India's Fight Against Anemia Nourish, Prevent, Protect

Ministry of Health and Family Welfare

16th April, 2025

Key Takeaways:

- 67.1% of children and 59.1% of adolescent girls in India are anemic (NFHS-5).
- 3 in 4 Indian women have low dietary iron intake.
- Anemia Mukt Bharat (uses a 6x6x6 strategy: 6 interventions, 6 target groups of beneficiaries, and 6 institutional mechanisms.
- 15.4 crore children/adolescents received Iron and Folic Acid supplements in Q2 FY 2024-25.
- Digital tools track real-time anemia screening and supply data.
- AMB Program integrates with POSHAN Abhiyaan and School Health Program.

Introduction

India is home to the world's largest adolescent population. It also leads one of the most ambitious public health campaigns against anemia, a condition that continues to affect millions, especially women, children, and adolescents. Anemia, primarily caused by iron deficiency, results from low haemoglobin levels, reducing the blood's capacity to carry oxygen to vital organs. Deficiencies in folate, vitamin B12, and vitamin A are other nutritional causes of anemia. Its widespread prevalence is rooted in poor nutrition, early pregnancies, inadequate maternal care, and limited access to iron-rich foods, making it a pressing public health challenge that demands urgent and sustained action.

Anemia is both preventable and treatable, and over the past two decades, the Government of India has taken strong, targeted action to combat it. A significant turning point came with the Second National Family Health Survey (NFHS-2) in 1998–99, paving the way for landmark programs like **Anemia Mukt Bharat (AMB)**. Today, AMB reaches millions annually through a comprehensive strategy that includes **Iron-Folic Acid supplementation, deworming, fortified nutrition, and behaviour change communication** across all age groups.

By integrating maternal and child health with adolescent nutrition and school-based outreach, India is actively disrupting the intergenerational cycle of malnutrition. This sustained, community-led approach transforms outcomes for girls, pregnant and lactating women, and children under five—positioning India as a global leader in evidence-based, inclusive public health innovation.

¹ https://www.who.int/news-room/fact-sheets/detail/anemia#:~:text=Key%20facts,age%20are%20affected%20by%20anemia

² https://www.who.int/health-topics/anaemia#tab=tab_1

³ https://www.unicef.org/india/stories/forging-anemia-free-future

Overview of Anemia

What are its symptoms?4

Anemia manifests with symptoms such as fatigue, diminished physical work capacity, and shortness of breath. It serves as an indicator of poor nutrition and various health issues. Common and non-specific symptoms of anemia include tiredness, dizziness or feeling light-headed, cold hands and feet, headache and shortness of breath, particularly during exertion.

Who does it impact generally?

The population groups most vulnerable to anemia include children under 5 years of age, particularly infants and children under 2 years of age, menstruating adolescent girls and women, and pregnant and postpartum women.

What is its impact?⁵

Iron deficiency anemia results in impaired cognitive and motor development in children and decreased work capacity in adults. The effects are most severe in infancy and early childhood. In pregnancy, iron deficiency anemia can lead to perinatal loss, prematurity and low birth weight (LBW) babies.

How can it be prevented and treated?

Anemia's treatment and prevention depend on its underlying cause. Still, it can often be managed through dietary changes such as consuming iron- and nutrient-rich foods (like folate, vitamin B12, and vitamin A), maintaining a balanced diet, and taking supplements when a healthcare provider recommends them.

Status of Anemia Globally⁶

• Anemia affects around 500 million women aged 15 to 49 and 269 million children under 5 years (6-59 months) worldwide.

