

## 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>