



FACT SHEET

Salmonella

Common clinical features

Salmonellosis - Diarrhoea, vomiting and abdominal pain. Malaise and fever almost always present. Dehydration may occur, particularly in infants and the elderly. Septicaemia with abscess formation in virtually any organ is an uncommon complication. Diarrhoea and fever often persist for several days. Blood may be present in the stool in 20% of cases.

Typhoid and paratyphoid (also known as Enteric Fever) are diseases caused by *Salmonella enterica* serovar Typhi (typhoid) or Paratyphi A, B and C (paratyphoid). Classic typhoid fever is a serious disease and can be life-threatening. The disease lasts several weeks and convalescence takes some time.

Incubation period

Salmonellosis - 12 hours to 3 days.

Typhoid Fever - Usually 8 - 14 days but can be 3 days to one month

Where is it found?

Non typhoid *Salmonella* - Gastrointestinal tract of wild and domestic animals, birds (especially poultry) reptiles, amphibians (for example terrapins) and occasionally humans become long-term carriers.

Typhoid and paratyphoid can be found in the gastrointestinal tract of humans and hence can be found in sewage, contaminated water supplies and contaminated food. These diseases are prevalent in regions of the world where sanitation is poor.

How is it acquired by affected individuals?

Non typhoid *Salmonella* - Predominantly from food (most commonly red and white meats, raw and undercooked eggs, milk and dairy products) following contamination of cooked food by raw food or failing to achieve adequate cooking temperatures. Contact with infected animals or animal faeces. Person to person spread from the case by close contact, usually when the case has diarrhoea. These so-called "secondary" cases are common in outbreaks.

Typhoid and paratyphoid are almost exclusively acquired abroad, through the ingestion of heavily contaminated food and water. These diseases are prevalent in regions of the world where sanitation is poor. It can also be transmitted by the person to person route.

How does the laboratory confirm the diagnosis?

The bacteria are cultured on selective media from faeces samples. Foods may be tested for the bacteria in outbreaks. A result will usually be available within 2 to 3 days but it may take several days to confirm the particular type of Salmonella. Although the organisms causing typhoid fever may be detected in faecal samples active infection is usually diagnosed by isolating the causative organism from blood cultures and/or rarely urine.

In this **study** all samples will be tested by a molecular test (Luminex xTAG® GPP) and results will be available within 24 hours.

How is it treated?

Normal Salmonellosis - symptomatic treatment and rehydration. Generally, antibiotics are not required for adults who are otherwise healthy and have mild to moderate disease. Antibiotics may be required for more severe cases. Classic typhoid fever is a serious disease and can be life-threatening unless treated promptly with antibiotics. Contact a consultant microbiologist for advice on treatment.