

Antibiotics becoming ineffective against diseases like typhoid, pneumonia, and urinary infections: ICMR rings alarm

Synopsis

A recent ICMR report highlights a troubling rise in antibiotic resistance in India. Diseases like UTIs, blood infections, pneumonia, and typhoid are becoming resistant to commonly used antibiotics. The report calls for immediate action and stronger regulations on antibiotic use to combat this growing public health challenge.



Antibiotic resistance

A recent report from the Indian Council of Medical Research (ICMR) indicates that diseases such as [urinary tract infections](#) (UTIs), blood infections, pneumonia, and typhoid are becoming resistant to commonly used antibiotics. The findings come from the [ICMR's](#) 2023 annual report on [antimicrobial resistance](#) (AMR), which is based on

data collected throughout the year. This report highlights a troubling increase in [antibiotic resistance](#) across India.

Key Findings from the Report

The ICMR's AMR research and surveillance network analyzed 99,492 samples from both public and private healthcare facilities between January 1 and December 31, 2023. The study focused on common antibiotics used for treating various conditions, including upper respiratory infections, fevers, and bloodstream infections.

The report indicates a significant rise in antibiotic resistance and a decrease in the effectiveness of key antibiotics. It evaluated samples from different infections, such as blood, urine, and respiratory specimens, with contributions from 21 regional centers nationwide.

Increasing Resistance to Common Bacteria

The report reveals a concerning trend regarding common bacteria. *E. coli*, which is prevalent in both ICU and outpatient settings, demonstrated poor responsiveness to antibiotics like cefotaxime, ceftazidime, ciprofloxacin, and levofloxacin, with susceptibility rates falling below 20%. Similarly, *Klebsiella pneumoniae* and [*Pseudomonas aeruginosa*](#) also showed rising resistance, particularly against critical antibiotics such as piperacillin-tazobactam, imipenem, and meropenem.

The effectiveness of piperacillin-tazobactam, for instance, has declined from 56.8% in 2017 to 42.4% in 2023. Other widely used antibiotics like amikacin and meropenem are also becoming less effective in treating infections.

Call for Immediate Action

The ICMR report stresses the need for immediate action to tackle the growing threat of antibiotic resistance. “Continuous surveillance of antimicrobial susceptibilities is crucial for tailoring empiric antibiotic therapy, optimizing patient outcomes, and controlling the spread of resistance,” the report states.

To address this escalating issue, experts call for comprehensive strategies to safeguard the efficacy of essential antibiotics. The findings underscore the importance of public awareness and responsible antibiotic use to combat this public health challenge effectively.

Concerns Over Misuse of Antibiotics

The report emphasizes the misuse of antibiotics, particularly in agriculture, which contributes to rising resistance. It urges for stronger regulations on antibiotic use to protect their effectiveness for both human and animal health.

ICMR researchers highlighted that bacteria responsible for gastroenteritis, such as *Salmonella typhi*, have developed over 95% resistance to fluoroquinolones, a class of antibiotics commonly used for severe infections.

News Source:

<https://economictimes.indiatimes.com/news/india/antibiotics-becoming-ineffective-against-diseases-like-typhoid-pneumonia-and-urinary-infections-icmr-rings-alarm/articleshow/113599189.cms?from=mdr>