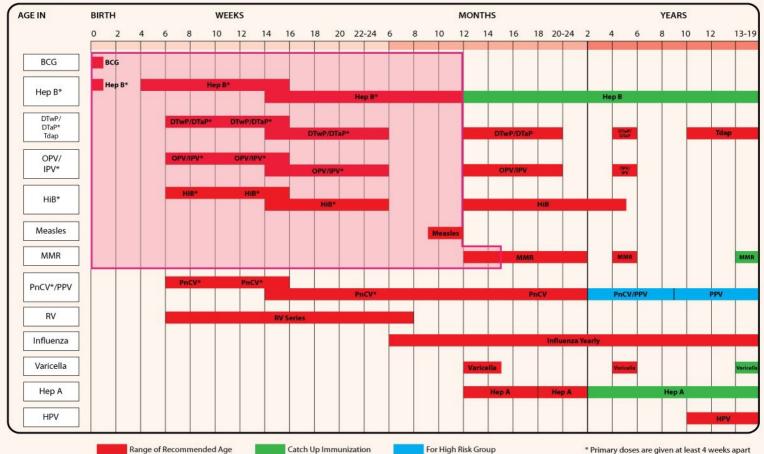






# **Childhood Immunization Schedule 2010**



#### **Annotations:**

#### PHILIPPINE EPI VACCINES:

Vaccines in the pink area, enclosed in parenthesis, are vaccines given in the Philippine Expanded Program of Immunization (EPI) of the Department of Health. Vaccines in the EPI include: BCG, DTwP, OPV, Measles, and Hepatitis B, MMR, Hib.

# OTHER RECOMMENDED VACCINES:

Other Recommended Vaccines are the vaccines outside the pink area. These vaccines are not part of the Philippine EPI but because of merit are advocated by the Philippine Pediatric Society (PPS), Pediatric Infectious Disease Society of the Philippines (PIDSP), and the Philippine Foundation for Vaccination (PFV). Other recommended vaccines include: MMRV, Hepatitis A, DTaP, Tdap, IPV, Pneumococcal, Rotavirus, Influenza, and Human Papilloma virus (HPV) Vaccine.

# **VACCINES FOR SPECIAL GROUPS:**

These are vaccines which are not part of the Philippine EPI or Other Recommended Vaccines but available data support its use in certain conditions or in selected populations. Vaccines for Special Groups include: Meningococcal, Typhoid and Rabies Vaccines.

#### BCG

Given Intradermally (ID)

BCG should be given at the earliest possible age after birth preferably within the first 2 months of life. For healthy infants and children >2 months who are not given BCG at birth, PPD prior to BCG vaccination is not necessary. However, PPD is recommended prior to BCG vaccination if any of the following are present: suspected congenital TB, history of close contact to known or suspected infectious cases of TB, clinical findings suggestive of TB and/or chest x-ray suggestive of TB. In the presence of any of these conditions, an induration of >5mm is considered positive.

The dose of BCG is 0.05ml for infants <12 months of age and 0.1 ml for children >12 months of age.

#### MEASLES

Given subcutaneously (SC)

Measles vaccine is given at 9 months of age but may be given as early as 6 months of age in cases of outbreaks.

# **HEPATITIS B VACCINE**

Given intramuscularly (IM)

The first dose is given within the first 12 hours of life. The hepatitis B birth dose may be used as the first dose in a 3-dose primary series. Doses are given at least 4 weeks apart. A fourth dose is needed for the following:

- · If the third dose is given at age <6 months
- If no birth dose is given using the EPI schedule of 6, 10, and 14 weeks.
- For preterms less than 2 kgs, the initial dose should not be counted in the 3-dose immunization schedule.

# PNEUMOCOCCAL VACCINES (PnCV/PPV)

Given intramuscularly (IM)

The minimum age for pneumococcal conjugate vaccine (PnCV) is 6 weeks of age and for pneumococcal polysaccharide vaccine (PPV) is at 2 years of age. PPV is recommended for high risk children >2 years of age in addition to PnCV. For healthy children, no additional doses of PPV are needed if the PnCV series is completed.

#### **HEPATITIS A**

Given intramuscularly (IM)

Hepatitis A vaccine is recommended for all children aged >12 months. A second dose of the vaccine is given 6 to 12 months after the first dose.

#### ROTAVIRUS VACCINE (RV)

Given per orem (PO)

The monovalent human rotavirus vaccine (RV1) is given as a 2-dose series. The pentavalent human bovine rotavirus vaccine (RV5) is given as a 3-dose series. The first dose of the vaccine is administered from age 6 weeks to 14 weeks and 6 days. There is insufficient data on safety of the first dose of rotavirus vaccine in older infants. The minimum interval between doses is 4 weeks. The second dose of RV1 should not be administered later than 24 weeks of age. The 3rd dose of RV5 should not be administered later than 32 weeks of age.

