



Deworming in India

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Why in News

As per the **Ministry of Health and Family Welfare**, states in India have **witnessed reduction in worm prevalence**.

- **Regular deworming** as advised by the **World Health Organization (WHO)** eliminates worm infestation among children and adolescents living in areas with high **Soil-Transmitted Helminthiases (STH) burden**, thereby contributing to achieve better nutrition and health.
- **Helminthiases** is infestation with or disease caused by parasitic worms.

Key Points

- **Background:**
 - As per **WHO Report on STH** published in **2012**, in India there were an estimated **64% children** in the age group (1-14 years) at risk of STH.
The risk was estimated based on the hygiene and sanitation practices and limited STH prevalence data at that point of time.
 - To **assess the exact burden of STH** in India, the Ministry of Health and Family Welfare appointed the **National Centre for Disease Control (NCDC) as the nodal agency** to coordinate and conduct **nationwide baseline STH mapping**.
The baseline STH mapping across the country was **completed by the end of 2016**. The data showed **varied prevalence ranging from 12.5% in Madhya Pradesh to 85% in Tamil Nadu**.
 - To **evaluate the impact** of the consistently implemented high coverage **National Deworming Day (NDD) programme**, the Ministry **recently initiated follow-up prevalence surveys led by NCDC and partners**.

- **Result of the Follow-up Surveys:** The follow-up surveys are **completed in 14 States**.
 - All 14 States have **shown reduction** in the follow up survey compared to the baseline prevalence survey.
 - The States of **Chhattisgarh, Himachal Pradesh, Meghalaya, Sikkim, Telangana, Tripura, Rajasthan, Madhya Pradesh and Bihar** have **shown substantial reduction** in worm prevalence in the STH follow up prevalence survey.
 - Chhattisgarh has successfully conducted 10 rounds of NDD as on date, and the **drop** in prevalence has been significant **from 74.6% in 2016 to 13.9% in 2018**.
 - **Sikkim**, with 9 rounds, has seen **reduction from 80.4% in 2015 to 50.9% in 2019**.
 - Rajasthan, the State that implemented an annual round only due to low baseline of 21.1 in 2013 has seen significant reduction to the level of **less than 1% in 2019** as per the survey.

National Deworming Day Programme

- **Implementation** of NDD is **led by the Ministry of Health and Family Welfare**, in collaboration with the Ministry of Women and Child Development, Ministry of Education and technical assistance from WHO and the technical partners. It was **launched in 2015**.
- It is **implemented as a biannual single day programme (10th February and 10th August)** through the platforms of schools and anganwadis.
- In the **last round of deworming** earlier this year in the country (which was halted due to the **Covid pandemic**), **11 crore children and adolescents were administered Albendazole tablets** across 25 States/UTs.

Albendazole tablet, approved by the WHO, is used for treatment of intestinal worms in children and adolescents as part of Mass Drug Administration (MDA) programmes globally.

Soil-Transmitted Helminths

- **Soil-Transmitted Helminths** refer to the intestinal worms infecting humans that are transmitted through contaminated soil.
 - Intestinal worms are **parasites** that live in the human intestines and consume nutrients and vitamins needed for a child.

- There are **three main types of helminths** that infect people, **roundworm** (*Ascaris lumbricoides*), **whipworm** (*Trichuris trichiura*) and hookworms (*Necator americanus* and *Ancylostoma duodenale*).

These **worms depend on the human body** for their food and survival and while being there, they lay thousands of eggs each day.
- **Transmission:**

Soil-transmitted helminths are **transmitted by eggs** that are passed in the faeces of infected people. In areas that **lack adequate sanitation**, these eggs **contaminate the soil**.
- **Impact:**
 - Since worms feed on host (human body) tissues, including blood, it leads to loss of iron, and protein, resulting in **anaemia** – reduced oxygen carrying capacity due to less Haemoglobin (Hb) available in the body.
 - Worm infection can also lead to **diarrhoea; dysentery; loss of appetite; reduced nutritional intake and physical fitness; increased malabsorption** – a condition that prevents absorption of nutrients through the small intestine.
- **Treatment:**

The WHO recommended medicines – **albendazole (400 mg)** and **mebendazole (500 mg)** – are effective, inexpensive and easy to administer by non-medical personnel (e.g. teachers).



Deworming infants, children and women for better health



Intestinal parasitic worms (soil-transmitted helminths) are spread through soil, contaminated by human faeces.

Worm infections interfere with children's nutritional uptake and can result in malnourishment, anaemia, and stunted growth.



**Periodic treatment of at-risk populations reduces the intensity of infection.
No individual diagnosis is needed.**

Treatment with what?



Free deworming medicines such as albendazole or mebendazole

Why treat everyone?



To reduce ill health (malnutrition, anaemia, impaired growth); To prevent others from acquiring severe infection



Who should be treated?



Preschool, school-age children and women of reproductive age

Where can treatment be sought?

Schools and community health centres



Global target: To reach 75% of children in need of treatment by 2020

Source: PIB