



Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

May 31, 2012

DEPARTMENT MEMORANDUM

No. 2012 - 0157

**FOR: ALL UNDERSECRETARIES, ASSISTANT SECRETARIES,
DIRECTORS OF BUREAUS, CENTER FOR HEALTH
DEVELOPMENT, SERVICES, CHIEFS OF MEDICAL CENTERS,
SPECIALTY HOSPITALS AND OTHER CONCERNED**

SUBJECT: Administration of Rotavirus Vaccine for Infants

Rotavirus is a virus that infects the bowels. It is the most common cause of severe form of diarrhea in infants and children which causes the death of about 600,000 children annually, and over two million hospitalizations worldwide. Children between the ages of 6 and 24 months are at greatest risk for developing severe disease from rotavirus infection. Recurrence of infections with different viral strains is possible, and approximately, all kids have had a rotavirus infection by the time they are 5 years old. Children acquire immunity to rotavirus after several infections with different strains of the virus.

In the Philippines, at least 30% of diarrhea-related hospitalizations are caused by rotavirus. This translates to 3,698 deaths of Filipino children each year. Sixty percent (60%) of all diarrhea cases reported in the Philippines are rotaviral in origin for the 6-month to 2-years age group. (Dr. Rogacion, UP College of Medicine, Nov 2006)

Rotavirus gastroenteritis is characterized by vomiting, watery diarrhea, low-grade fever, abdominal pain and dehydration. It is noted that once a child is infected by the virus, there is an incubation period of about two days before symptoms appear. Symptoms often start with vomiting followed by four to eight days of profuse diarrhea. Dehydration is more common in rotavirus infection than in most of those caused by bacterial pathogens, and is the most common cause of death related to rotavirus infection.

The virus usually spreads through the fecal-oral route via contact with contaminated hands, surfaces and objects, and possibly by the respiratory route. It is indicated that infected persons shed large quantities of the virus in their stool two days before and up to 10 days after the illness.

Essentially, vaccination is the best strategy for disease prevention. The introduction of the rotavirus vaccines is expected to significantly contribute to reducing child mortality and achieving the target of MDG4 related to diarrhea caused by the rotavirus. There are currently two (2) types of rotavirus vaccines available and with different immunization schedule.

The Department of Health (DOH) shall prioritize the administration of the rotavirus vaccines among infants of families identified in the NHTS list provided by the Department of Social Welfare and Development (DSWD).

The following guideline describes the schedule and procedures for administration of the rotavirus vaccine:

A. Coverage

All infants **6 weeks – 15 weeks old** identified in the NHTS list by the DSWD nationwide. This shall be integrated in the essential vaccination of all infants and children in these priority areas.

B. Recommended Schedule of Rotavirus Immunization

The Rotavirus vaccine procured this year has the brand name “**Rotarix**”. This shall follow a *2-dose schedule vaccination*:

The *first dose* of Rotavirus vaccine shall be administered **orally** to infants aged **6 weeks up to 15 weeks old only**.

The *second dose* of Rotavirus vaccine shall be administered **orally** to infants aged **10 weeks up to a maximum of 32 weeks**.

The 2-dose Rotavirus vaccine shall be administered with the first and second dose of the DPT-HepB-HiB vaccine (Pentavalent). Please see Annex A Immunization Schedule. This is to ensure maximum immunization coverage and to reduce the possibility for late administration beyond the approved age schedule.

C. Preparation and Administration for the Rotavirus Vaccination

The Rotavirus vaccine is presented as a clear, colorless liquid, free of visible particles, for administration. The vaccine is ready to use; no reconstitution or dilution is required. It is administered orally.

Before the administration of the rotavirus vaccine, the health worker shall:

- Ensure that the infant is *6 weeks to 15 weeks old*.
- Establish if the infant is healthy before administering the vaccine (i.e. no fever over 38°C, diarrhea and/or vomiting).
- Screen each infant for contraindications (e.g. intussusceptions), allergies to any previous vaccine prior to vaccine administration, taking medications (steroids) that may impair their immune response to the vaccine.

Annex B Instructions for the Use of the Rotavirus vaccine oral applicator.

D. Co-administration of Rotavirus vaccine

The Rotavirus vaccine can be safely administered concurrently with any vaccine in EPI such as Oral Polio Vaccine (OPV) and other appropriate vaccines for the child.

