This is the first in a series of two article on introduction of IPV to the National Immunization Programme.

Injectable Inactivated Polio Vaccine (IPV) was introduced into the National Expanded Programme on Immunization (EPI) from 1st July 2015, in line with the recommended Global Poliomyelitis eradication endgame strategies. Despite the declaration of the certification of South-East Asia as polio-free in March 2014, the risk persists until the disease is eradicated globally.

The requirement of shifting over from trivalent Oral Polio Vaccine (tOPV) to bivalent Oral Polio Vaccine (bOPV) (with Polio Virus type 2 withdrawal plans) during 2016 is universally identified. Wild Polio Virus type 2 (WPV type 2) has been eliminated globally since 1999 but some countries are still experiencing symptomatic cases due to Vaccine Derived Polio Virus type 2 and Vaccine Associated Paralytic Polio type 2 (VDPV2 & VAPP type 2). In fact, ensuring the maintenance of immunity to polio virus type 2 (PV), after withdrawal of PV type 2 from tOPV, introduction of at least one dose of IPV in to the National EPI schedule as an additional dose before shifting over from tOPV to bOPV, is a requirement.

Introduction of IPV will supplement the immunity to polio virus and is recommended in addition to OPV but does not replace OPV. Inactivated Polio Vaccine has been proven to be an extremely safe and effective vaccine but does not produce adequate gut immunity which OPV would provide.

Introduction of injectable Inactivated Polio Vaccine (IPV) into the National EPI schedule

One dose of IPV should be given to infants from 1st of July 2015 on completion of 4 months of age, together with the 2nd dose of Pentavalent vaccine and OPV vaccine.

Dose, route and site of administration

IPV is liquid suspension, which does not require reconstitution. A single dose of 0.5 ml of IPV should be administered by intramuscular route (IM) into the right thigh of the baby.

Sequence of vaccination of infants at 4 months of age (at the clinic)

Step 1: Give OPV first

Step 2: Give IPV to Right thigh

Step 3: Give Pentavalent vaccine to Left thigh

Contraindications

Should not vaccinate if:

- Known or documented allergy to vaccine components, including: Streptomycin, Neomycin, Polymyxin B
- History of an allergic reaction following a previous IPV injection
Thrombocytopenia (insufficient blood platelets, which play an important role in coagulation)

Other bleeding disorders

Anyone with a fever over 38.5°C (101°F)

But IPV can be administered on schedule to immune deficient infants (such as HIV) or infants born prematurely (on completion of 2 months)

Vaccination is better postponed if:

The recipient is under temporary treatment that suppresses the immune response in which the treatment could reduce immune response to the vaccine.

Side effects

Side effects are rare, the most common side effects of the vaccine are redness, swelling and pain at the injection site, fever and discomfort.

Allergic reactions are extremely rare.

Storage

- IPV in 5 dose (multi-dose) vials
- IPV should be stored in the upper compartment in the Ice lined Refrigerator and middle compartment in the domestic refrigerator.
- IPV should be transported and stored at +2°C to +8°C temperature. (should not be exposed to heat)
- The vaccine should be kept in the clinic in a container with cool water or inside the form pad of the vaccine carrier to maintain the cold chain (+2°C to +8°C) and should be protected from direct sunlight.
- IPV should not be stored in the freezer compartment since it is freeze sensitive. (unlike OPV which can be frozen)

It is important to ensure that the vaccine is not frozen. If vaccines are frozen (as indicated by “X” in the freeze tag or any electronic monitor), potency will be lost and will not provide adequate protection against the disease. The “shake test” is ineffective in determining whether IPV has been frozen since it does not contain aluminum as an adjuvant. If there is any suspicion that IPV was frozen, the vial must be discarded.

IPV 5-dose vial can be used under Multi-dose Vial Policy.

Opened IPV 5-dose vial can be used up to 28 days after opening if following criteria are fully met.

The expiry date of the vaccine has not passed. The vaccine vial has been, and will continue to be stored at +2°C-8°C and the Vaccine Vial Monitor (VVM) has not passed its discard point.

Further information on MDVP is available in circular no.01-06/2015 dated 11/02/2005.

Injection safety:

Should explain adequately the safety of 2 injections (IPV and pentavalent vaccines) at a single visit to parent/s of the child vaccinated at 4 months

AD syringes provided in the National EPI programme should be used in vaccine administration and used AD syringes should be discarded into safety boxes provided.

AD syringes and safety boxes will be provided for the National EPI programme by the Regional Medical Supplies Division in coordination with the Epidemiology Unit. Regional Directors of Health Services, Regional Epidemiologists, Medical Officers of Health and Heads of Medical Institutions are responsible for ensuring adequate supply, availability and use of injection safety items at all Immunization clinics in their respective areas.

Appropriate and safe disposal of sharps should be ensured in all instances.

Accountability of the IPV

IPV vials are presented as 5-dose vials and measures should be taken to minimize wastage. Significant wastage should be clearly documented and should be reported to both Epidemiology Unit and RDHS office. Open 5-dose multi-dose vial can be used under Multi-dose Vial Policy.

Compiled by Dr H.H.W.S.B Herath of the Epidemiology Unit
<table>
<thead>
<tr>
<th>Region</th>
<th>Dengue Fever</th>
<th>Dysentery</th>
<th>Enteric Fever</th>
<th>Leptospirosis</th>
<th>Typhus Fever</th>
<th>Chickenpox</th>
<th>Other</th>
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<th>Polio</th>
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Note: Table 1: Selected notifiable diseases reported by Medical Officers of Health

Source: Weekly Returns of Communicable Diseases (WRCD)

Timeliness refers to returns received on or before 24 July 2015

Completeness refers to reporting units data provided for the current week

A = Cases reported during the current week
B = Cumulative cases for the year

**Page 3**
### Table 2: Vaccine-Preventable Diseases & AFP  
**18th – 24th July 2015 (30th Week)**

<table>
<thead>
<tr>
<th>Disease</th>
<th>No. of Cases by Province</th>
<th>Number of cases during current week in 2015</th>
<th>Number of cases during same week in 2014</th>
<th>Total number of cases to date in 2015</th>
<th>Total number of cases to date in 2014</th>
<th>Difference between the number of cases to date in 2014 &amp; 2015</th>
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**Key to Table 1 & 2**

- **Provinces:**  
  
- **RDHS Divisions:**  
  
- **Data Sources:**  
  - Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps, Rubella, CRS.
  
- **Special Surveillance:**  
  - AFP* (Acute Flaccid Paralysis), Japanese Encephalitis
  
- **CRS** = Congenital Rubella Syndrome
  
- AFP and all clinically confirmed Vaccine Preventable Diseases except Tuberculosis and Mumps should be investigated by the MOH

**Dengue Prevention and Control Health Messages**

*Look for plants such as bamboo, bohemia, rampe and banana in your surroundings and maintain them*

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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to [chepid@sltnet.lk](mailto:chepid@sltnet.lk). Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication.

**On State Service**

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