

Reduction in U5MR and NMR

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Though India has made substantial progress in improving child survival over the past few decades, a comprehensive understanding of child mortality trends is not available. The below findings give information that could guide Indian and state governments to put forth further efforts to improve child survival.

In news Under-five and neonatal mortality has reduced in India according to a recent report.

Placing it in syllabus Health indicators

Dimensions

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2. India's achievement
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Content

Definition of U5MR and NMR: Under-five mortality rate (U5MR) is the **probability per 1,000** that a newborn baby will die **before reaching age five**, if subject to current age-specific mortality rates. Neonatal mortality rate (NMR) is the number of deaths during the **first 28 completed days of life per 1000 live births in a given year or period**. Neonatal deaths may be subdivided into early neonatal deaths, occurring during the first seven days of life, and late neonatal deaths, occurring after the seventh day but before the 28 completed days of life.

India's achievement:

- According to a recent paper published in the magazine Lancet, India has managed to decrease U5MR in children and NMR.
- Yet there are high inter-state and intra-state variations.
- **U5MR has dropped by 49% and NMR by 38% from 2000 to 2017.**

- **U5MR has decreased from 83.1 in 2000 to 42.4 per 1,000 live births in 2017.**
- **The NMR has decreased to 23.5 per 1,000 live births from 38.0.**
- The annual rate of reduction of NMR was lower than that of U5MR in all states during 2010–17.
- **The leading causes of deaths included** lower respiratory infections, neonatal preterm birth, neonatal jaundice, diarrhoeal diseases, birth asphyxia, congenital birth defects, injuries and neonatal sepsis.
- **The most dominant risk factor for under-five deaths was child and maternal malnutrition,** to which 68.2 percent of all child deaths in India could be attributed.
- If the trends observed up to 2017 were to continue, India would meet the SDG-2030 U5MR target but not the SDG-2030 NMR target.
- It would also fail to meet **National Health Policy-2025** targets for NMR.

State Wise report:

The report categorised the states into three groups on the basis of their Socio-demographic Index (SDI), a composite indicator of development status, which ranges from 0 to 1.

- low SDI (≤ 0.53),
- middle SDI ($0.54-0.60$),
- high SDI (>0.60)
- UP is on the top as far as the total number of under-five and neonatal deaths in 2017 were concerned, followed by Bihar.
- Among the low SDI states, Assam had the lowest annual rate of reduction and Madhya Pradesh the highest.
- In the middle SDI states, Andhra Pradesh and Tripura had a similar U5MR in 2017, but quite different annual rates of reduction from 2010 to 2017.
- Among the high SDI states, Tamil Nadu had an annual rate of reduction of 6.13% and Goa of 3.66% during 2010–17,

with both having a similar U5MR in 2017.

- The ratio of NMR to U5MR reduction was lowest in Meghalaya, Bihar, Nagaland and Uttar Pradesh and highest in Goa, Kerala and Tamil Nadu.
- Kerala is one of the best performing states, with an intra-state difference 0.4 times in terms of U5MR, while in Uttar Pradesh it is 59.7 times.
- In terms of NMR, the intra-state difference in Kerala is 4.5 times while that in UP is 31.7.
- The inequality among the districts increased in 23 states for U5MR and 24 for NMR, with the largest increase in Odisha and Assam among the low SDI states.
- 17 of the 31 states would need a higher rate of improvement than they had up to 2017 to individually achieve the NHP, U5MR target.

Mould your thought Define under-five mortality rate (U5MR). Explain the progress that India has achieved in U5MR and neonatal mortality rate (NMR).