# Antibiotic-resistant typhoid fever poses rising global health threat



Typhoid fever, a bacterial disease notorious for its historical impact during the Victorian era, is increasingly becoming resistant to antibiotics, raising concerns among scientists and healthcare professionals. According to reports, including insights from an international team of researchers published in the journal Scientific Data, typhoid fever continues to affect millions of people worldwide despite advancements in vaccination and treatment strategies.

The disease, caused by the bacterium Salmonella Typhi, remains a significant health threat particularly in regions with poor sanitation and water quality, such as Southeast Asia, Sub-Saharan Africa, South America, and Eastern Europe. An estimated nine million people globally fall ill with typhoid every year, resulting in more than 110,000 deaths.

In the UK, typhoid fever is still present with hundreds of confirmed cases annually, as noted by the National Health Service (NHS). Most infections in the UK occur in individuals who have travelled to countries like Bangladesh, India, Pakistan, as well as other parts of Asia, Africa, and South America. The NHS highlights that the infection can spread throughout the body, affecting multiple organs, and warns that vaccination is not completely foolproof. The two vaccines available in the UK, represented historically by administration in the 1940s, do not offer 100% protection.

The disease also causes thousands of cases in the United States each year. The Centers for Disease Control and Prevention (CDC) estimates there are around 5,700 illnesses and 620 hospitalisations annually, with most cases linked to international travel.

Antibiotic resistance is a growing concern with Salmonella Typhi strains showing genetic mutations that render treatments increasingly ineffective. Jehan Zeb Khan, a clinical pharmacist at a clinic in northern Pakistan, told The Guardian, “Typhoid was once treatable with a set of pills and now ends up with patients in hospital.” This development complicates the management of the disease and heightens the risk of severe health outcomes such as intestinal haemorrhage, organ failure, sepsis, and death.

Symptoms typically appear within one to three weeks of infection and include high fever, fatigue, and stomach cramps. The need for prompt antibiotic treatment remains critical. Massachusetts’ University of Wisconsin-Madison recently issued a public warning about potential exposure after a campus café worker was diagnosed with typhoid, signalling attention to the disease even in settings far from endemic areas.

Adding to concerns about infectious diseases, new data released in recent times pointed out that tuberculosis (TB) continues to be a serious public health issue in England. Experts suggest that the resurgence of several infectious illnesses, including typhoid and TB, is linked to increased social mixing and international travel following the COVID-19 pandemic.

The persistence and evolution of typhoid fever as a threat across different global regions underscore ongoing challenges in infectious disease control and the urgent need for continued surveillance and innovation in treatment strategies.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11272152/> - This URL supports the claim of rising antibiotic resistance in Salmonella Typhi, highlighting the alarming rise of multi-drug resistant (MDR) and extensively drug-resistant (XDR) strains.
2. <https://www.cdc.gov/typhoid-fever/php/rep-strain/index.html> - This URL from the CDC discusses the issue of extensively drug-resistant Salmonella Typhi strains, corroborating concerns about antibiotic resistance complicating typhoid treatment.
3. <https://www.cdc.gov/typhoid-fever/index.html> - This CDC webpage provides information on typhoid fever, including its prevalence and the need for antibiotic treatment, aligning with the article's discussion on the disease's impact and management challenges.
4. <https://www.sciencedaily.com/releases/2024/02/240220144624.htm> - This article highlights the rise in antibiotic-resistant typhoid, particularly after increased use of antibiotics like ciprofloxacin, reinforcing the article's point about growing resistance.
5. <https://www.coalitionagainsttyphoid.org/the-issues/drug-resistant-typhoid/> - This URL discusses drug-resistant typhoid, specifically mentioning the emergence of XDR strains and the need for new antibiotics, supporting the article's concerns about antibiotic resistance.
6. <https://www.nhs.uk/conditions/typhoid-fever/> - This NHS webpage provides information on typhoid fever in the UK, including its prevalence and travel-related cases, supporting the article's mention of cases in the UK.
7. <https://www.mirror.co.uk/news/health/typhoid-fever-deadly-victorian-disease-35107933> - Please view link - unable to able to access data