



## POLIO VIRUS RESURGENCE: SCIENCE & TECHNOLOGY

*NEWS: A global polio resurgence and the need to reevaluate the basics*

### WHAT'S IN THE NEWS?

WHO detected poliovirus in wastewater across several European countries with no confirmed cases, highlighting the need for strong vaccination and surveillance. Globally, vaccine-derived cases persist, prompting experts to recommend switching from OPV to IPV to prevent outbreaks.

### Poliovirus Detection in Europe

- WHO detected poliovirus in wastewater systems across Finland, Germany, Poland, Spain, and the UK (since September 2024).
- No confirmed cases of polio reported in these countries to date.

### Global Polio Cases

- Pakistan: 4 cases of WPV1 and 8 WPV1-positive environmental samples.
- Cameroon, Côte d'Ivoire, Chad, and Nigeria: Reported cases of cVDPV2.
- Environmental detection of cVDPV2: Found in cities like Barcelona (Spain), Warsaw (Poland), and Munich (Germany).

### Vaccination Coverage and Immunity

- High immunization rates (85%-95%) in Finland, Germany, Poland, Spain, and the UK provide protection from paralysis.
- Immunity gaps identified in subnational areas with low vaccination coverage.

### Debates on Transmission Routes

- Traditional faecal-oral transmission debated.
- Recent studies highlight respiratory transmission as a significant route.

### Vaccine Strategy

- Experts recommend switching globally from OPV to IPV to prevent vaccine-derived polio cases and support eradication efforts.



## POLIO

Contagious Viral Illness

Poliovirus Destroys  
Nerve Cells in the  
Spinal Cord

Causing Muscle  
Wasting and  
Paralysis

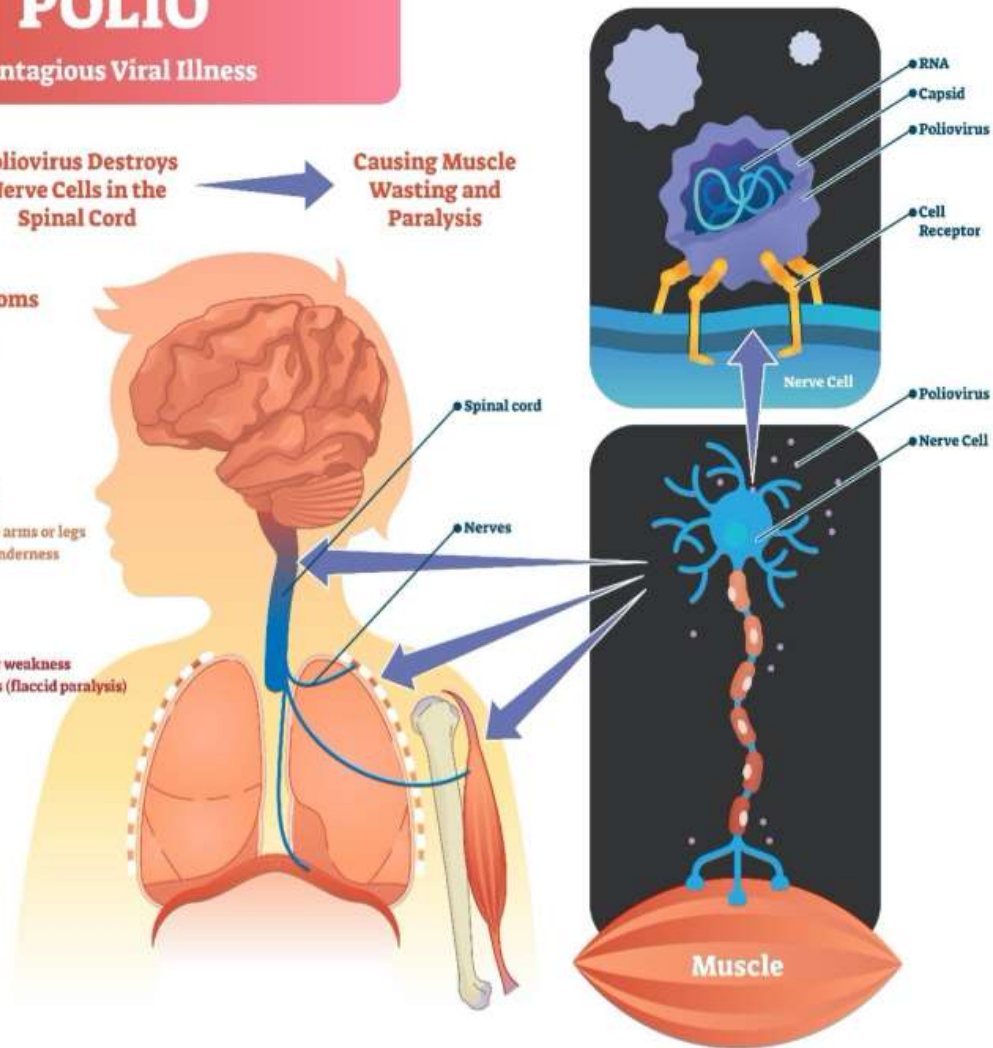
### Signs and symptoms

#### Nonparalytic polio

- Fever
- Sore throat
- Headache
- Vomiting
- Fatigue
- Back pain or stiffness
- Neck pain or stiffness
- Pain or stiffness in the arms or legs
- Muscle weakness or tenderness

#### Paralytic polio

- Loss of reflexes
- Severe muscle aches or weakness
- Loose and floppy limbs (flaccid paralysis)



Source: <https://www.thehindu.com/sci-tech/health/a-global-polio-resurgence-and-the-need-to-reevaluate-the-basics/article69026816.ece>

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