



Shigella Bacteria Outbreak

Why in News?

An **outbreak of shigella bacteria** is believed to be the reason behind the recent incident of suspected food poisoning in **Kasaragod district, Kerala**.

- Earlier in 2019, the bacteria were found in Koyilandy district, Kerala.

What is Shigella Bacteria?

- **About:** Shigella is a genus of bacteria that causes an **infection called shigellosis**. It is the **second leading cause of diarrhea** ([after Rotavirus](#)) worldwide and the third leading cause of death in children less than 5 years old.
 - The annual number of shigellosis episodes **throughout the world is estimated to be 164.7 million**.
- **Possible Symptoms:** Symptoms include diarrhoea, fever, stomach cramps which can last for seven days.
- **Transmission:** Shigella is generally transmitted through contaminated food or water, or through person-to-person contact.
 - Shigellosis is primarily a disease of **poor and crowded communities** that do not have adequate sanitation or safe water.
- **Incubation Period:** The incubation period of shigellosis is **typically 1-4 days**.
- **Different Species:** The severity of the disease varies by the infecting species:
 - **Shigella dysenteriae infections** usually cause dysentery, which may also occur in infection with *Shigella flexneri*.
 - **Shigella boydii and Shigella sonnei** often have self-limited watery diarrhea.
- **Vaccines:** Currently, there are **no vaccines** available for shigellosis.
- **Medium Priority Bacteria:** Due to the increasing rate of multidrug resistance, in particular resistance to **fluoroquinolone** in Asian and African regions, this has been classified as a medium priority for research and development of new and effective antibiotic treatments by the [WHO Priority Pathogens List of antibiotic-resistant bacteria](#).

What is the Treatment Protocol?

- **Hydration:** The cornerstone of shigella treatment is the maintenance of hydration and electrolyte balance.
 - In young children, **oral rehydration with a reduced osmolarity solution** is indicated to treat the WHO-defined category of some dehydration and is preferable to intravenous fluids unless severe dehydration is present.
- **Use of Antibiotics:** Although shigellosis is primarily **self-limiting**, **antibiotics** are recommended for reducing illness duration and for preventing transmission.
 - The current drugs of choice are **third-generation cephalosporins (ceftriaxone or cefixime) and macrolides (azithromycin)**.
- **Public Hygiene:** Handwashing is said to reduce **shigella transmission by 70%**. Recommended public health control measures are exclusion of ill people with shigellosis from work, food preparation, and childcare.

[Source: TH](#)

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