

**GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
DEPARTMENT OF HEALTH RESEARCH**

**RAJYA SABHA
UNSTARRED QUESTION NO. 1865
TO BE ANSWERED ON 05TH AUGUST, 2025**

EFFECT OF MICROPLASTICS IN HUMANS

1865. SMT. PRIYANKA CHATURVEDI:

Will the **Minister of HEALTH AND FAMILY WELFARE** be pleased to state:

- (a) whether Government has assessed the extent of use of microplastics in the country, if so, the details thereof;
- (b) whether Government has assessed the impact of use of microplastics among the public in the country;
- (c) if so, the details thereof; and
- (d) the steps taken by Government to reduce the usage of microplastics in the country?

ANSWER

**THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE
(SHRI PRATAPRAO JADHAV)**

(a) to (d): Studies have estimated microplastics in different environment samples, biota and/or human tissue. Indian Council of Medical Research (ICMR) has informed that National Institute for Research in Environmental Health (ICMR-NIREH) Bhopal has undertaken a review titled “Micro/nano plastics and human health: Synthesis of evidence on repercussions and toxicity potential”. Separately, a Committee comprising of Central Pollution Control Board (CPCB), ICMR, Central Institute of Petrochemicals Engineering & Technology (CIPET), National Centre for Sustainable Coastal Management (NCSCM), under the coordination of CPCB, submitted a report to the National Green Tribunal noting that there are studies about the presence of microplastics in human body but not about their physiological or psychological impact on humans.

In order to reduce pollution caused by littered and unmanaged plastic waste, which includes microplastics, the Ministry of Environment, Forest and Climate Change has already prohibited identified single use plastic items, which have low utility and high littering potential, with effect from 1 July, 2022. Further, the Ministry of Environment, Forest and Climate Change has also notified the Guidelines on Extended Producer Responsibility (EPR) for plastic packaging vide Plastic Waste Management (Amendment) Rules, 2022, on 16th February, 2022. The Guidelines

stipulate mandatory targets on EPR, recycling of plastic packaging waste, reuse of rigid plastic packaging and use of recycled plastic content. The guidelines provide for moving towards sustainable plastic packaging and reducing the plastic foot print. Further, vide Amendment No. 2, of Indian Standard IS 4707 (Part 2): 2017, Classification of Cosmetic Raw Materials and Adjuncts (Fourth Revision) notified in November 2017, under Annex A at Sr. No. 1373 it has stated that Plastic microbeads: 5 mm or less, water insoluble, solid plastic particles used to exfoliate or cleanse in rinse-off personal care products are not recognized as safe for use in Cosmetics. The raw materials specified in Annex A of the Indian Standard IS: 4707 Part 2, as amended from time to time, shall not be added in cosmetic product, as per the Cosmetics Rules issued under the Drugs and Cosmetics Act, 1940.

The Government has also launched campaigns to raise awareness about the negative impacts of Single Use Plastic (SUP) waste and microplastics and also about the promotion of sustainable alternatives.

The Department of Biotechnology (DBT) has informed that it has undertaken an initiative on 'Biotechnological Interventions for Management and Mitigation of Microplastic Pollution' and supported 14 research and development projects in this area. These projects are focused on enzymatic and microbial biodegradation of microplastics, meta-omics and systems biology approaches in microplastic research, development of bio-based and biodegradable plastics, synthetic biology and metabolic engineering for functional biopolymers, nanotechnology for biodegradation and sustainable packaging, and detection, monitoring, and upcycling of micro/mixed plastics. These projects have been implemented at academic institutes across the nation.
