiti's tetanus activities took place in the head communes of the Nippes, South and Southeast departments, as well as in the Anse à Pitre commune of the Southeast department. This latter commune borders the Dominican Republic and has been classified as

especially high risk for neonatal tetanus. Finally, in Mexico, more than one million doses of the Td vaccine were administered to women aged 12 to 45 years as part of VWA activities.

### 3. Facing new challenges: VWA has become a platform for new vaccine introduction. In 2009 results included:

- During the VWA national launching event in Panama, presided over by First Lady Vivian Fernandez de Torrijos, the Minister of Health, Dr. Rosario Turner, announced the national introduction of the polysaccharide pneumococcal vaccine. This vaccine will be administered to adults over 60 years of age, simultaneously with the seasonal influenza vaccine. In the Cayman Islands, the Minister of Health and Human Services, the Honorable Anthony Eden, reported on the introduction of the rotavirus vaccine into the childhood vaccination schedule on March 12<sup>th</sup> in his VWA message. He also stated that the pneumococcal and human papillomavirus vaccines will be introduced in the Cayman Islands in the upcoming months.

**Table 3. People Vaccinated, by Target Population and Country or Territory, VWA 2009\***

| Country                  | 0-12 months                           | 1-4 years | <5 years  | > 5 years | WCBA<br>Td | >60 years<br>influenza | Adult<br>MR/MMR | Indigenous | High risk<br>occupations | Yellow<br>Fever | Others  | TOTAL      |
|--------------------------|---------------------------------------|-----------|-----------|-----------|------------|------------------------|-----------------|------------|--------------------------|-----------------|---------|------------|
| Anguilla <sup>1</sup>    |                                       |           |           | 187       |            |                        |                 |            | 250                      |                 |         | 437        |
| Antigua & Barbuda        |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Argentina                | 28,205                                | 11,889    |           | 11,544    |            |                        |                 |            |                          |                 |         |            |
| Aruba                    |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Bahamas                  |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Barbados                 |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Belize                   |                                       | 281       |           | 4,205     |            |                        |                 |            | 5,066                    |                 |         | 9552       |
| Bermuda                  |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Bolivia <sup>2</sup>     | 80,669                                | 64,200    |           |           | 194,016    |                        |                 |            | 3,274                    |                 | 100,891 | 443050     |
| Brazil                   |                                       |           |           |           |            | 15,828,506             |                 |            |                          |                 |         |            |
| British Virgin Islands   |                                       |           |           |           |            |                        |                 |            |                          | 21              | 485     | 506        |
| Canada                   |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Cayman Islands           | Social mobilization and communication |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Chile                    |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Colombia                 |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Costa Rica               | Social mobilization and communication |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Cuba                     |                                       |           | 342,784   | 136,558   |            |                        |                 |            |                          |                 |         | 479342     |
| Dominica                 | Social mobilization and communication |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Dominican Rep.           | 122,941                               | 260,118   |           |           |            |                        |                 |            |                          |                 |         | 383059     |
| Ecuador                  |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| El Salvador <sup>3</sup> | 78,692                                |           | 215,210   |           | 321,338    | 10,593                 |                 |            | 6,803                    | 602             | 296,988 | 930226     |
| Grenada                  |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Guatemala                | 30,125                                |           | 11,234    |           | 18,373     |                        |                 |            |                          |                 |         | 59732      |
| Guyana                   |                                       |           |           |           |            |                        | 840             |            |                          | 6,167           |         | 7007       |
| Haiti <sup>4</sup>       |                                       | 130,137   |           |           | 100,634    |                        |                 |            |                          |                 | 129,913 | 360684     |
| Honduras                 | 35,428                                | 25,173    |           |           | 69,808     |                        |                 |            |                          |                 |         | 130409     |
| Jamaica                  |                                       |           |           |           |            |                        |                 |            |                          |                 |         |            |
| Mexico <sup>5</sup>      | 225,297                               |           | 9,286,544 | 67,807    | 1,117,812  |                        | 139,695         |            |                          |                 | 112,196 | 10,949,352 |
| Montserrat               |                                       |           | 73        | 75        |            |                        |                 |            | 31                       |                 | 75      | 254        |

