

Elimination of Measles and Rubella by 2023

Why in news?

The Government decided to reset the Measles-Rubella elimination target to 2023 as COVID 19 pandemic stole two years from the programme.

What is measles and rubella?

- **Measles-** Measles (also called **rubeola**) is a very contagious respiratory viral infection that causes a total-body skin rash and flu-like symptoms.
- It is transmitted person-to-person via droplets when infected people sneeze or cough.
- Initial symptoms usually occur 10–12 days after infection and comprise high fever, runny nose, bloodshot eyes and **Koplik's spots** (tiny white spots on the inside of the mouth).
- Several days later, a rash develops and the most severe complication includes blindness, encephalitis (an infection that causes brain swelling), severe diarrhea and pneumonia.
- There is no specific medical treatment.
- **Rubella-** Rubella is a viral disease caused by the rubella virus that mostly affects the skin and lymph nodes.
- In kids, rubella (commonly called **German measles or 3-day measles**) is usually a mild illness.
- But the infection is dangerous for pregnant women because it can cause serious health problems in their babies.
- Rubella is transmitted in airborne droplets from the nose, mouth or throat of infected people.

What about the vaccination?

- The MR vaccine is a combined product, targeting two diseases in one shot.
- Two doses of MR vaccine should be given at 9-12 months and 16-24 months of age.
- However, if a child misses the scheduled dose, MR vaccine can be given till 5 years of age.
- For epidemiological reasons, rubella vaccination had to cover children up to 15 years.
- The same vaccine is being given in routine Universal Immunisation Programme (UIP) of India.

Why should the diseases be eliminated?

- **Elimination of measles-** In the pre-vaccination era, while polio paralysed about 1% of all children before the age of five, measles actually killed 1% of all under-five children.
- The case-fatality rate of measles was about 10%-15%.
- Children who recovered would have lost weight as well as the steady momentum of cognitive development and academic performance.
- Measles affects the immune system rendering the child vulnerable to other infectious diseases, leading to high mortality over the next two to three years.
- **Elimination of rubella-** If a pregnant woman gets infected, the virus has a tendency to cross the placenta and damage the developing fetus's eyes, brain, heart and other tissues.
- Affected babies are born with severe birth defects such as cataracts, deafness, heart defects

and developmental delay which is called as congenital rubella syndrome (CRS).

What efforts were taken by the government to eliminate measles and rubella?

Every year in India nearly 2.7 million children get measles and over 40,000 children are born with birth defects caused by Congenital Rubella Syndrome.

- MR elimination is defined as zero transmission of measles and rubella viruses, evidenced by zero clinical disease, sustained over three years.
- The two arms of intervention are vaccination and surveillance.
- The Government decided to eliminate measles and rubella from India by the year 2020, having missed the earlier set target of 2015.
- In 2017, the government aimed to create a very high level of vaccination-induced immunity against both diseases, by inoculating MR vaccine.
- School registration and attendance are high in all States and so the opportunity was seized to vaccinate children in schools.
- But due to a lack of information given to the public there was much anxiety and antipathy towards the programme in the minds of parents and school authorities.
- Also, the COVID-19 pandemic stole two years from the programme resetting the MR elimination target to 2023.
- In spite of the pandemic, nationally, the UIP has maintained about 85% MR second dose coverage below five years.
- The cooperation of parents, health-care personnel at all levels, opinion leaders, influencers, media, NGOs play a key role in making the district-by-district programme a story of success.

References

1. <https://www.thehindu.com/opinion/op-ed/sighting-the-finishing-line-in-measles-rubella-elimination/article65464459.ece>
2. <https://vikaspedia.in/health/health-campaigns/measles-rubella-mr-vaccination-campaign#:~:text=All%20children%20from%209%20months,months%20of%20age%20of%20child.>
3. <https://www.euro.who.int/en/health-topics/communicable-diseases/measles-and-rubella/measles-and-rubella>
4. <https://kidshealth.org/en/parents/measles.html>