

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

**LOK SABHA
UNSTARRED QUESTION NO. 3488
TO BE ANSWERED ON 13TH MARCH, 2026**

MICROPLASTICS IN HUMAN ORGANS

3488. SHRI NAVEEN JINDAL:

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

- (a) whether it is a fact that researchers have discovered microplastics in the blood, faeces and organs of human beings and if so, the details of such studies; and
- (b) the likely implications of this development on human health and the mitigation strategies being put in place to curb this reported grave threat to human health?

ANSWER

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

(a) and (b): Indian Council of Medical Research (ICMR) has informed that its National Institute for Research in Environmental Health (ICMR-NIREH), Bhopal has done systematic review of studies on presence of microplastics in human body. The Department of Biotechnology (DBT) has informed that a number of research projects on microplastics in terrestrial and aquatic ecosystems have been supported with a strategy to focus on understanding their potential impact on human health and mitigation thereof. The activities are focused on research and development to understand the microplastic pollution, their entry into food chain and their impact on environment and health with emphasis on microplastics' interaction with immune cells and intestinal tissues, microplastic induced oxidative stress, cytotoxicity and pro-inflammatory responses in macrophages and the mechanisms through which microplastic exposure may affect gut health and disease risk. Parallel studies have identified human pathogenic bacteria and harmful algal bloom (HAB) species associated with microplastics in ballast and coastal waters, highlighting their role as potential hotspots for the development and spread of antibiotic-resistant pathogens.

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. 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 footprint. Already, 114 lakh tonnes of plastic packaging waste have been recycled after the EPR Guidelines have come into force in 2022. 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.