| Country                          | 0-12 months    | 1-4 years      | <5 years          | > 5 years      | WCBA's<br>Td     | >60 years<br>influenza | Adult<br>MR/MMR | Indigenous | High risk<br>occupations | Yellow<br>Fever | Others           | TOTAL             |
|----------------------------------|----------------|----------------|-------------------|----------------|------------------|------------------------|-----------------|------------|--------------------------|-----------------|------------------|-------------------|
| Netherlands<br>Antilles          |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| Bonaire                          |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| Curaçao                          |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| St. Maarten                      |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| Saba                             |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| St Eustatius                     |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| Nicaragua <sup>6</sup>           | 54,352         |                | 653,236           |                |                  |                        |                 |            |                          |                 | 799,663          | 1,507,251         |
| Panama <sup>7</sup>              | 2,083          | 4728           |                   |                | 1,600            |                        |                 |            |                          |                 | 7,074            | 15,485            |
| Paraguay                         |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| Peru                             |                |                | 83,952            |                |                  |                        |                 |            |                          |                 |                  | 83,952            |
| St. Kitts and Nevis              |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| St. Lucia                        |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| St Vincent and the<br>Grenadines |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| Suriname                         |                |                | 431               |                |                  |                        |                 |            |                          | 12,657          |                  | 13,088            |
| Turks and Caicos                 |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| Trinidad & Tobago <sup>8</sup>   |                |                |                   |                |                  |                        |                 |            |                          | 414             | 1,503            | 1,917             |
| United States                    |                |                |                   |                |                  |                        |                 |            |                          |                 |                  |                   |
| Uruguay <sup>9</sup>             |                |                |                   |                |                  |                        |                 |            |                          |                 | 59,723           | 59,723            |
| Venezuela <sup>10</sup>          | 61,635         |                | 94,313            | 371,882        |                  | 1,180,485              |                 |            |                          | 52,574          | 624,362          | 2,385,251         |
| <b>TOTAL</b>                     | <b>719,427</b> | <b>496,526</b> | <b>10,687,777</b> | <b>592,258</b> | <b>1,823,581</b> | <b>17,019,584</b>      | <b>140,535</b>  |            | <b>15,424</b>            | <b>72,435</b>   | <b>2,132,873</b> | <b>33,700,421</b> |

\*As of 24 August 2009

1. Anguilla Indian migrant workers at the Viceroy Barney Bay Development Project (Hep B, DT, MMR).

2. In Bolivia, MR to those from 5-39 years and Td in men.

3. Vaccination of women >50 years and men with Td vaccine.

4. Universal Tetanus vaccination in Haiti (other).

5. Mexico MMR administered to children 1-4 years and at 6 years.

6. Nicaragua Td vaccine administered to children aged 6-14 years, WCBA's, and risk groups who have incomplete Td vaccination schedules.

7. Additional WCBA's vaccinated with other antigens.

8. Partial data reported of all individuals vaccinated in Trinidad and Tobago.

9. In Uruguay VWA activities included the administration of seasonal influenza and pneumococcal vaccines to a variety of risk groups, however national data was reported, not by risk group.

10. Influenza applied to individuals >40 years, not >60 years. Others corresponds to influenza vaccination targeting risk groups, and pneumococcal vaccination of elderly adults.