In 2019

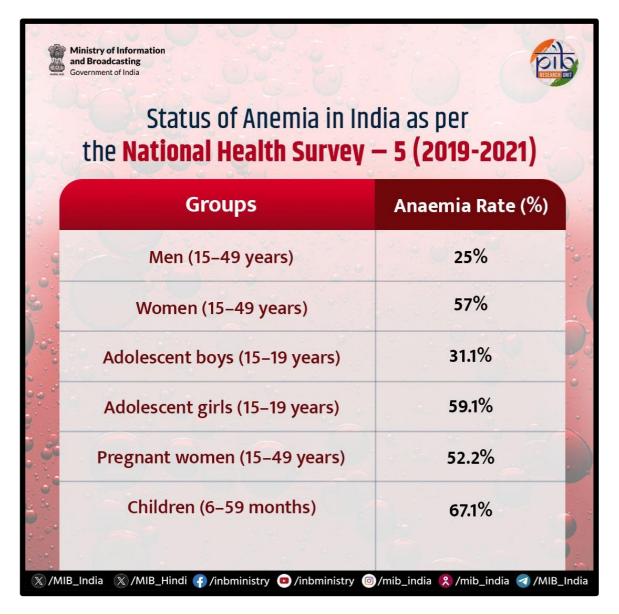
- Approximately 30% of non-pregnant women (539 million) had anemia.
- Approximately **37% of pregnant women (32 million)** were affected by anemia.

^{4 &}lt;u>https://www.who.int/news-room/fact-sheets/detail/anaemia</u>

⁵ https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1448&lid=797

⁶ https://www.who.int/news-room/fact-sheets/detail/anaemia#:~:text=Key%20facts,age%20are%20affected%20by%20anaemia

Status of Anemia in India as per the National Health Survey – 5 (2019-2021)⁷



Policy Interventions by the Government of India for Anemia Eradication

Recognizing the burden of anemia across various population groups, the Government of India is committed to its eradication. Although health is a state subject, the Centre is proactive by extending financial and technical support to states and UTs through the **National Health Mission (NHM)**, which is aligned with their annual Programme Implementation Plans.

1. Anemia Mukt Bharat

It was launched in **2018** with a 6x6x6 strategy under which there are six interventions to reduce the **prevalence of anemia** (**nutritional and non-nutritional**) in six age groups - pre-school children (6-59 months), children (5-9 years), adolescent girls and boys (10-19 years), pregnant women, lactating women, and women of reproductive age (15-49 years) following a life cycle approach. The Anemia Mukt Bharat strategy is implemented in all villages, blocks, and districts of all the States/UTs

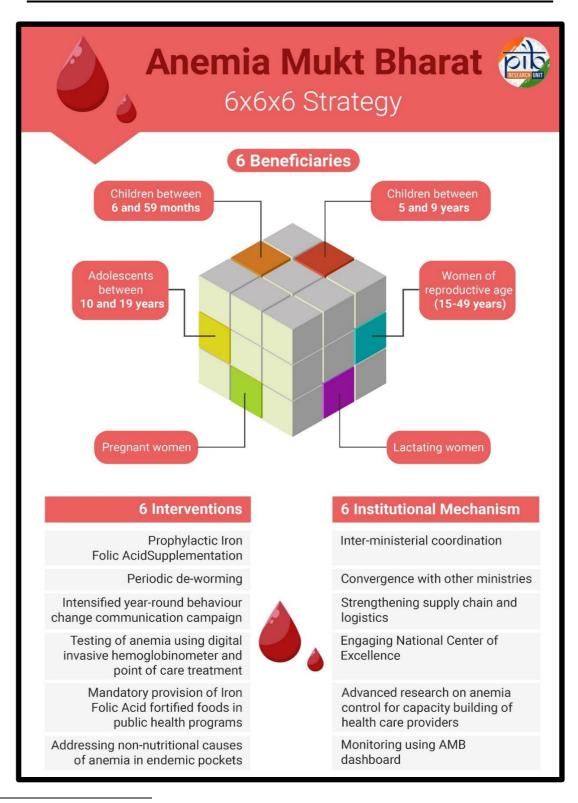


⁷ https://pib.gov.in/PressReleasePage.aspx?PRID=1795421

https://mohfw.gov.in/sites/default/files/Final%20Printed%20English%20AR%202024-25.pdf, p.64

of India through existing delivery platforms as envisaged in the **National Iron Plus Initiative** (**NIPI**) ⁹, a comprehensive strategy to combat the public health challenge of Iron Deficiency Anaemia prevalent across the life cycle¹⁰ and **Weekly Iron Folic Acid Supplementation**, (**WIFS**) **programme** to reduce the prevalence and severity of anemia in adolescent population (10-19 years)¹¹

