

Chinese Notifiable Infectious Diseases Surveillance Report

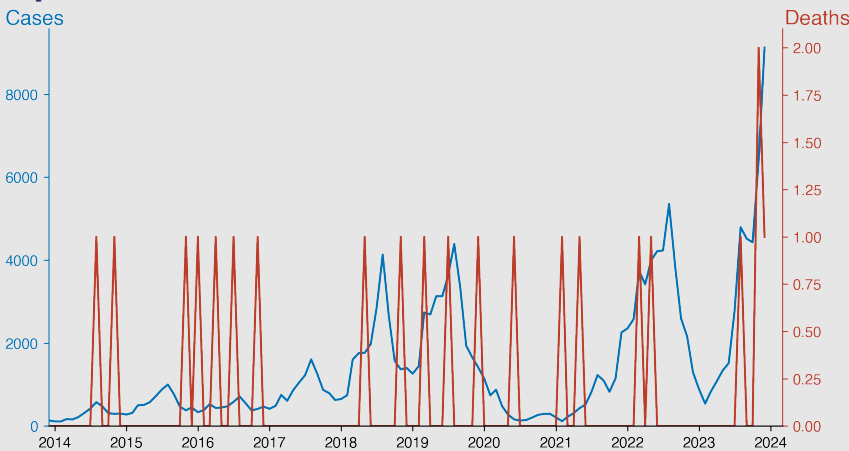
Pertussis

December 2023

Introduction

Pertussis, commonly known as whooping cough, is a highly contagious bacterial infection characterized by severe coughing spells. Caused by the *Bordetella pertussis* bacteria, it primarily affects the respiratory tract. Pertussis is transmitted directly from person to person through droplets expelled during talking, coughing, or sneezing. It is particularly dangerous to infants under six months and can be fatal. Vaccination is the main preventive measure and is part of routine childhood immunizations. Despite vaccination, pertussis outbreaks still occur.

Temporal Trend



Highlights

- Pertussis cases in the Chinese mainland soared from 136 in December 2013 to a peak of 9,126 in December 2023, indicating enhanced transmission and potentially evolving disease dynamics.
- Mortality remained low, with occasional spikes, suggesting improved clinical management despite increased case numbers; for example, only 1 death amid December 2023's surge.
- There's a seasonal trend with cases escalating in summer months, necessitating targeted health interventions during these times.
- The public health response appears to be containing case fatality rates, even as cases escalate sharply.

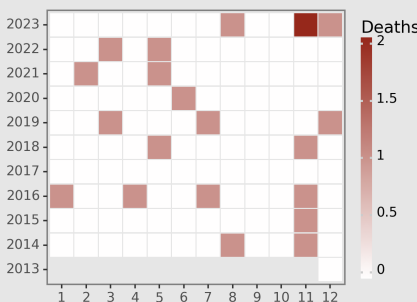
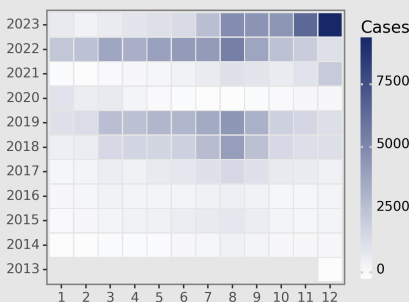
Cases Analysis

From December 2013 to December 2023, there is a notable upward trend in pertussis cases in mainland China, with seasonal peaks typically in the summer months. The data indicates a substantial increase over the years, with a slight decline seen after high numbers in July and August. Cases sharply rose to 9,126 by December 2023. Sporadic fluctuations are evident, notably the decrease in 2020, potentially attributable to public health measures during the COVID-19 pandemic, but thereafter, cases increased again, suggesting resurgence or reporting changes.

Deaths Analysis

Despite the consistent rise in pertussis cases over the decade, mortality remained remarkably low, with only 11 reported deaths. Deaths were sporadic with no particular pattern or trend, indicating the potentially effective clinical management of cases or underreporting of fatalities. Nevertheless, each death elucidates the necessity for vigilance in prevention strategies, such as vaccination, and improved access to healthcare services to maintain low mortality amidst rising case numbers. The slight increase in deaths in November and December 2023 signifies a point of interest for further investigation.

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