

Chinese Notifiable Infectious Diseases Surveillance Report

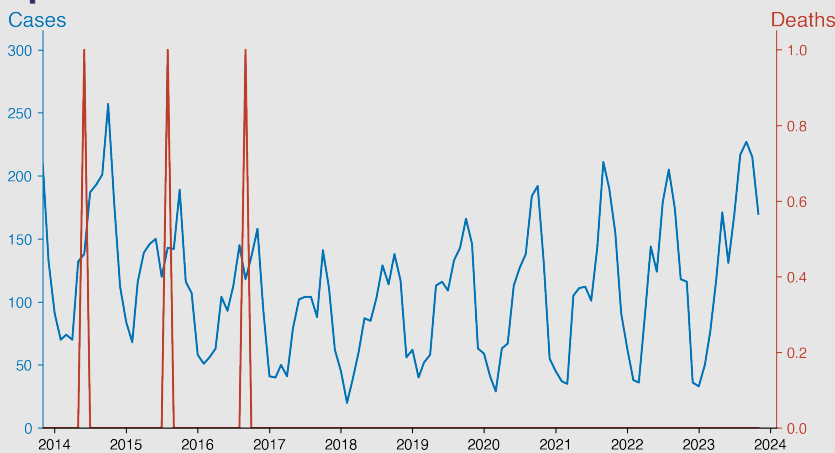
Typhus

November 2023

Introduction

Typhus is a bacterial disease transmitted by body lice or fleas. It's typically found in areas of high population density and poor sanitation, often affecting homeless or refugee populations. Symptoms include severe headache, high fever, rash, and confusion, typically appearing 1-2 weeks after exposure. Typhus is caused by *Rickettsia prowazekii* and *Rickettsia typhi* bacteria, and its treatment involves antibiotics, especially doxycycline. Without intervention, complications such as neurological issues or organ failure can occur, leading to possible fatal outcomes. Vaccination is not currently available.

Temporal Trend



Highlights

- Seasonal pattern observed with cases peaking during the summer months, particularly from May to August, suggesting a vector trend possibly influenced by environmental conditions conducive to the spread of typhus.
- A steady decrease in reported cases has been noted since 2010, with the highest number of 276 cases in June 2011 followed by a general decline to 170 cases in November 2023, indicating successful control measures.
- The fatality rate is remarkably low, with only a few deaths reported over the years despite the number of cases, suggesting effective clinical management and possibly low virulence of the circulating strains.
- Current disease situation as of November 2023 shows a controlled scenario, with caseloads maintained at lower levels compared to the peaks observed in the early 2010s, demonstrating improved public health

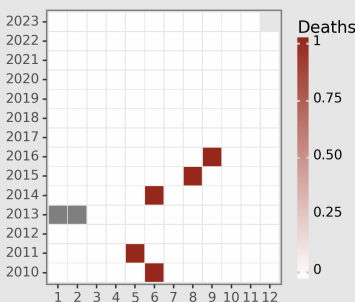
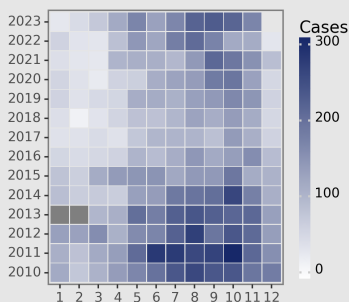
Cases Analysis

From 2010 to 2023, reported typhus cases in mainland China show discernible seasonality, with troughs typically in January and February, and peaks around July through October. Cases tend to increase during the warmer months and decrease during the colder months, with few anomalies. A gradual decline in annual case counts is noticeable from 2010 to 2017, followed by relative stabilization, suggesting either improved control measures, underreporting, or both. The data for January and February 2013 are missing but this does not significantly skew the overall trend analysis.

Deaths Analysis

The mortality data from 2010 to 2023 reveal a low death rate associated with typhus in mainland China, with only three reported deaths, each occurring in different years (2010, 2011, and 2015). This indicates a case-fatality rate well below 1%, suggesting either the typhus strain present may be less virulent, medical treatments are effectively administered, or cases are promptly identified and managed. The rarity of reported deaths, despite varying case counts, points to a generally effective public health response to the disease.

Distribution



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