**Table 4.** Number of Doses Administered by Antigen and Country or Territory, VWA 2009\*.

| Country                | MMR                                   | MR      | DTP     | DT      | Td        | Hep B   | Tetavalent | Pentavalent | Polio     | BCG     | YF     | Influenza  | RV      | Pneumo  | Other   |
|------------------------|---------------------------------------|---------|---------|---------|-----------|---------|------------|-------------|-----------|---------|--------|------------|---------|---------|---------|
| Anguilla               | 46                                    |         |         | 187     | 249       | 250     |            |             | 187       |         |        |            |         |         |         |
| Antigua & Barbuda      |                                       |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Argentina <sup>1</sup> | 24,230                                |         | 11,544  |         |           | 12,160  | 23,723     |             | 24,641    | 12,637  |        |            |         |         | 13,568  |
| Aruba                  |                                       |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Bahamas                | 3                                     |         |         |         | 95        | 121     |            |             |           |         |        | 111        |         |         |         |
| Barbados               |                                       |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Belize                 |                                       |         | 281     |         | 9,271     |         |            |             | 281       |         |        |            |         |         |         |
| Bermuda                |                                       |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Bolivia                | 27,972                                | 125,249 |         |         | 208,261   | 3,274   |            | 63,388      | 65,454    | 18,508  | 25,254 |            | 33,133  |         |         |
| Brazil                 |                                       |         |         |         |           |         |            |             |           |         |        | 15,828,506 |         |         |         |
| British Virgin Islands |                                       |         |         |         | 155       | 168     |            |             |           |         | 21     | 162        |         |         |         |
| Canada                 |                                       |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Cayman Islands         | Social mobilization and communication |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Chile                  |                                       |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Colombia               |                                       |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Costa Rica             | Social mobilization and communication |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Cuba                   |                                       |         |         |         |           |         |            |             | 479,342   |         |        |            |         |         |         |
| Dominica               | Social mobilization and communication |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Dominican Rep.         | 22,084                                |         | 28,749  | 464,543 |           | 12,724  |            | 13,444      | 432,133   | 1,647   |        | 46,928     |         |         |         |
| Ecuador                |                                       |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| El Salvador            | 31162                                 | 753     | 33,023  | 162,497 | 618,326   |         |            | 49,997      | 82,916    | 15,637  | 602    | 20,822     | 13,619  |         |         |
| Grenada                |                                       |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Guatemala              | 7,669                                 |         | 11,065  |         | 18,373    |         |            | 23,134      | 34,305    | 6,945   |        |            |         |         |         |
| Guyana                 | 840                                   |         | 2,829   | 919     |           | 713     |            |             | 293       |         | 6,167  |            |         |         |         |
| Haiti                  |                                       | 34,037  |         | 230,547 |           |         |            |             | 130,171   |         |        |            |         |         |         |
| Honduras               | 14,690                                |         | 62,033  |         | 69,808    |         |            | 31,488      | 56,097    | 6,114   |        |            | 12,134  |         |         |
| Jamaica                |                                       |         |         |         |           |         |            |             |           |         |        |            |         |         |         |
| Mexico                 | 233,834                               | 255,136 | 266,069 |         | 1,117,812 | 544,335 |            |             | 9,286,544 | 108,929 |        |            | 225,297 | 235,154 | 468,445 |
| Montserrat             | 110                                   |         |         | 222     |           | 19      |            |             | 222       |         |        |            |         |         | 345     |

