Expanded Program on Immunization

I. **Rationale**

The Expanded Program on Immunization (EPI) was established in 1976 to ensure that infants/children and mothers have access to routinely recommended infant/childhood vaccines. Six vaccine-preventable diseases were initially included in the EPI: tuberculosis, poliomyelitis, diphtheria, tetanus, pertussis and measles. In 1986, 21.3% “fully immunized” children less than fourteen months of age based on the EPI Comprehensive Program review.

II. **Scenario**

**Global Situation**

**The burden**

In 2002, WHO estimated that 1.4 million of deaths among children under 5 years due to diseases that could have been prevented by routine vaccination. This represents 14% of global total mortality in children under 5 years of age.

Source: Weekly Epidemiological Record, WHO: No.46,2011,86.509-520)
Burden of Diseases

The immunization coverage of all individual vaccines has improved as shown in Figure 1: (Demographic Health Survey 2003 and 2008). Fully Immunized Child (FIC) coverage improved by 10% and the Child Protected at Birth (CPAB) against Tetanus improved by 13% compared to any prior period. Thus, the Philippines has now historically the highest coverage for these two major indicators.

![Figure 1: Comparison of the 2003 and 2008 EPI indicators, Source: NDHS](image)

III. Interventions/ Strategies

Program Objectives/Goals:

**Over-all Goal:**

To reduce the morbidity and mortality among children against the most common vaccine-preventable diseases.

**Specific Goals:**

1. To immunize all infants/children against the most common vaccine-preventable diseases.
2. To sustain the polio-free status of the Philippines.
3. To eliminate measles infection.
4. To eliminate maternal and neonatal tetanus
5. To control diphtheria, pertussis, hepatitis b and German measles.
6. To prevent extra pulmonary tuberculosis among children.

**Mandates:**

Republic Act No. 10152*Mandatory Infants and Children Health Immunization Act of 2011*Signed by President Benigno Aquino III in July 26, 2010. The mandatory includes basic immunization for children under 5 including other types that will be determined by the Secretary of Health.
Strategies:

- **Conduct of Routine Immunization for Infants/Children/Women through the *Reaching Every Barangay (REB)* strategy**

  REB strategy, an adaptation of the WHO-UNICEF Reaching Every District (RED), was introduced in 2004 aimed to improve the access to routine immunization and reduce drop-outs. There are 5 components of the strategy, namely: data analysis for action, re-establish outreach services, strengthen links between the community and service, supportive supervision and maximizing resources.

- **Supplemental Immunization Activity (SIA)**

  Supplementary immunization activities are used to reach children who have not been vaccinated or have not developed sufficient immunity after previous vaccinations. It can be conducted either national or sub-national—in selected areas.

- **Strengthening Vaccine-Preventable Diseases Surveillance**

  This is critical for the eradication/elimination efforts, especially in identifying true cases of measles and indigenous wild polio virus

  - Procurement of adequate and potent vaccines and needles and syringes to all health facilities nationwide

IV. **Status of implementation/ Accomplishment**

- All health facilities (health centers and barangay health stations) have at least one (1) health staff trained on REB.

**Polio Eradication:**

- The Philippines has sustained its polio-free status since October 2000.

- Declining Oral Polio Vaccine (OPV) third dose coverage since 2008 from 91% to 83%. A least 95% OPV3 coverage need to be achieved to produce the required herd immunity for protection.
• There is an on-going polio mass immunization to all children ages 6 weeks up to 59 months old in the 10 highest risk areas for neonatal tetanus. These areas are the following: Abra, Banguet, Isabela City and Basilan, Lanao Norte, Cotabato City, Maguindanao, Lanao Sur, Marawi City and Sulu.

• Acute Flaccid Paralysis (AFP) reporting rate has decreased from 1.44 in 2010 to 1.38 in 2011. Only regions III, V and VIII have achieved the AFP rate of 2/100,000 children below 15 years old. (Source: NEC, DOH). A decreasing AFP rate means we may not be able to find true cases of polio and may experience resurgence of polio cases.

Measles Elimination

• Implemented the 2-dose measles-containing vaccine (MCV) in 2009

\[ \text{MCV1 (monovalent measles) at 9-11 months old} \]
\[ \text{MCV2 (MMR) at 12-15 months old.} \]

• Implemented and strengthened the laboratory surveillance for confirmation of measles. Blood samples are withdrawn from all measles suspect to confirm the case as measles infection.

