

COMPREHENSIVE GUIDE TO TYPHOID

Description

Typhoid fever is a life-threatening systemic infection caused by the bacterium *Salmonella Typhi*. It is a significant health threat in parts of the world with limited access to safe water and sanitation, particularly in South Asia, Southeast Asia, and Africa. Typhoid is a bacterial disease that infiltrates the bloodstream and intestinal tract. It typically progresses in stages over several weeks:

- Week 1: Gradual onset of high fever (climbing to 104°F/40°C), headache, and malaise.
- Week 2: Sustained high fever, extreme exhaustion, and the appearance of "rose spots" (faint pink spots on the chest or abdomen).
- Week 3: This is the "critical phase" where complications like intestinal perforation (holes in the bowel) or internal bleeding can occur.
- The Carrier State: About 2–5% of people who recover continue to carry the bacteria in their gallbladder and shed it in their stool for years, potentially infecting others.

History

The history of Typhoid is a chronicle of military setbacks and the discovery of "silent" transmission:

- Ancient Plagues (430 BC): Some historians believe the Plague of Athens, which killed one-third of the city's population during the Peloponnesian War, was an early typhoid epidemic.
- The American Civil War (1860s): Disease killed more soldiers than combat did; over 80,000 Union soldiers died of typhoid or dysentery due to poor camp sanitation.
- The "Typhoid Mary" Case (1906): Mary Mallon, an Irish cook in New York, became the first identified "asymptomatic carrier" in the U.S. Though she never felt sick, she unknowingly infected dozens of people, leading to her lifelong forced isolation.
- Sanitation Revolution (20th Century): The introduction of water chlorination and the first vaccines in the early 1900s dramatically reduced the disease's prevalence in industrialized nations.

How the Disease Spreads

Typhoid follows the faecal-oral route. It is transmitted exclusively by humans through:

- Contaminated Water: Drinking water tainted by sewage is the most common source of large outbreaks.
- Contaminated Food: Eating food handled by someone who is shedding the bacteria and has not washed their hands thoroughly.
- Raw Produce: Eating fruits or vegetables that were rinsed with contaminated water or fertilized with human waste.
- Close Contact: Living with or caring for an infected person or a chronic carrier.

Common Symptoms

Symptoms usually appear 6 to 30 days after exposure and can be mistaken for the flu initially:

- Prolonged High Fever: A fever that starts low and increases daily, potentially reaching 104°F (40°C).
- Gastrointestinal Distress: Abdominal pain, along with either severe constipation (common in adults) or diarrhoea (common in children).
- "Rose Spots": A rash of small, flat, pink spots usually found on the trunk.
- General Malaise: Severe weakness, fatigue, muscle aches, and loss of appetite.
- Nervous Symptoms: In severe cases, patients may experience confusion or "muttering delirium."

When to Visit a Doctor

Early diagnosis and antibiotic treatment are critical to prevent life-threatening complications. Consult a doctor if:

- You have a fever that lasts more than 3 days and you feel very ill.
- You have recently travelled to a high-risk region (like India, Pakistan, or Bangladesh) and develop a fever.
- Emergency Signs (Seek A&E immediately):
 - Sudden, severe stomach pain that gets worse.
 - Vomiting blood or vomit that looks like "coffee grounds."
 - Passing black, tarry, or dark red stools.

Preventative Measures

Typhoid is highly preventable through vaccination and "safe" consumption habits:

- Vaccination: If traveling to an endemic area, get vaccinated at least 1–2 weeks before departure. Options include a single injection or oral capsules.
- "Boil it, Cook it, Peel it, or Forget it":
 - Water: Drink only bottled, boiled, or chemically disinfected water. Avoid ice.

- Food: Eat only thoroughly cooked food served steaming hot.
 - Produce: Avoid salads and raw vegetables. Only eat fruit that you peel yourself (like bananas or oranges).
- Hand Hygiene: Wash hands vigorously with soap and warm water after using the bathroom and before handling any food.
- Avoid Street Vendors: In high-risk areas, avoid food and drinks from unknown sources where hygiene standards may be low.