| Country                       | MMR            | MR             | DTP            | DT             | Td               | Hep B          | Tetavalent    | Pentavalent    | Polio             | BCG            | YF            | Influenza         | RV             | Pneumo         | Other          |
|-------------------------------|----------------|----------------|----------------|----------------|------------------|----------------|---------------|----------------|-------------------|----------------|---------------|-------------------|----------------|----------------|----------------|
| Netherlands Antilles          |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| Bonaire                       |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| Curaçao                       |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| St. Maarten                   |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| Saba                          |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| St Eustatius                  |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| Nicaragua                     | 32,351         |                | 42,170         |                | 799,663          |                |               | 68,889         | 653,236           |                |               |                   | 54,352         |                |                |
| Panama <sup>2</sup>           |                | 3,979          |                |                | 1,600            |                | 1,533         | 2,042          | 2,083             | 299            |               | 7,920             | 1,154          |                | 2,076          |
| Paraguay                      |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| Peru                          |                |                |                |                |                  |                |               | 83,952         |                   |                |               |                   |                |                |                |
| St. Kitts y Nevis             |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| St Lucia                      |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| St Vincent and the Grenadines |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| Suriname <sup>3</sup>         | 107            |                | 160            | 9              |                  |                |               | 34             |                   |                | 12,657        |                   |                |                | 231            |
| Trinidad and Tobago           |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| Turks and Caicos              |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| United States                 |                |                |                |                |                  |                |               |                |                   |                |               |                   |                |                |                |
| Uruguay <sup>4</sup>          |                |                |                |                |                  |                |               |                |                   |                |               | 54461             |                | 5775           | 309            |
| Venezuela                     | 122,374        | 95,024         |                |                | 276,858          |                |               | 80,651         | 93,803            |                | 53,329        | 1,622,779         | 37,813         | 182,068        |                |
| <b>TOTAL</b>                  | <b>517,472</b> | <b>514,178</b> | <b>457,923</b> | <b>858,924</b> | <b>3,115,406</b> | <b>573,764</b> | <b>25,256</b> | <b>417,019</b> | <b>11,341,708</b> | <b>170,716</b> | <b>98,030</b> | <b>17,581,689</b> | <b>377,502</b> | <b>422,997</b> | <b>484,974</b> |

\*As of 24 August 2009

1. Other=Hepatitis A.

2. Hepatitis A and Tdap.

3. Both DTP and DT were given with OPV in Suriname. Others =children <5 years vaccinated with EPI antigens found during the MMR campaign along the border with Brazil.

4. A variety of vaccines administered at the "ExpoSalud" event in Montevideo.

**c. Indicators**

As one means of documenting the impact of VWA, countries have defined the following indicators:

- Number and percentage of children aged 1-4 years with the first, second, and third dose of the DTP/pentavalent (to measure cases of 0 doses, delayed schedules, and completed schedules);
- Number and percentage of WCBA in at-risk municipalities vaccinated with the first dose of Td during VWA;
- Percentage of rapid coverage monitoring (RCM) in municipalities with MR vaccination coverage <95%;
- Percentage of people interviewed in preselected areas who know about VWA;
- Percentage of municipalities with plans for a second and third round of vaccination to complete schedules after the VWA; and
- Number of suspect measles/rubella and acute flaccid paralysis (AFP) cases identified during active case-finding in the community and previously detected by the surveillance system.

In 2009, VWA results using the above, or similar, indicators included:

- In Venezuela, VWA activities initiated and completed delayed vaccination schedules in children aged 2-5 years through the administration of the following doses:

**Vaccination schedules started during VWA**

|         |              |                      |
|---------|--------------|----------------------|
| Vaccine | <i>OPV 1</i> | <i>Pentavalent 1</i> |
| Doses   | 6,449        | 5,575                |

**Vaccination schedules completed during VWA**

|         |              |                     |                     |            |                      |
|---------|--------------|---------------------|---------------------|------------|----------------------|
| Vaccine | <i>OPV 3</i> | <i>Pentavalente</i> | <i>Yellow Fever</i> | <i>MMR</i> | <i>MMR (booster)</i> |
| Doses   | 28,720       | 17,058              | 32,182              | 22,057     | 65,807               |

**Source:** Ministry of Health, Venezuela

- In Bolivia, 1,409 children between the aged of 2 and 4 years with delayed schedules were vaccinated with the pentavalent vaccine during VWA. In El Salvador, among children aged 1-4 years, 142 children received their first dose of pentavalent vaccine, 228 received their second dose and 332 received their third dose of this vaccine during VWA activities. The country also administered more than 49,000 doses of pentavalent vaccine to children aged less than one year. In Nicaragua, VWA activities resulted in the identification of 12,873 children nationwide who did not have a birth certificate and were not registered with the EPI program. In Costa Rica, 6,587 vaccination cards were reviewed in 49 health units in three regions. Of these, 316 incomplete schedules were detected (5%).
- In Honduras, 6,195 pregnant women received their first dose of Td as part of VWA activities. In Panama, 11.2% of WCBA living in municipalities identified as at-risk were vaccinated with their first dose of Td vaccine during the initiative.