• A supplemental immunization campaign for measles and rubella (German measles) was done in 2011. This was dubbed as “Iligtas sa Tidak ang Pinas” 15.6 million (84%) out of the 18.5 million children ages 9 months to 8 years old were given 1 dose of the measles-rubella (MR) vaccine between April and June 2011.
Rapid coverage assessment (RCA) were conducted in selected areas to validate immunization coverage, assess high quality and that there are NO missed child in every barangay. Overall RCA results showed that 70,594 (97.6%) out of 72,353 9 months to 8 years old living in the randomly selected barangays were vaccinated. There are 3,494 barangays with a population of 1000 and above that were randomly selected. 97.6% of all eligible children were given the MR vaccine during the immunization campaign.

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As of Morbidity Week 8 of 2012, there were 92 confirmed cases: 60 cases were laboratory confirmed, 5 cases were epidemiologically-linked and 27 clinically confirmed. This means we have at least 60 “true” measles at present. Measles is said to be eliminated if we have 1 case per million or below 100 cases in a year

Maternal and Neonatal Tetanus Elimination

10 areas were classified as highest risk for neonatal tetanus (NT). Figure 3 shows the areas categorized as low risk, at risk and highest risk based on the NT surveillance, skilled birth attendants and facility based delivery and the tetanus toxoid 2+ (TT 2+) vaccination.

Figure 3: Level of Risk for NT, Philippines

Three (3) rounds of TT vaccination are currently on-going in the 10 highest risk areas. An estimated 1,010,751 women age 15 - 40 year old women regardless of their TT immunization will receive the vaccine during these rounds. This is funded by the Kiwanis International through UNICEF and World Health Organization.
Control of other common vaccine-preventable diseases (Diphtheria, Pertussis, Hepatitis B and Meningitis/Encephalitis secondary to H. influenzae type B)

Continuous vaccination for infants and children with the DPT or the combination DPT-HepB-HiB Type B. Annex1 EPI Annual Accomplishment Report. DOH procures all the vaccines and needles and syringes for the immunization activities targeted to infants/children/mothers.

Hepatitis B Control

- Republic Act No. 10152 has been signed. It is otherwise known as the “Mandatory Infants and Children Health Immunization Act of 2011, which requires that all children under five years old be given basic immunization against vaccine-preventable diseases. Specifically, this bill provides for all infants to be given the birth dose of the Hepatitis-B vaccine within 24 hours of birth.

- One strategy to strengthen Hepatitis B coverage is to integrate birth dose in the Essential Intrapartum and Newborn Care Package (EINC). In 2011, 11 tertiary hospitals are already EINC compliant.

- The goal of Hepatitis B control is to reduce the chronic hepatitis B infection rate as measured by HBsAg prevalence to less than 1% in five-year-olds born after routine vaccination started 100% Hepatitis B at birth vaccination.

Figure 4  Hepatitis B Coverage. Philippines, 2001-2011

<table>
<thead>
<tr>
<th>Timing of administration/dose</th>
<th>2009</th>
<th>2010*</th>
<th>2011*</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;24 hours</td>
<td>34%</td>
<td>38%</td>
<td>14%</td>
</tr>
<tr>
<td>&gt;24 hours</td>
<td>62%</td>
<td>55%</td>
<td>24%</td>
</tr>
<tr>
<td>Hep B 3rd dose</td>
<td>86%</td>
<td>81%</td>
<td>30%</td>
</tr>
</tbody>
</table>

*both 2010 and 2011 data are as of October 2011

Vaccines and cold chain management

- Upgraded the cold chain equipment in the 80 provinces, 38 cities and 16 regions since 2003.

- An effective vaccine management assessment was conducted last December 2011 and revealed cold chain capacity gaps from the national up to the implementers level.

- A total of PhP 267 million is required to address the gaps identified during the assessment.

Introduction to New Vaccines

- For 2012, Rotavirus and Pneumococcal vaccines will be introduced in the national immunization program. Immunization will be prioritized among the infants of families listed in the National Housing and Targeting System (NHTS) for Poverty Reduction nationwide.

- The Government of the Philippines has allocated PhP 1.6 billion for the procurement of these 2 vaccines.
V. Future Plan/Action

- Strengthening the Cold Chain to support the Immunization Program
- Capacity Building for Health Workers for the Introduction of New Vaccines
- Advocacy for the financial sustainability for the newly introduced vaccines for expansion.
- Development of the comprehensive multi-year plan for immunization program.

VI. Other Significant Information worth mentioning

- One significant milestone is that the budget allocation for the immunization program has continued to increase year by year
- The Government of the Philippines allocated budget for the immunization of all infants/children/women/older persons nationwide. For 2012, the budget for EPI is PhP1.8 billion and another PhP1.5 Billion for the immunization for senior citizen and children for the NHTS families. This is great leap towards universal access to quality vaccines for the prevention of the most common vaccine-preventable diseases.

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