



## FSSAI Sets up Lab Network to Test Food for Pathogens

### Why in News?

The [Food Safety and Standards Authority of India \(FSSAI\)](#) is working towards creating a network of 34 microbiology labs across the country that will be equipped to **test food products for 10 pathogens**, including [E. coli](#), **salmonella** and **listeria**.

### Key Points

//

| 34 MICROBIOLOGY LABS IN 24 STATES |                                                                                                                                                                                                        |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Three labs                        | Karnataka, Kerala and Uttar Pradesh                                                                                                                                                                    |
| Two labs                          | Tamil Nadu, Gujarat and Maharashtra                                                                                                                                                                    |
| One lab                           | Bihar, Chhattisgarh, Jharkhand, Odisha, West Bengal, Punjab, Rajasthan, Madhya Pradesh, New Delhi, Himachal, Uttarakhand, Haryana, Assam, Sikkim, Manipur, Meghalaya, Nagaland, Puducherry and Tripura |

  
(Source: FSSAI)

- These labs will help test food for microbial contamination that can lead to spoilage of food and potential health risks.
- Data from the [National Centre for Disease Control](#), which tracks the trajectory of several diseases every week, shows that [acute diarrhoeal disease](#) and **food poisoning** were the two most common outbreaks in the country.
  - There were over 1,100 outbreaks of acute diarrhoeal disease across the country in the last four years and nearly 550 outbreaks of food poisoning.
- There are **79 state food testing laboratories in the country, none of them are currently equipped to test for pathogens** as they require maintaining live reference samples, expensive reagents and a microbiologist.

### E. coli

- **Escherichia coli**, commonly known as E. coli, is a **type of bacteria** that can be **found in the intestines of humans and animals**.
- It is a **rod-shaped bacterium** of the Enterobacteriaceae family.
- Some kinds of E. coli **can cause diarrhea**, while others **cause urinary tract infections, respiratory illness and pneumonia**, and other illnesses.

- Pathogenic E. coli can be transmitted to humans through **contaminated food, water, or contact with fecal matter from infected individuals or animals.**

## Salmonella

- It is a **group of bacteria** that can **cause food-borne illnesses** known as **salmonellosis.**
- Salmonella bacteria typically **live in animal and human intestines** and are shed through feces. Humans become **infected** most frequently through **contaminated water or food.**
- The symptoms of Salmonella include **nausea, diarrhoea, fever, and abdominal cramps** 12-72 hours after contracting the infection.
- WHO has identified Salmonella as **one of four key global causes of diarrhoeal diseases.**

## Listeria

- This bacterium is **naturally present in the environment** and can be found in the intestines of certain animals, as well as in soil and water.
- It can cause **symptoms similar to the flu**, making it particularly **dangerous for people over 65 and pregnant women.**
- It can **infect humans** through the **consumption of unpasteurized milk and dairy products**, as well as certain pre-prepared fruits like sliced melons.

PDF Reference URL: <https://www.drishtiias.com/printpdf/fssai-sets-up-lab-network-to-test-food-for-pathogens>