Women were also included in this category if they were unable to present their vaccination card.

- On the island of Dominica, a survey was conducted to assess the effectiveness of VWA-related social communication activities. Of the 43 individuals who participated in the survey, the majority were WCBAAs (65%). When asked whether they had heard about a special vaccination activity, 72% responded yes. Eighty-four percent of respondents had heard about activities surrounding influenza and Hepatitis B vaccination and 29% had heard about VWA in particular. In Panama, 82.6% of 2,540 people interviewed in pre-selected areas had some prior knowledge of VWA.
- As part of VWA, active case-finding for cases of acute flaccid paralysis (AFP) and suspected measles/rubella was undertaken in the majority of the health areas of the Dominican Republic. All suspected cases were discarded. In Panama, 18,244 residences were visited during active case-finding for AFP and suspected measles/rubella and zero cases were found. In Guatemala, one suspected AFP case was identified during VWA, as were seven suspected cases of measles/rubella, all of which had previously been identified by the surveillance system and discarded.

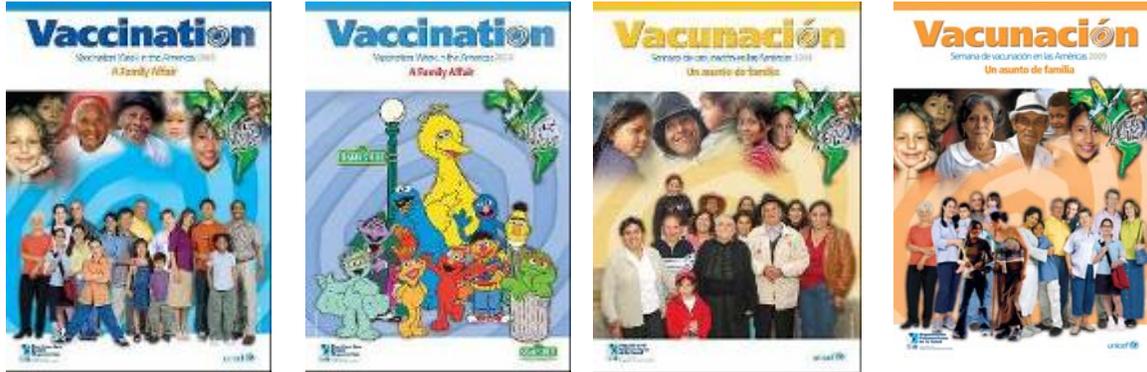
#### *d. Mass communication and social mobilization*

##### 1. Regional social communication campaigns

In 2009, the importance of family vaccination and the vaccination of health-care workers were selected as the two Regional themes for VWA. The latter theme is discussed in more detail in section e. Two new slogans, Vaccination: “A Family Affair”, and “Immunization begins with health-care workers-get vaccinated” were developed and utilized along with the traditional VWA slogan “Vaccination, an Act of Love” in materials distributed throughout the Region.

##### *Print materials*

Approximately 27,000 posters and 93,000 stickers were printed this year for country use. The majority of materials were designed in Spanish, English and Creole. VWA posters were also produced in five indigenous languages, Aymara, Chorote, Guaraní (Argentina and Paraguay varieties), Quechua and Wichi, in conjunction with the VWA Regional launch in the South American Chaco. PAHO’s partnership with Sesame St continued in 2009, and the popular children’s characters were again used in the Regional social communication campaign materials. To allow countries to adapt VWA materials to meet specific local needs, a CD with 2009 design templates was also distributed.



Examples of the print materials created for VWA 2009.

