Chinese Notifiable Infectious Diseases Surveillance Project

Typhoid fever and paratyphoid fever

November 2023

Introduction

Typhoid fever and paratyphoid fever are life-threatening illnesses caused by Salmonella species. Typhoid fever, caused by Salmonella typhi, and paratyphoid fever, caused by Salmonella paratyphi, are marked by symptoms such as cramps, diarrhea, fever, or headache. The diseases are transmitted via the fecal-oral route, usually through contaminated water or food. Globally, typhoid fever affects about 21 million people annually, predominantly in low and middle-income countries. Paratyphoid fever is less common but poses similar challenges in prevention and control due to its similar transmission route and similar range of symptoms.

Temporal Trend Cases Deaths 1500 1250 1000 1.5 750

Highlights

- Notable decline in Typhoid and paratyphoid fevers from 2010's peak (1867 cases) to November 2023 (377 cases), indicating successful control measures over the years.
- Deaths remain consistently low, with occasional instances, such as a single death in October 2023, showing no rising mortality trend.
- Cases increase seasonally from May to August each year, hinting at potential seasonal transmission factors.
- A significant reduction in cases since 2020 may relate to heightened sanitation and health practices during the COVID-19 era.

Cases Analysis

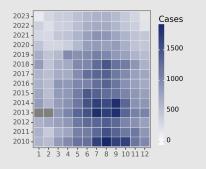
From 2010 to 2023, the trend in cases of Typhoid and paratyphoid fever in the Chinese mainland presents a clear seasonality, with peaks generally occurring in the summer months from June to August. Over the years, there has been a gradual decrease in the number of reported cases, particularly noticeable after 2020. The highest number of cases within a single month was observed in July 2013 with 1,799 cases, and a remarkable decline was seen over a decade later, with 657 cases reported in July 2023.

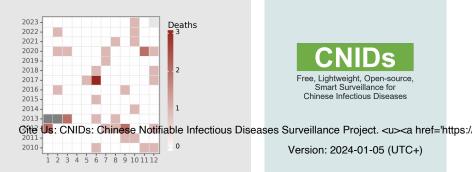
Deaths Analysis

2024

Throughout the same period, the number of deaths remained relatively low considering the total number of cases, with occasional months reporting 1 to 3 deaths. The mortality shows no clear seasonal pattern and remains sporadic with a total of 27 deaths reported from 2010 to 2023. Notably, there was an improvement in reported outcomes post-2020, coinciding with the reduction in case numbers, likely due to improved public health measures, with only two months reporting a single death each since then.

Distribution





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