

Haemophilus influenzae type B (Hib)

- The bacterium, *Haemophilus influenzae type B (Hib)*, is an important cause of infections in infants and young children; severe disease in adults due to Hib is uncommon.
- Hib is the leading cause of acute bacterial meningitis in infants and children less than five years old. Bacterial meningitis is fatal unless treated immediately with antibiotics. Even with proper treatment 3-25% of affected children may die. Permanent disability with sequelae that include deafness, learning disabilities, and difficulties in movement is not uncommon among those who survive the infection.
- Hib accounts for up to one-quarter of the severe pneumonia cases in young children.
- The disease burden study on 'Haemophilus Influenzae B' carried out in 2004 has indicated that it is an emerging public health issue in Sri Lanka. The study has revealed that Hib meningitis incidence under 5 years population in the Colombo district is 20.1 per 100,000, and it estimated all Hib disease incidence to be 124.5 cases per 100,000 under 5 years. This rate is the highest incidence reported in the south Asian region.
- Safe and effective vaccines against Hib infections exist.

Introduction of combined pentavalent (DTP-Hep B- Hib) Vaccine into the EPI

- With the support of the GAVI Alliance combined pentavalent (DTP-HepB-Hib) vaccine will be introduced into the national EPI programme in 2008 in all districts of the country
- Pentavalent (DTP-Hep B-Hib) vaccines are available in both liquid and freeze-dried forms. It has been decided to use liquid form Pentavalent (DTP-HepB-Hib)vaccine in the national EPI programme considering the convenience of using liquid form of Pentavalent (DTP-HepB-Hib)vaccine at busy immunization clinics.
- The Pentavalent (DTP-HepB-Hib) vaccine will be introduced into the current EPI schedule at completion of 2, 4 and 6 months of age.
- First three doses of OPV also will also be given with the Pentavalent (DTP-HepB-Hib) vaccine at the same time as done in the past with DTP and Hep B vaccines at the completion of 2, 4 and 6 months of age.
- No pentavalent fourth dose will be given at the age of 18 months but the fourth dose of DTP given at this age will be continued.
- If any dose of Pentavalent (DTP-Hep B-Hib) vaccine is missed or delayed, it should be given at the next earliest available opportunity for immunization. The immunization regime should not be restarted if a dose is missed.

- All children presenting to immunization clinics for DPT1 and Hepatitis B 1 on or after the 1st January 2008 will be eligible to receive the Pentavalent (DTP-HepB –Hib) vaccine.
- The standard dose for infants is 0.5 ml.
- Penta valent (DTP-Hep B-Hib) vaccine should be stored and transported between 2°C. 8°C. IT SHOULD NOT BE FROZEN

Contra-indications

- A history of a severe allergic reaction (e.g. generalized urticaria, difficulty in breathing, swelling of mouth and throat, shock) to a previous dose of Pentavalent DTP- Hep B - Hib vaccine or with known hypersensitivity to any vaccine component
- A history of an encephalopathy of unknown aetiology after a previous immunization with a vaccine containing pertussis.

In these circumstances, the vaccination course should be continued with DT and Hepatitis B, which are available in all government immunization clinics. Since the monovalent Hib vaccine is not available in the government clinics, these children may not be able to receive the Hib vaccine in the routine immunization clinics.

- A severe acute illness with temperature above 38.5°C. As with other vaccines, vaccination should be postponed in children suffering from acute febrile illness
- A progressive neurological disease.

The following are NOT contra indications;

- Minor illnesses such as respiratory tract infection or diarrhoea with temperature below 38.5°C
- Allergy or asthma
- Family history of convulsions
- Treatment with antibiotics
- Treatment with topical corticosteroids or systemic use of corticosteroids at low dosage (<0.5 mg/kg of prednisone or equivalent) in case of skin diseases like dermatitis, eczema, or other localised skin disorders
- Infection with HIV
- Breast feeding
- History of seizures (Convulsions, fits)
- Chronic illnesses such as those of heart, lung, kidney or liver
- Stable neurological conditions e.g. cerebral palsy, Down syndrome
- Prematurity or low birth weight
- History of jaundice at birth.
- Pentavalent (DTP-Hep B-Hib) vaccine should be given as an INTRAMUSCULAR (IM) injection to the anterolateral aspect of the thigh in infants.