### *Videos*

A variety of public service announcement videos (PSAs) were also produced for use in national media channels in 2009, including two new PSAs starring popular Latino television personality Don Francisco, a PAHO champion of health. For the second year, WHO Director-General, Dr. Margaret Chan tapped a PSA in support of vaccination weeks with the Regional Directors of those WHO Regions currently implementing or considering such initiatives in the near future (EURO, AMRO/PAHO and EMRO).



Drs. Al Gezairy (RD-EMRO), Chan (Director-General, WHO), Roses (RD-AMRO/PAHO) and Danzon (RD-EURO) in a screen shot from their 2009 PSA.

## 2. National social communication campaigns

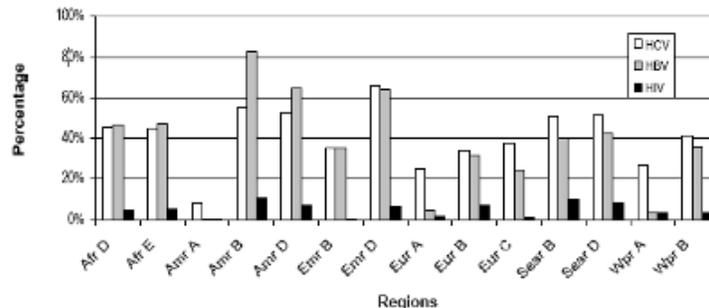
Many countries and territories choose to mark VWA through national social communication and educational initiatives relating to vaccination. This focus was especially common throughout the Caribbean, where church services, radio and television programs, and local newspapers were among the popular channels used for addressing the public on islands such as Anguilla, Bahamas, British Virgin Islands, Cayman Islands, Dominica and Montserrat. In Costa Rica, the focus of VWA was also centered on social communication and information dissemination. Hundreds of training activities took

place, in addition to vaccine related talks directed at school children. Many information posts were also set up, including 1,370 posts in health units in the Northern Central Region.

**e. Focus on Occupational Health**

As mentioned above, the vaccination of health-care workers was one of the highlighted themes during VWA 2009. In the Americas, the occupational transmission of infectious and vaccine preventable diseases, such as hepatitis B and seasonal influenza, account for significant illness, sick days, and lost productivity among health-care workers. Reversely, improved vaccination among health-care workers is associated with reduced absenteeism and fewer patient deaths<sup>2</sup>.

In the Americas, the proportion of hepatitis B infections among health-care workers due to occupational sharps injuries is 55 percent – the highest in the world<sup>3</sup> (Figure 3). At the same time, globally, hepatitis B vaccine coverage among health care workers remains low with a range of 39 to 67%<sup>3</sup>. Vaccination remains one of the most effective and cost-efficient way to prevent this significant burden of disease, which accounts for 66, 000 cases of infection each year among health care workers<sup>3</sup>. Improved vaccination coverage of health-care workers with the seasonal influenza vaccine is also needed; in the United States the average annual influenza vaccination rates remains low at 36%<sup>2</sup>.



**Figure 3:** Proportion of hepatitis C (HCV), hepatitis B (HBV), and human immunodeficiency virus (HIV) infections in health care workers due to contaminated sharps<sup>1</sup>



Vaccination Week poster promoting health care worker vaccination

In 2009, the areas of Workers’ Health and Immunization collaborated to assist member countries with VWA planning around this theme. An aide memoire on evidence-based information on best practices to increase immunization coverage for health care workers, (Appendix 1) was elaborated and distributed. As part of the Regional social communication campaign, a poster aimed at health workers was also designed for country use.

2 CDC 2003, Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP), MMWR. 2003; 52(RR8):1-44.

3 Pruss-Ustun A, Rapiti E, Hutin Y, 2003, *Sharps injuries: Global burden of disease from sharps injuries to health-care workers*, Environmental burden of disease series No. 3, WHO, Geneva, available online: [http://www.who.int/quantifying\\_ehimpacts/publications/9241562463/en/](http://www.who.int/quantifying_ehimpacts/publications/9241562463/en/).

