Chinese Notifiable Infectious Diseases Surveillance Report

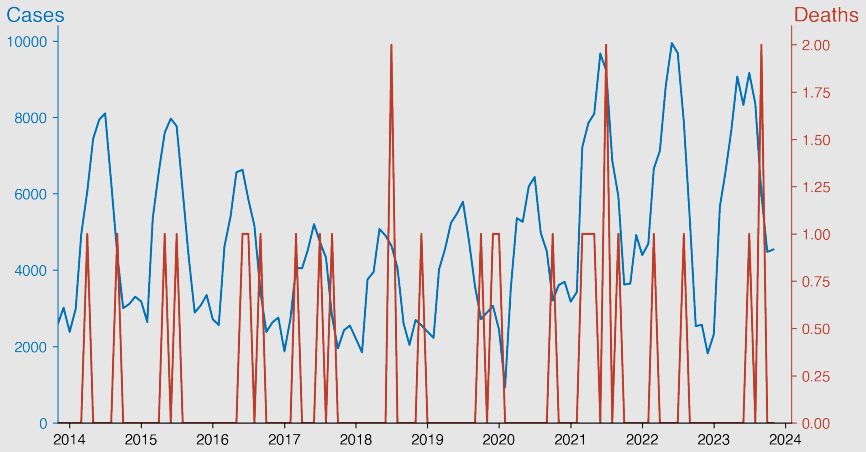
Brucellosis

November 2023

Introduction

Brucellosis is a highly contagious zoonotic disease caused by the bacteria of the genus Brucella. It primarily affects animals like goats, sheep, cattle, and dogs, however, humans can contract the infection through consuming contaminated products, direct contact with infected animals, or inhaling the bacteria. In humans, it can cause flu-like symptoms such as fever, night sweats, and muscle pain. Occasionally, it can also have long-term complications like arthritis or inflammation of organs. Despite its global distribution, it is often neglected due to its non-specific symptoms and under-reporting.

Temporal Trend



Highlights

- Brucellosis cases have shown an overall increasing trend in Chinese mainland from 2010 to 2023, peaking during the warmer months (April to August).
- Despite fluctuations, there is a notably sharp rise in case numbers from 2021 onwards, suggesting a heightened transmission period or possible changes in surveillance/reporting.
- The mortality associated with Brucellosis has remained very low, with occasional deaths reported in some years, indicating a manageable case fatality rate.
- By November 2023, the case count appears sustained compared to the previous months, with 4540 cases and no deaths, continuing the trend of significant disease presence with low mortality.

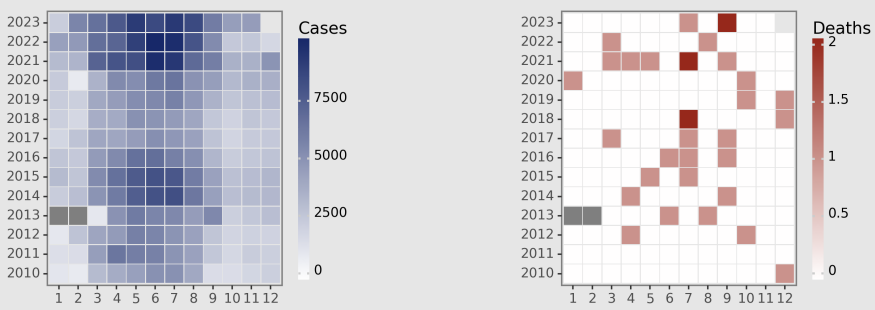
Cases Analysis

The data indicates a seasonal pattern of Brucellosis incidence with peaks generally occurring during the summer months (May to August), consistent with agricultural cycles and increased animal contact. Cases have progressively increased over the years, suggesting either improved reporting, a genuine increase in infections, or both. The sharp decline observed in February 2020 could be attributed to disruptions caused by the COVID-19 pandemic. Overall, the trend shows an upward trajectory in the number of cases, which warrants continuous surveillance and intensified control measures.

Deaths Analysis

Brucellosis fatalities are exceptionally low, with instance-expanded months sometimes reporting one death despite thousands of cases. This demonstrates the disease's low mortality but potentially high morbidity. The deaths are sporadic with no distinct pattern or increase over time, indicating that while the disease incidence is rising, the case fatality rate remains extremely low. Note that even a single death in a month stands out due to the generally zero fatalities, underlining the rare occurrence of Brucellosis-associated mortality.

Distribution



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