India’s vaccination drive – A lesson for Every Nation

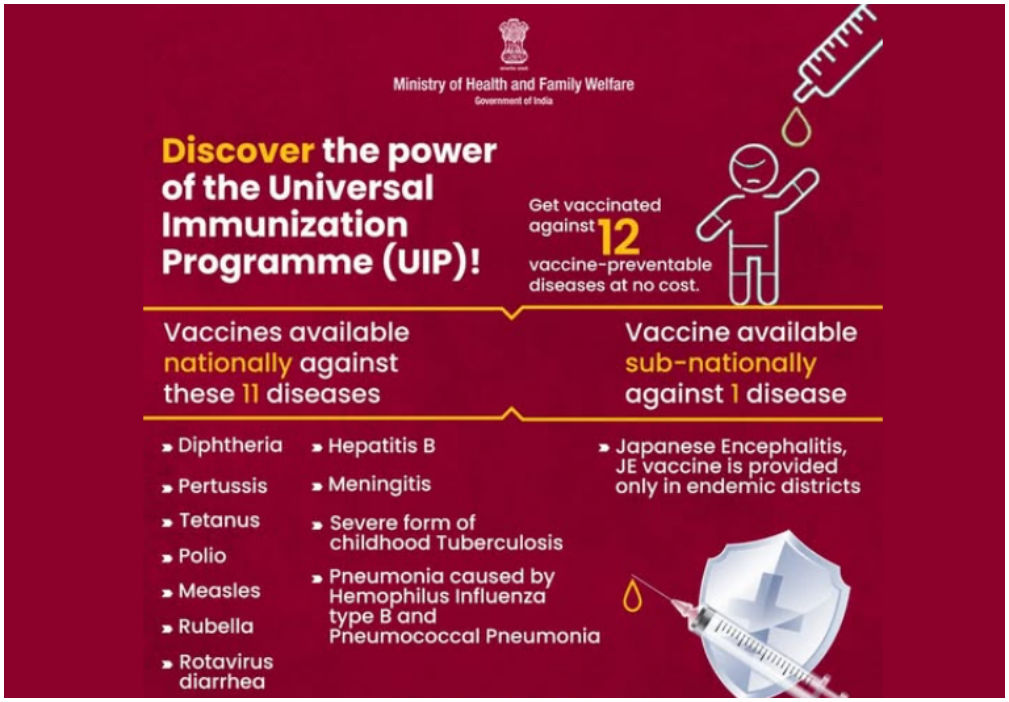
Mains: *GS II - Issues Relating to Development and Management of Social Sector/Services relating to Health*

Why in News?

Recently, India’s immunization programmes received a worldwide attention and recognition for fighting against various diseases.

What is Universal immunization programme(UIP)?

- **Vaccination** – It is one of the most effective and cost-efficient public health measures, saving millions of lives.
- **UIP** – India’s Universal Immunisation Programme (UIP) is the world’s largest, and annually vaccinates *2.6 crore infants* and *2.9 crore pregnant women*.
- It contributed to a *decline in under-5 mortality from 45 to 31 per 1,000* live births between 2014 and 2021, according to the Sample Registration System 2021.
- **Vaccines included** – The UIP offers free immunisation against 12 diseases
    - 11 vaccines nationwide and
    - 1 vaccine in endemic areas.
- **Recent addition** – In the past decade, six vaccines were added to the UIP across age groups.
    - Tetanus and Adult Diphtheria
    - Inactivated Poliovirus
    - Measles-Rubella
    - Rotavirus
    - Pneumococcal Conjugate
    - Japanese Encephalitis



- **Coverage** – India's full immunisation coverage was 62% in 2014 (National Family Health Survey-4, 2015-16).
- **Mission Indradhanush** – To achieve 90% coverage, India launched Mission Indradhanush (MI) in 2014.
- **Intensified mission Indradhanush** – In 2017, it launched the Intensified MI (IMI) programme to strategically target low-coverage areas and missed populations.
- By 2023, 12 phases of the MI and IMI had been completed, vaccinating 5.46 crore children and 1.32 crore pregnant women.
- **Inclusion into campaigns** – The MI and IMI phases were integrated into campaigns such as the Gram Swaraj Abhiyan and the Extended Gram Swaraj Abhiyan to further the outreach.
- As a result, full immunisation coverage increased in 2024–25.
- **Challenges** – Reaching remote and migratory populations, clusters with low awareness, and populations with vaccine hesitancy.
- **Innovative strategies** – Approaches such as 'zero-dose' outreach, digital tracking, and infrastructure improvements are being used to address these gaps.