Many countries and territories responded positively toward this VWA focus. Approximately 9 countries aimed to vaccinate health care workers against diseases such as hepatitis B, measles, rubella, diphtheria, tetanus, and influenza as part of the week (Table 5).

**Table 5.** VWA activities targeting health care workers, 2009

| Country                    | Activities   | Results  |
|----------------------------|--|--|
| <b>Bolivia</b>             |  | Hepatitis B: 3,274 doses, SR: 2,376 doses  |
| <b>Cayman Islands</b>      | Presentation on immunization for health care workers delivered and poster displays at all public and private health care facilities  |  |
| <b>Dominica</b>            | Six training workshops for 114 health care workers from 7 districts on a variety of topics including safe injection techniques and equipment and infection control. Health education sessions were also conducted and immunization corners were set up at the various health centers on the island to provide and promote vaccination.   |  |
| <b>Dominican Republic</b>  | Health workers and health science students were vaccinated against hepatitis B in their workplaces and in universities. Health science students were also given Td vaccine. Influenza vaccine was provided to health care workers at the workplace   | Hepatitis B: 12,724 doses for health workers and health science students,                                |
| <b>El Salvador</b>         |  | Influenza: 6803 doses  |
| <b>Panama</b>              | Influenza vaccination for health officials   |  |
| <b>Suriname</b>            | Expansion of yellow fever vaccination campaign to include health workers in the Sipaliwini and Marowijne Districts (Southeast and East Suriname)   | In the coastal areas, the yellow fever vaccination campaign was expanded to include 2,475 health workers |
| <b>Trinidad and Tobago</b> | Health care workers were vaccinated in St. George West county: Port of Spain General and St. Anne's hospitals. In St. George Central county: health promotion and education discussions included health workers. The strategies employed included poster displays, video presentations, outreach using Mobile Clinic, and open days at all health centers. In St. George East: staff were immunized at the Eric Williams Medical Complex. County Victoria: 2-day immunization program for staff members at the San Fernando General Hospital |  |
| <b>Uruguay</b>             | Free influenza vaccine provided to health personnel  |  |



Health care worker being vaccinated in Bolivia during VWA 2009.

In 2009, VWA also coincided with World Day for Safety and Health at Work, an annual and global campaign to promote healthy and safe work for all. This year's theme was "Protecting the health and safety of health care workers."

An event was held at PAHO in Washington DC to mark this occasion, with the participation of over 100 people from across the Americas. PAHO's Director Dr. Mirta Roses, spoke live from a hospital in Argentina where all workers were provided with



Poster for the 2009 World Day for Safety and Health at Work.

free, on site influenza vaccines in light of VWA. Making health care workers a priority group this year encouraged awareness and action to vaccinate other high-risk occupational groups in the Region, such as farmers and fishermen, teachers, construction workers and waste collectors, among others (Table 6).

**Table 6.** VWA activities targeting other occupational groups.

| Country                    | Activities   | Results  |
|----------------------------|--|--|
| <b>Belize</b>              | Construction, industrial workers and farmers were vaccinated on site against tetanus.  | 35 sites were visited and 5,066 doses of Td were administered.   |
| <b>Dominican Republic</b>  | Farm workers and construction workers were vaccinated against Td under the leadership, guidance, and coordination with employers, unions, or others  |  |
| <b>Guyana</b>              | Symposium for nursery school teachers in Georgetown<br>Hepatitis B vaccines given to sanitation workers in East Coast Demerera<br>Vaccination of inmates and officers in Mazaruni prison   |  |
| <b>Montserrat</b>          | A PowerPoint presentation was given to the Farmer's Association regarding Tetanus. Handouts/ brochures given on EPI diseases and tetanus Booster administered.<br>A partnership was formed with Staff at the John. A. Osborne Airport who received a presentation on cold chain management.<br>In conjunction with the Ministry of Education a symposium was done on EPI diseases and the child health |  |
| <b>Suriname</b>            | Expansion of yellow fever vaccination campaign to include gold miners in the Sipaliwini and Marowijne Districts (Southeast and East Suriname)  | In the coastal areas, the yellow fever vaccination campaign was expanded to include transportation workers, immigration and police officers, military personnel and gold mine workers. |
| <b>Trinidad and Tobago</b> | Cumuto area of County St. Andrew/St. David: Clinic-mobile community outreach programs were used to identify and immunize selected groups of soldiers   |  |
| <b>Uruguay</b>             | Free influenza vaccine provided to staff working with poultry and at poultry hatcheries  |  |