The 6x6x6 intervention under the Anemia Mukt Bharat are as follows: 12 13 14



⁹ https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1448&lid=797

 $[\]frac{10}{\text{https://health.vikaspedia.in/viewcontent/health/health-campaigns/national-iron-plus-initiative?lgn=en}}$

https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1024&lid=388

¹² https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1448&lid=797

¹³ https://www.nhm.gov.in/images/pdf/Nutrition/AMB-guidelines/Anemia-Mukt-Bharat-Operational-Guidelines-FINAL.pdf, p. 28

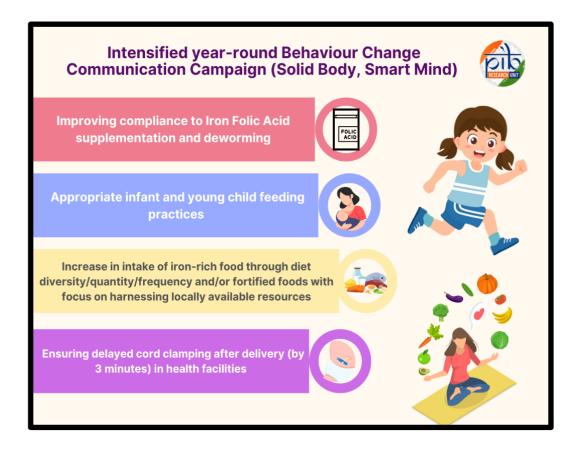
 $^{{}^{14}\ \}underline{\text{https://www.nhm.gov.in/images/pdf/Nutrition/AMB-guidelines/Anemia-Mukt-Bharat-Operational-Guidelines-FINAL.pdf, p.~28}$

1.1 Prophylactic Iron and Folic Acid Supplementation

Under the AMB strategy, **Iron-Folic Acid (IFA) supplementation** is tailored by age group and physiological needs. Children aged **6–59 months** receive biweekly IFA syrup, while those aged **5–10 years** are given a weekly pink tablet. **Adolescents (10–19 years)** and **non-pregnant, non-lactating women (20–49 years)** receive a weekly blue or red IFA tablet, respectively. **Women in the preconception period and first trimester** are advised to take daily folic acid tablets. **Pregnant women** start daily IFA tablets from the second trimester and continue through pregnancy and six months postpartum. All supplements follow standardized dosages and are color-coded for easy identification.

1.2 Deworming

- MoHFW is implementing the **National Deworming Day (NDD)** program, under which biannual mass deworming for children and adolescents aged 1-19 is carried out on designated dates 10th February and 10th August every year.
- Pregnant women are provided services under the strategy through antenatal care contacts (ANC clinics/ VHND) for deworming (in the second trimester).
- 1.3 Intensified year-round Behaviour Change Communication Campaign (Solid Body, Smart Mind) focusing on four key behaviours as mentioned below:



- **1.4 Testing and treatment of anemia, using digital methods and point-of-care treatment, with special focus on pregnant women and school-going adolescents**
- **1.5 Mandatory provision of Iron and Folic Acid fortified foods** in government funded public health programmes.
- 1.6 Intensifying awareness, screening and treatment of non-nutritional causes of anemia in endemic pockets, with special focus on malaria, haemoglobinopathies and fluorosis.

Progress of Anemia Mukt Bharat¹⁵



Progress Highlights Under

Anemia Mukt Bharat



(FY 2024-25, Till Q2)



Children (6–59 months)

4.7 Crore children received 8–10 doses of Iron-Folic Acid (IFA) Syrup every month.



Children

(5-9 years)

4.9 Crore children received 4–5 IFA Pink tablets monthly.



Adolescents (10–19 years)

5.9 Crore adolescents were given *4–5 IFA Blue tablets*



Pregnant Women

1.5 Crore received *180 IFA Red tablets* during *Antenatal Care (ANC)*.



Lactating Women

0.9 Crore received *180 IFA Red tablets* during *Postnatal Care (PNC).



Weekly Iron and Folic Acid Supplementation (WIFS)

■ 5.29 Crore adolescents (in-school boys & girls + out-of-school girls) received weekly supervised IFA tablets till November 2024.



National Deworming Day (NDD) – February 2024 Round

- 28.09 Crore children and adolescents (1–19 years) were covered.
- Achieved 91.05% coverage against State targets.

