#### **Universal Immunisation Programme**

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**Immunization Programme** in India was introduced in 1978 as 'Expanded Programme of Immunization' (EPI) by the Ministry of Health and Family Welfare, Government of India. In 1985, the programme was modified as 'Universal Immunization Programme' (UIP) to be implemented in phased manner to cover all districts in the country by 1989-90 with the one of largest health programme in the world.

Ministry of Health and Family Welfare, Government of India provides several vaccines to infants, children and pregnant women through the **Universal Immunisation Programme**.

Immunization division is a part of the RCH program under National Health Mission (NHM) and is placed at the Ministry Of Health and Family Welfare, Nirman Bhawan New Delhi. This division provides all the technical assistance required to undertake the activities under UIP. The division reviews the state Program implementation plans and facilitates in its approval process as per norms and guidelines The key roles of this division include activities related to Routine Immunization, Campaigns (SIAs) such as Polio, Measles, and Japanese Encephalitis, Monitoring Adverse Events Following Immunization (AEFI), Vaccine and Cold Chain Logistics, Strategic communication related to immunization program and trainings related to Immunization Program. It facilitates the National Technical Advisory Group on Immunization (NTAGI) to review and recommend its views on various technical and programmatic issues related to immunization such as new vaccine introduction etc. The division is engaged in reviewing and sharing the leanings of the program with state and district program officers. The division also works closely with all development partners and other stake holders.

#### About immunization

Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines are substances that stimulate the body's own immune system to protect the person against subsequent infection or disease.

#### Vaccines provided under UIP:

BCG

- About-BCG stands for Bacillus Calmette-Guerin vaccine. It is given to infants to protect them from tubercular meningitis and disseminated TB.
- When to give BCG vaccine is given at birth or as early as possible till 1 year of
- Route and site- BCG is given as intradermal injection in left upper arm.

## OPV

- About-OPV stands for Oral Polio Vaccine. It protects children from poliomylitis.
- When to give- OPV is given at birth called zero dose and three doses are given at 6, 10 and 14 weeks. A booster dose is given at 16-24 months of age.
- Route and site OPV is given orally in the form of two drops.

### **Hepatitis B vaccine**

- About Hepatitis B vaccine protects from Hepatitis B virus infection.
- When to give- Hepatitis B vaccine is given at birth or as early as possible within 24 hours. Subsequently 3 dose are given at 6, 10 and 14 weeks in combination with DPT and Hib in the form of pentavalent vaccine.
- Route and site- Intramuscular injection is given at anterolateral side of mid thigh

#### **Pentavalent Vaccine**

- About-Pentavalent vaccine is a combined vaccine to protect children from five diseases Diptheria, Tetanus, Pertusis, Haemophilis influenza type b infection and Hepatitis B.
- When to give Three doses are given at 6, 10 and 14 weeks of age (can be given till one year of age).
- Route and site-Pentavalent vaccine is given intramuscularly on anterolateral side of mid thigh

## **Rotavirus Vaccine**

- About -RVV stands for Rotavirus vaccine. It gives protection to infants and children against rotavirus diarrhoea. It is given in select states.
- When to give Three doses of vaccine are given at 6, 10, 14 weeks of age (can be given at one year of age).

• **Route and site-**5 drops of liquid vaccine or 2.5 ml (lyophilized vaccine) are given orally.

# PCV

- About- PCV stands for Pneumococcal Conjugate Vaccine. It protects infants and young children against disease caused by the bacterium Streptococcus pneumoniae.
- When to give The vaccine is given as two primary doses at 6 & 14 weeks of age followed by a booster dose at 9-12 months of age
- **Route and site-** PCV is given as intramuscular (IM) injection in antero-lateral side of mid- thigh. It should be noted that pentavalent vaccine and PCV are given as two separate injections into opposite thighs.

# fIPV

- About- fIPV stands for Fractional Inactivated Poliomylitis Vaccine. It is used to boost the protection against poliomylitis.
- When to give- Two fractional doses of IVP are given intradermally at 6 and 14 weeks of age.
- Route and site- It is given as intradermal injection at right upper arm.

## Measles/ MR vaccine

- About-Measles vaccine is used to protect children from measles. In few states Measles and Rubella a combined vaccine is given to protect from Measles and Rubella infection.
- When to give-First dose of Measles or MR vaccine is given at 9 completed months to12 months (vaccine can be given up to 5 years if not given at 9-12 months age) and second dose is given at 16-24 months.
- Route and site Measles Vaccine is given as subcutaneous injection in right upper arm.

## JE vaccine

- About-JE stands for Japanese encephalitis vaccine. It gives protection against Japanese Encephalitis disease. JE vaccine is given in select districts endemic for JE after the campaign.
- When to given- JE vaccine is given in two doses first dose is given at 9 completed months-12 months of age and second dose at 16-24 months of age.
- Route and site- Live attenuated vaccine is given as subcutaneous injection in left upper arm and killed vaccine is given as intramuscular injection in anterolateral aspect of mid- thigh.

# **DPT booster**

- About-DPT is a combined vaccine; it protects children from Diphtheria, Tetanus and Pertussis.
- When to give -DPT vaccine is given at 16-24 months of age is called as DPT first booster and DPT 2<sup>nd</sup> booster is given at 5-6 years of age.
- **Route and site-** DPT first booster is given as intramuscular injection in antero-lateral side of mid-thigh in left leg. DPT second booster is given as intramuscular injection in left upper arm.

## Tetanus and adult diphtheria (Td) vaccine:

- About-TT vaccine has been replaced with Td vaccine in UIP to limit the waning immunity against diphtheria in older age groups.
- When to give- Td vaccine is administered to adolescents at 10 and 16 years of age and to pregnant women.
- **Pregnant women-** Td-1 is given early in pregnancy as first dose and 4 weeks after Td1, second dose of Td as Td-2 is given. Td- Booster is given, if pregnant woman has received 2 TT/Td doses in a pregnancy within the last 3 years.\* Intra-muscular Upper Arm
- Route and site- Td is given as intramuscular injection in upper arm.