#### *f. Other integrated preventative interventions*

This year, many countries and territories also took advantage of the population contact generated through VWA to integrate other preventative interventions together with vaccination initiatives. Selected efforts included:

- In Haiti, 104,137 total doses of vitamin A were administered to children under five all of the communes (39) of the three targeted departments. In Honduras, the country administered 16,907 doses of vitamin A to children aged 6-11 months, 214,729 doses to children aged 1-4 years and 5,736 doses to post-partum women.
- A large health fair occurred in Yacuiba, Bolivia as part of the VWA launching celebrations. Booths at the fair addressed multiple public health topics including nutrition, breastfeeding, dengue prevention, and sexual education.
- Mexico delivered multiple other preventative interventions as part of VWA 2009 including: 7,592,245 packets of oral rehydration therapy to mothers of children younger than 5 years, 7,202,208 doses of vitamin A to individuals aged 6 months to 4 years in at risk municipalities, more than 18 million doses of anti-parasitic medication to individuals aged two to 14 years in these same at risk areas, 1,089,740 doses of folic acid to WCBAs, and more than 300,000 doses of multivitamins and iron. Additionally millions of messages related to diarrheal diseases, respiratory infections and neonatal tetanus were disseminated.
- A memo was distributed to HIV and immunization focal points in PAHO country offices which supported the provision of HIV prevention services as part of VWA activities, in conjunction with national authorities and other United Nations agencies.

#### *g. VWA and the Influenza A (H1N1) pandemic*

Countries and territories faced a unique situation in the 2009 implementation of VWA activities due to the emergence and subsequent spread of the Influenza A (H1N1) virus in the Region. The beginning stages of this pandemic coincided directly with the opening days of VWA; the ensuing need for countries and territories to respond rapidly to this health threat at times took up those health resources that would have been used for the implementation of VWA activities. On a Regional level, the media attention that is usually placed on VWA efforts was also greatly diverted to Influenza A (H1N1). Several countries and territories made note of this unique challenge in their VWA reports, while others have been unable to report their VWA results on time due to this ongoing issue. Experiences and lessons learned from VWA however will likely prove useful as countries prepare to introduce an Influenza A (H1N1) vaccine. These include the importance of international, inter-agency and inter-sector cooperation, the successful enactment of social communication campaigns, and the importance of reaching difficult to access populations and vaccinating health-care workers and other risk groups.

## *h. Challenges*

Looking towards future Vaccination Weeks in the Americas, additional challenges and opportunities that will be faced include:

- Maintaining VWA as a Regional strategy which increases population awareness of vaccination and the work of the Expanded Program on Immunization, while highlighting the immunization of underserved populations in the Americas.
- Expanding upon the integration of other preventative interventions with immunization as part of VWA. This may include the identification of children without birth certificates (as done in Nicaragua in 2009) and increased integrated work with areas such as HIV.
- Consolidating ties with the European Immunization Week and helping to support the expansion of vaccination weeks to other interested regions, working towards a Global Vaccination Week in the near future. In 2010, the Eastern Mediterranean Region of the WHO is planning to pilot a vaccination week and they are collaborating with PAHO and EURO to achieve this goal.

**Appendix 1:** Aide memoire for an effective approach to the immunization of health-care workers against hepatitis B.

