

Chinese Notifiable Infectious Diseases Surveillance Report

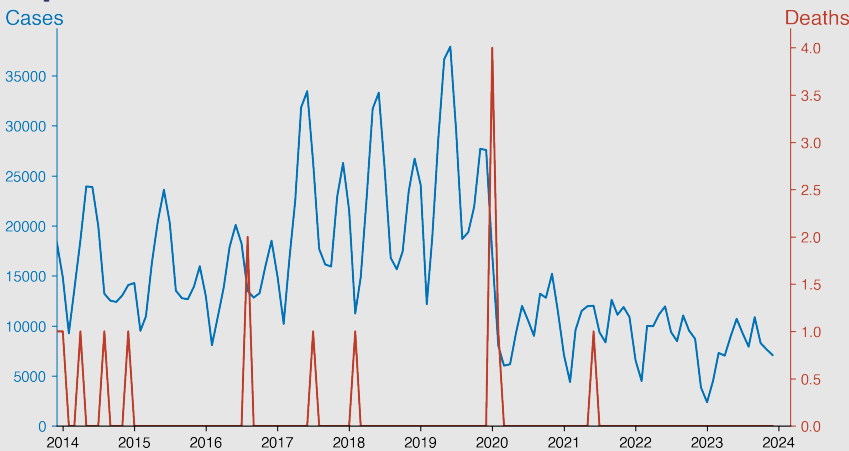
Mumps

December 2023

Introduction

Mumps is a highly contagious viral infection, often characterized by fever, muscle aches, loss of appetite, tiredness, and most notably swollen salivary glands. It primarily affects the parotid glands, which are one of three pairs of salivary glands, located below and in front of your ears. Prior to the development of a mumps vaccine, mumps was a common childhood disease worldwide but vaccines have significantly reduced its incidence. Transmission is person-to-person and can occur even when symptoms aren't present. No specific treatment for mumps exists, care is largely supportive.

Temporal Trend



Highlights

- Mumps cases in mainland China significantly declined from a peak of 37,913 in June 2019 to 7,092 cases in December 2023, indicating improved control measures and vaccination.
- An annual pattern shows caseloads peaking during May and June, attributing to mumps' seasonality and aggregating social events like school activities.
- Deaths are rare, suggesting low complication rates and effective case management.
- The 2020 case reduction coincides with the start of the COVID-19 pandemic, likely due to increased public health interventions.

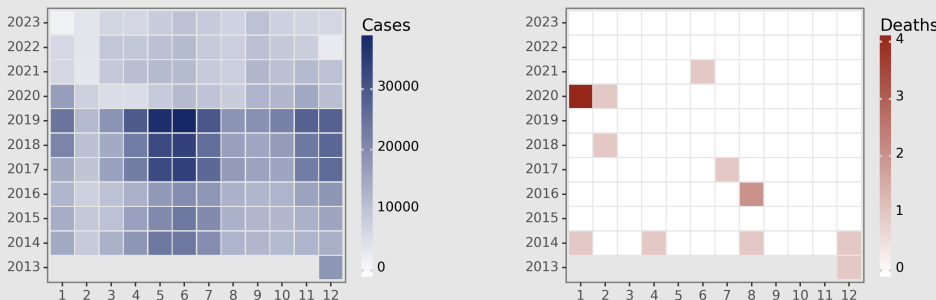
Cases Analysis

From December 2013 to December 2023, mumps cases in Chinese mainland exhibited clear seasonality with peaks generally in May and June each year. The highest number of cases (38,913) occurred in June 2019, suggesting possible outbreaks or weakened herd immunity. A notable decline in cases began in 2020, coinciding with the COVID-19 pandemic onset, which may correlate with increased public health interventions. The years 2021 and 2022 continued this trend of fewer cases compared with pre-pandemic years, with cases remaining significantly lower in 2023. This indicates sustained intervention effects or reporting changes.

Deaths Analysis

Over the same period, mumps-associated deaths remained extremely low, with a total of 11 mortalities. Deaths were sporadic and not associated with the peak incidence of cases, suggesting a low case-fatality rate and possibly effective clinical management of complications. The uptick in deaths in January 2020 (four deaths) was anomalous and could warrant further investigation for potential contributory factors such as healthcare access or strain virulence. Subsequent years saw either one or no reported deaths, indicating consistent low mortality associated with mumps infection in the Chinese mainland.

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Version: 2024-01-16 (UTC+)