



Pneumococcal Conjugate Vaccine

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Why in News

The government is planning for the nationwide rollout of **Pneumococcal Conjugate Vaccine (PCV)** under **Universal Immunisation Programme (UIP)**.

- According to government estimates, a countrywide rollout of PCV **would require about 50% of the budget of UIP** (minus shared costs such as staff salary, establishment costs, etc).
 - **PCV** is the **costliest vaccine** in the UIP basket that currently covers only about 50% of the 26 million birth cohort in Himachal Pradesh, Madhya Pradesh, Haryana, Bihar, Uttar Pradesh, and Rajasthan.
 - PCV was **first brought into the UIP basket in 2017** but cost concerns have been among the reasons for its still-partial rollout.
- The cost challenge for India's immunisation programme is set to mount further as **Global Alliance for Vaccines and Immunizations (GAVI)** is set to withdraw its support for India from 2022.

GAVI is an international organisation which brings together public and private sectors to create equal access to vaccines for children.
- Pneumococcal Conjugate Vaccine (PCV) prevents **pneumococcal disease**.
- The vaccine is a **mix of several bacteria** of the pneumococci family, which are known to cause pneumonia — hence '**conjugate**' is included in the name of the vaccine.

Conjugate vaccines are made using a combination of two different components.

Pneumococcal Disease

- Pneumococcal disease refers to any illness caused by **pneumococcal bacteria**.
- **Symptoms:** These bacteria can cause many types of illnesses, including pneumonia, which is an infection of the lungs. Pneumococcal bacteria are one of the most common causes of pneumonia.

- **Vulnerable Population:** Anyone can get pneumococcal disease, but children under 2 years of age, people with certain medical conditions, adults 65 years or older, and cigarette smokers are at the highest risk.
- **Status in India :**
 - In 2010, the **annual incidence** of severe pneumococcal pneumonia in India was estimated to be **4.8 episodes per 1,000 children younger than 5 years.**
 - The **top five contributors to India's pneumococcal pneumonia burden** in terms of the number of cases and deaths were Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan and Jharkhand.

Universal Immunization Programme

- Universal Immunization Programme (UIP) was **launched by the government in 1985**, to prevent mortality and morbidity in children and pregnant women against 12 vaccine-preventable diseases.
- Under UIP free of cost vaccination is provided against **twelve vaccine-preventable diseases** i.e. Tuberculosis, Diphtheria, Pertussis, Tetanus, Polio, Hepatitis B, Pneumonia and Meningitis due to Haemophilus Influenzae type b (Hib), Measles, Rubella, Japanese Encephalitis (JE) and Rotavirus diarrhoea.
- The programme is **one of the largest health programmes in the world.** Despite being operational for many years, UIP has been able to fully immunize only 65% of children under 1 year of age.

Source: IE