It is recommended that the sequence of the co-administration shall be: *OPV first followed by Rotavirus vaccine then other recommended appropriate vaccines.*

E. Recording and Reporting

Record the date the dose of the rotavirus vaccine was administered to the infant in the immunization card of the infant/Mother and Child Book, ECCD Card and in the Target Client List (TCL). In the **Remarks column**, draw 2 columns and indicate column 1 as Rota1 and column 2 as Rota2.

Include in the *monthly, quarterly and summary FHSIS* reporting the number of infants given the Rota1 and Rota2. The indicator shall be:

a) % of infants given Rota1 = # of infants given Rota1

$$\frac{\text{-----}}{\text{\# of infants listed in NHTS}}$$

b) % of infants given Rota2 = # of infants given Rota2

$$\frac{\text{-----}}{\text{\# of infants listed in NHTS}}$$

Children who did not complete the 2-dose schedule due to age, should be recorded as “not received”.

Put an **asterisk (*)** or any markings in the space before the registration number on the TCL that will readily identify the child. This marking shall indicate that the child belongs to the NHTS families.

F. Storage and Transport of the Vaccines

DOH shall provide the Rotavirus vaccines to all the health facilities offering immunization services through the Centers for Health Development (CHDs).

Rotavirus vaccines should be stored between +2°C to +8°C and protected from light. Twice a day temperature monitoring shall be done in every vaccine storage.

G. Immunization Safety

A variety of adverse reactions were reported during the 7 or 8 days after rotavirus vaccination in the clinical trials includes the following:

Adverse reactions	% of Occurrence
Vomiting	15 - 18
Diarrhea	9 - 24
Irritability	13 - 62
Fever	40 - 43

(Source: *Epidemiology and Prevention of Vaccine-Preventable Diseases*, 12th edition, revised May 2011)

However, the rate of these symptoms in vaccinated children is similar to the rate among unvaccinated children. No serious adverse reactions attributable to rotavirus vaccine have been reported.

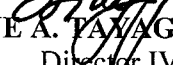
There is a potentially higher risk of intussusceptions when the first dose of these vaccines is given to infants aged >12 weeks; consequently, current rotavirus vaccines should not be used in catch-up vaccination campaigns, where the exact age of the vaccinees may be difficult to ascertain.

In June 2007, GACVS stated that, to date, careful post-licensure surveillance did not indicate any increased risk of intussusceptions or other serious adverse events associated with the use of these vaccines. On rare occasions, mild and transient symptoms from the gastrointestinal or respiratory tract may be associated with rotavirus vaccination.

H. Contraindications

Contraindications to these vaccines are: hypersensitivity to any of their components and a history of intussusceptions or intestinal malformations, predisposition to intussusceptions. Vaccination should be postponed in case of ongoing acute gastroenteritis or serious febrile illness.

For strict compliance.


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 Support to Service Delivery Technical Cluster II

ANNEX A Immunization Schedule for Infants, Philippines

Antigen	AGE					
	At Birth	6 weeks	10 weeks	14 weeks	9 months	12 months
BCG Vaccine						
Hepatitis B Vaccine						
DPT-HepB-HiB (Pentavalent Vaccine)						
Oral PolioVaccine						
Rotavirus Vaccine						
Measles Vaccine						
Measles-Mumps- Rubella Vaccine						

ANNEX B Instructions for Using the Rotavirus Vaccine Oral Applicator

NOTE: Rotavirus vaccine must **not** be administered by injection.

1. Remove the vaccine from the refrigerator immediately prior to use.
2. Remove the protective tip cap from the oral applicator.
3. Ask the parent or caregiver to hold the infant in the nursing or feeding position (seated in a reclining position).
4. Administer the entire amount of the liquid slowly down one side of the inner mouth cheek (between the cheek and gum) toward the back of the infant's mouth and allow the infant to swallow the vaccine.
 - Do not administer the vaccine too far back into the mouth which may initiate the gag reflex.
 - Do not administer the vaccine directly into the throat.
5. The oral vaccine must be swallowed and retained.
6. To prevent spitting or failed swallowing, stimulate the rooting-and-sucking reflex for the infant to suck the medication from the syringe and swallow. For infants who are 5 months of age and older eligible for the 2nd dose, lightly stroke the throat in a downward motion to stimulate the infant to swallow.
7. If the infant spits out, fails to swallow, or regurgitates most of the vaccine dose, do not repeat the dose. Finish the remaining liquid slowly.
8. Once the vaccine has been administered, the infant may be breastfed. There is no restriction on the infant's consumption of food or liquid either before or after the vaccination.
9. Discard the empty applicator and cap in the appropriate biological containers.