What are some achievements of Vaccine coverage?

- **Polio** – India has maintained its polio-free status since 2011 through continued stringent surveillance.
- Lessons from the National Polio Programme have strengthened the UIP and vaccine-preventable disease surveillance.
- **Tetanus** – India also achieved maternal and neonatal tetanus elimination in 2015 and was declared Yaws-free in 2016.
- **Measles-Rubella** – Between 2017 and 2019, through the nationwide Measles-Rubella catch-up campaign, 34.8 crore children aged 9 months to 15 years were vaccinated, alongside the introduction of the rubella vaccine into the UIP.
- **Unexpected Setbacks** – The COVID-19 pandemic disrupted routine immunisation services, causing setbacks in the gains made under UIP.

- Disruptive measles outbreaks between 2022 and 2024 signalled immunity gaps and affected large clusters of unimmunised children.
- **India's response** – In response, the IMI 5.0 in 2023 targeted under-five children across the country.
- The Zero Measles- Rubella Elimination campaign was launched in 2025 to boost public awareness about immunisation.
- These efforts aim to surpass 95% national Measles-Rubella coverage and build strong herd immunity.

What are the innovations, strengths and potential of India's vaccine programme?

- **Logistics** – India has prioritised cold chain logistics, system strengthening through the Pradhan Mantri Ayushman Bharat Health Infrastructure Mission.
- It strengthened the vaccine delivery and vaccination using the U-WIN platform.
- **U-WIN** – It enables end-to-end digital vaccination and record keeping and tracking of vaccination for pregnant women and children up to 16 years.
- It enables nationwide, anytime-anywhere access for vaccination services, especially for migratory populations.
- **Complementary digital technologies** – This includes
    - The electronic Vaccine Intelligence Network for vaccine stock
    - The National Cold Chain Management Information System for real-time cold chain tracking
    - The SAFE-VAC module for vaccine safety reporting.
- **Scenarios during COVID** – During the COVID-19 pandemic, India was a frontrunner in vaccine development.
- The COVID-19 vaccination programme was launched on January 16, 2021, just weeks after the global rollout.
- By January 2023, over 220 crore doses had been administered, covering 97% of citizens with one dose and 90% with both doses, marking a great achievement in public health on the global stage.
- **Domestic manufacturing** – Despite pressure from various sectors, India relied on its domestic vaccine development and manufacturing capacity.
- **Proactive public-private partnerships** – Through this India not only met its national needs but also supported many low and middle-income countries.
- Through the Vaccine Maitri initiative, India reflected the spirit of Vasudhaiva Kutumbakam (the world is one family).
- **Future prospects** – With the 'Make in India' strategy, the country has the potential to transform the future global vaccine landscape.
- **Serves as a model** – India's immunisation achievements over the past decade are path-breaking and globally recognised as a model for emulation.
- **Recent awards** – On March 6, 2024, India received the Measles and Rubella Champion Award from the Measles and Rubella Partnership, honouring its efforts in the South-East Asia Region.
- India has made remarkable strides in expanding vaccine coverage, strengthening supply chains, enhancing surveillance, and building public trust.
- **Measures needed** – There remains a need to closely link high-quality and sensitive disease surveillance with immunisation efforts, as well as monitoring of anti-vaccine

narratives.

- For a country’s pandemic/epidemic preparedness, the immunisation and vaccine-preventable disease surveillance has to have a ONE-HEALTH lens.
- This would mean nurturing existing platforms and integrating joint surveillance of human, animal, and environmental systems.

Reference

The Hindu| The vaccination Drive of India