# +MEASLES, MUMPS, RUBELLA (MMR) (SC)

Given subcutaneously (SC)

Minimum age is 12 months. Administer the second dose at age 4 through 6 years. However, the second dose may be administered before age 4 provided an interval of 28 days has lapsed since the first dose.

# +MEASLES, MUMPS, RUBELLA, VARICELLA (MMRV) (SC)

Given subcutaneously (SC)

Combination MMRV may be given as an alternative to separately administered MMR and Varicella vaccine for healthy children 12 months to 12 years of age.

# +VARICELLA VACCINE

Given subcutaneously (SC)

The first dose of the vaccine is administered from age 12-15 months. The second dose of the varicella vaccine is administered at age 4-6 years or at an earlier age provided the interval between the first and the second dose is at least 3 months. A second dose of the vaccine is recommended for children, adolescents, and adults who previously received only one dose of the vaccine. All individuals aged >13 years and without previous evidence of immunity should receive 2 doses of varicella vaccine given at least 4 weeks apart.

# INFLUENZA VACCINE (IM/SC)

Given intramuscularly or subcutaneously (IM/SC) All children from 6 months to 18 years should receive influenza vaccine.

Children 6 months to 8 years receiving influenza vaccine for the first time should receive 2 doses of the vaccine separated by at least 4 weeks. If only one dose was administered during the previous influenza season, administer 2 doses of the vaccine then one dose yearly thereafter.

Children who received a single dose of influenza vaccine for 2 consecutive years should continue receiving single annual doses.

Yearly vaccination should preferably be given between February to June.

# **HUMAN PAPILLOMAVIRUS VACCINE (HPV)**

Given intramuscularly (IM)

Primary vaccination consists of a 3-dose series administered to females 10-18 years of age. The recommended schedule is as follows:

- Bivalent HPV at 0, 1 and 6 months; Quadrivalent HPV at 0, 2, and 6 months.
- The minimum interval between the first and second dose is at least one month and the minimum interval between the second and third dose is at least 3 months.
- \* Use in males 10-18 years of age for the prevention of anogenital warts is optional.

# TETANUS AND DIPTHERIA TOXOIDS AND ACELLULAR PERTUSSIS (Tdap)

Given intramuscularly (IM)

Children and adolescents 10-18 years of age should receive a single dose of Tdap instead of Td for booster immunization against tetanus, diphtheria, and pertussis if they have not completed the recommended childhood DTwP/DTaP immunization series and if they have not received either Td or Tdap. Thereafter, Td booster given every 10 years is recommended. An interval of at least 5 years from the last Td dose is recommended if Tdap is used as booster to reduce the risk of local and systemic reactions.

#### **TYPHOID VACCINE**

Given intramusculary (IM)

Recommended for travelers to areas where there is risk of exposure to S. typhi and for persons with frequent exposure to S. typhi. A single dose may be given as early as 2 years of age with revaccination every 2 to 3 years if there is continued exposure to S. typhi.

# **MENINGOCOCCAL VACCINE**

Given intramuscularly or subcutaneously (IM/SC)

A single dose of meningococcal vaccine is recommended for all children aged >2 years known to be at high risk for disease.

In outbreak situations, infants <2 years of age (minimum of 3 months of age) may be given 2 doses of the vaccine 3 months apart.

Revaccination may be considered 3-5 years after the first dose for persons who remain at high risk for infection.

#### RABIES VACCINE

Given intramuscularly or intradermally (IM/ID)

The Anti-rabies Act of 2007 recommends routine rabies pre-exposure (PreP) for children aged 5-14 years in areas where there is high incidence of rabies (incidence > 2.5 human rabies/million population). There are 2 recommended regimens for pre-exposure prophylaxis:

- Intramuscular dose: PVRV 0.5ml or PCECV 1ml given on days 0,7,21 or 28.
- Intradermal dose: PVRV or PCECV 0.1ml given on days 0,7,21 or 28.

Rabies vaccine should never be given in the gluteal area since absorption is unpredictable. For the intradermal dose, a repeat dose should be given if the vaccine is inadvertently given subcutaneously.

After completion of 3 doses of rabies vaccine as pre-exposure prophylaxis, periodic booster doses in the absence of exposure are not recommended for the general population. Any exposure, regardless of interval between re-exposure and last dose of the vaccine should receive two (2) booster doses as follows:

Day 0 – 1 dose

Day 3 – 1dose

Doses may be given intramuscularly (0.5ml PVRV or 1ml PCECV) or intradermally (0.1ml PVRV or PCECV). There is no need to give rabies immune globulin (RIG).

# DISCLAIMER:

The Childhood Immunization Schedule present recommendations for immunization for children and adolescents based on the knowledge, experience and premises current at the time of publication. The schedule represents a consensus with which physicians may at times disagree. No claim is made for infallibility, and the PPS, PIDSP and PFV acknowledge that individual circumstances may warrant decisions differing from the recommendations given here. The recommendations are not absolute. Physicians must regularly update their knowledge about specific vaccines and their use because information about safety and efficacy of vaccines and recommendations relative to their administration continue to develop after a vaccine is licensed.