 $^{^{15}\ \}underline{\text{https://static.pib.gov.in/WriteReadData/specificdocs/documents/2024/3dec/doc20241228477601.pdf}, p.16-17$



Combat Anemia



in Women & Children

Nutrition-Based Interventions

✓ Fortified Rice Distribution Supplied via Targeted Public Distribution System (TPDS), Pradhan Mantri Poshan Shakti Nirman (PM-POSHAN) Scheme, Integrated Child Development Services (ICDS) Scheme, and other welfare schemes

✓ Village Health & Nutrition Days (VHSNDs)

Monthly outreach at Anganwadi Centres
for maternal and child nutrition services.

in all states/UTs (enriched with Iron,

Folic Acid, and Vitamin B12).

Maternal Health Schemes

- ✓ Surakshit Matritva Aashwasan (SUMAN)

 Free, respectful, quality care for all women and newborns at public health facilities.
- ✓ Janani Shishu Suraksha Karyakram (JSSK)
 Free delivery (including C-sections),
 medicines, tests, diet, transport, and blood
 for all pregnant women.
- ✓ Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)

Free specialist antenatal care on the 9th of every month, including anaemia screening.

✓ Extended PMSMA

Incentives for tracking and supporting high-risk pregnancies with 3 additional ANC visits.

✓ Optimized Postnatal Care
Focus on detecting danger signs remaining the complex of t

Focus on detecting danger signs post-delivery; ASHAs incentivized for referrals.

Health Infrastructure & Outreach

✓ Outreach Camps

Health services in tribal & hard-to-reach areas; focus on tracking high-risk pregnancies.

✓ Strengthening Facilities

Functional First Referral Units, blood storage, Obstetrics High Dependency Units, and Intensive Care Units in high-load hospitals.

Awareness & Education

✓ Mother and Child Protection Cards (MCH) and Safe Motherhood Booklets

These give pregnant women information on diet, danger signs, and schemes.

✓ Information Education and Communication (IEC) Campaigns

Mass & social media campaigns to promote nutrition, health practices, and service uptake.

Research Initiatives

✓ The Indian Council of Medical Research (ICMR) drives nationwide, solution-oriented research on anemia through its National Health Priority Program, funding scalable interventions and informing policy to improve health outcomes.

¹⁷ https://static.pib.gov.in/WriteReadData/specificdocs/documents/2024/3dec/doc20241228477601.pdf, p. 48-49

Conclusion

India's commitment to ending anemia is a global example of inclusive public health action. Through the Anemia Mukt Bharat strategy, the government has reached millions of women, children, and adolescents with Iron-Folic Acid supplementation, deworming, fortified nutrition, and awareness campaigns. By prioritizing the health of its most vulnerable—girls, mothers, and young children—India is breaking the intergenerational cycle of malnutrition. With sustained investment, digital innovation, and strong last-mile delivery, the vision of a healthier, anemia-free India is within reach.

References

- https://www.who.int/news-room/fact sheets/detail/anemia#:~:text=Key%20facts,age%20are%20affected%20by%20anemia
- https://www.who.int/health-topics/anaemia#tab=tab_1
- https://www.unicef.org/india/stories/forging-anemia-free-future
- https://www.who.int/news-room/fact-sheets/detail/anaemia
- https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1448&lid=797
- https://pib.gov.in/PressReleasePage.aspx?PRID=1795421
- https://mohfw.gov.in/sites/default/files/Final%20Printed%20English%20AR%202024-25.pdf
- https://health.vikaspedia.in/viewcontent/health/health-campaigns/national-iron-plus-initiative?lgn=en
- https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1024&lid=388
- https://www.nhm.gov.in/images/pdf/Nutrition/AMB-guidelines/Anemia-Mukt-Bharat-Operational-Guidelines-FINAL.pdf
- https://static.pib.gov.in/WriteReadData/specificdocs/documents/2024/3dec/doc2024122847760
 1.pdf
- https://sansad.in/getFile/loksabhaquestions/annex/182/AU3031_DVkg7s.pdf?source=pqals-LOK SABHA UNSTARRED QUESTION NO. 3031

Santosh Kumar/ Ritu Kataria / Vatsla Srivastava