Chinese Notifiable Infectious Diseases Surveillance Report

Japanese encephalitis

January 2024

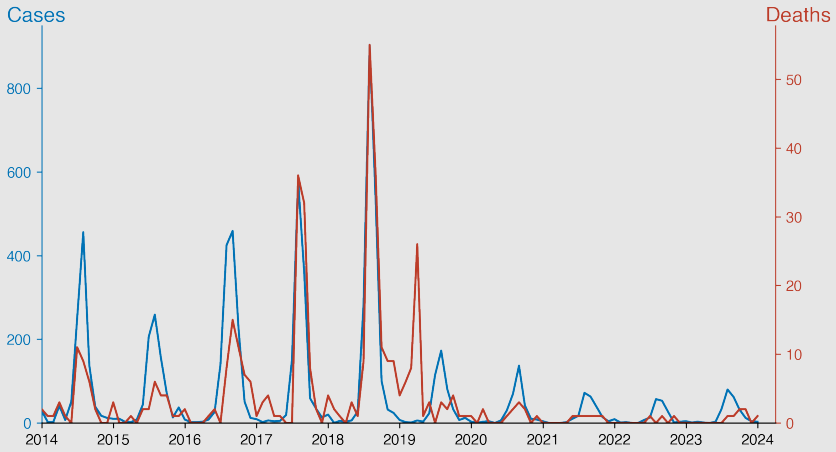
Introduction

Japanese Encephalitis (JE) is a mosquito-borne viral infection prevalent in rural areas of Asia and the Western Pacific. The virus primarily affects the central nervous system, leading to inflammation of the brain (encephalitis). While most infections are mild or asymptomatic, severe cases can result in neurological damage, paralysis, or death. Vaccination is the most effective prevention method. The disease predominantly circulates in pigs and wading birds, which serve as amplifying hosts, making its control challenging in regions where these animals are farmed near human habitation.

Highlights

- **Seasonal Trends**: Peaks in summer (July-August) and declines by year-end, showing a clear seasonal pattern in Japanese encephalitis cases.
- **Decline Over Years**: Noticeable reduction in cases and deaths since 2018, reflecting improved control measures.
- **Historical High Mortality**: Earlier years, especially 2018, had higher mortality rates, indicating severe outbreaks.
- **Current Status**: As of January 2024, low cases (3) and deaths (1), suggesting effective disease management.

Temporal Trend



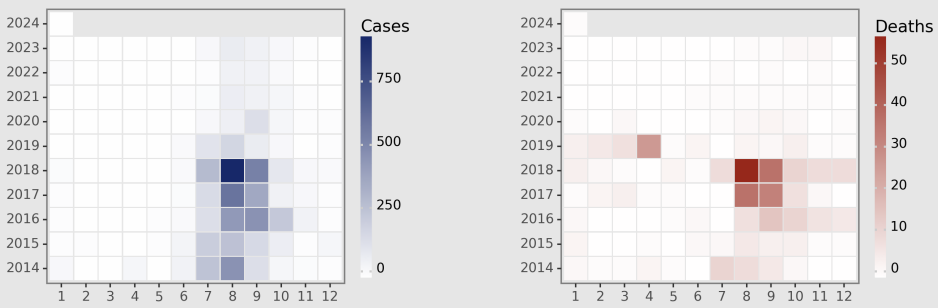
Cases Analysis

The reported cases of Japanese encephalitis in Chinese mainland show a clear seasonal pattern with peaks typically in July and August, reflecting the vector-borne nature of the disease. Over the years, there's a notable decline in cases, especially post-2018, indicating possible improvements in public health interventions, such as vaccination and mosquito control. The highest case count observed in August 2018 (904 cases) suggests a significant outbreak, while the gradual decrease in subsequent years could indicate effective control measures or underreporting.

Deaths Analysis

The mortality data associated with Japanese encephalitis over the same period also exhibits a seasonal trend, with the highest number of deaths typically occurring in the peak months of infection. The year 2018 stands out for having the highest mortality, which correlates with the peak in reported cases. Post-2018, there is a noticeable decrease in the number of deaths, suggesting that interventions to manage the disease, such as prompt diagnosis, treatment, and vaccination programs, may have become more effective. The overall trend indicates a positive shift towards controlling the lethality of the disease, despite its fluctuating incidence.

Distribution



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