Chinese Notifiable Infectious Diseases Surveillance Report

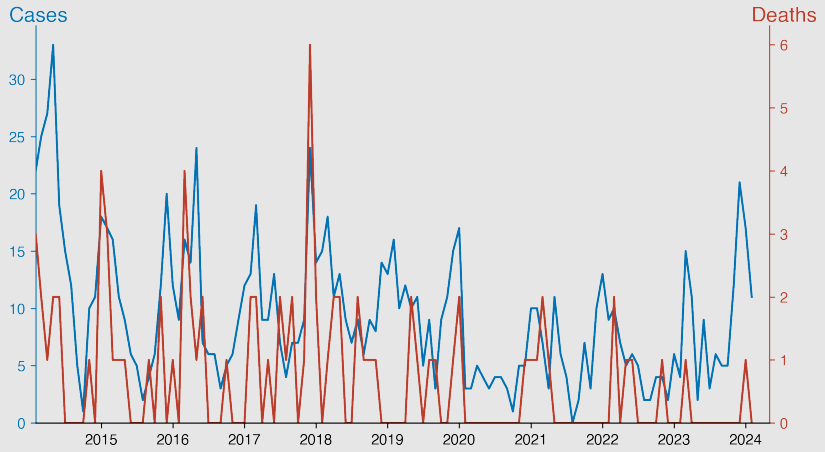
Meningococcal meningitis

February 2024

Introduction

Meningococcal meningitis is an acute bacterial infection of the meninges, the protective membranes covering the brain and spinal cord. Caused by Neisseria meningitidis, it can result in severe illness or death if not treated promptly. It is characterized by sudden onset of fever, headache, and stiff neck, often accompanied by nausea, vomiting, increased sensitivity to light, and confusion. Transmission occurs through respiratory droplets or close contact. Vaccines are available for prevention, and immediate antibiotic treatment is crucial for affected individuals. It primarily affects infants, young children, and adolescents.

Temporal Trend



Highlights

1. There's a significant decrease in the number of both Meningococcal meningitis cases and deaths in Chinese mainland from 2014 through February 2024. The most reported cases were 33 in May 2014, whereas February 2024 saw only 11 cases.
2. The months of January and December recurrently peak in the number of cases, suggesting a seasonal trend.
3. The overall case fatality rate has considerably declined over the years, indicating possible advancements in early detection and treatment.
4. Despite fluctuations, there's a general downward trend in the incidence of Meningococcal meningitis over this decade, suggesting effective disease control measures.

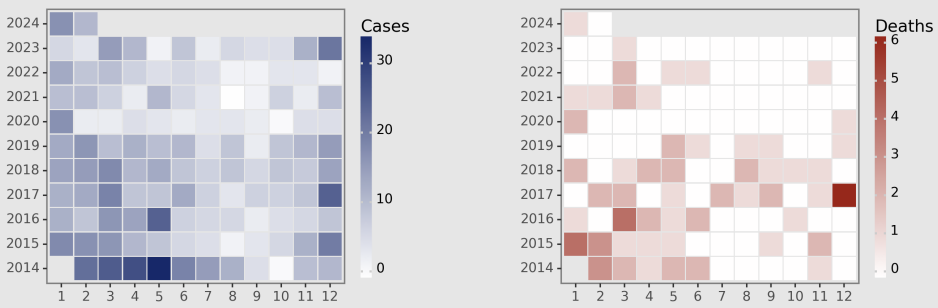
Cases Analysis

From the February 2014 to February 2024 data, there is no clear increasing or decreasing trend in the number of Meningococcal meningitis cases in mainland China. The number of reported cases per month ranges from 0 to 33. Peak incidents prominently occur between March to May and November to January, pointing out to a seasonal pattern of the disease. In contrast, cases notably diminish in the late summer and early autumn months. The disease might has a potential correlation with temperature, rainfall, or other seasonal factors.

Deaths Analysis

Mortality due to meningococcal meningitis in this region shows significant variability, with the highest recorded deaths being 6 in December 2017. Overall, the trend in deaths is less clear than that of case numbers, yet there's a general decrease over time with several months reporting zero fatalities, especially from 2020 onwards. This trend may indicate improved clinical management and possibly the implementation of more effective public health measures.

Distribution



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