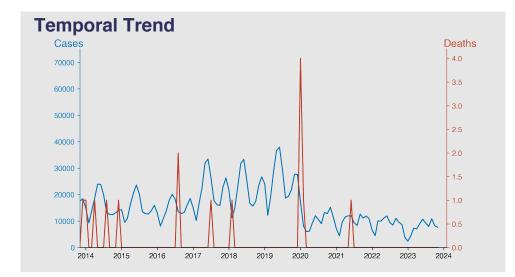
# Chinese Notifiable Infectious Diseases Surveillance Project

## Mumps

November 2023

#### Introduction

Mumps is a contagious viral infection characterized by swelling and pain in the salivary glands. It primarily affects the parotid glands located near the jawline. Symptoms tend to include fever, headache, muscle aches, tiredness, and loss of appetite. The disease spreads via respiratory droplets or direct contact with an infected individual. Vaccination with the MMR (measles, mumps, and rubella) vaccine is the primary preventative measure. Despite vaccination efforts, occasional outbreaks still occur, particularly in close-quarters environments.



### **Highlights**

- Consistent seasonality with cases peaking during the summer months (May to July), indicative of increased social interactions and outdoor activities during this period.
- A significant reduction in cases and deaths from mumps has been observed since the spike in 2016, showing improved disease control and possible impacts of vaccination efforts.
- The lowest numbers of cases in over a decade were reported in late 2022 and 2023, indicating a current low transmission rate for mumps in the Chinese mainland.
- The consistent low number of deaths since 2010 suggests that fatalities due to mumps are rare, likely due to effective clinical management and possibly high vaccination coverage.

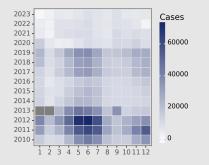
### Cases Analysis

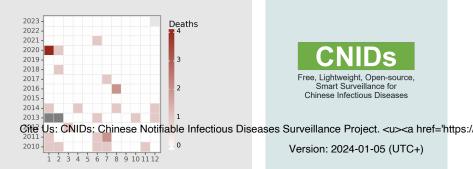
The dataset on Mumps cases in Chinese mainland from 2010 to 2023 shows seasonal patterns with peaks generally in the months of May to July, indicating a higher transmission in warmer months. A notable decreasing trend is observed starting from 2016, with significantly lower case counts from 2020 onwards which might be associated with public health interventions during the COVID-19 pandemic, such as social distancing and mask-wearing. The data for January and February 2013 are missing, which could skew analysis for that period.

## **Deaths Analysis**

Deaths due to Mumps are extremely rare, with only 15 reported deaths over 13 years despite high case numbers, suggesting a low fatality rate. There was an atypical spike of 4 deaths in January 2020 which is an anomaly compared to other years. The data reflects good case management and the potentially effective role of vaccination and healthcare in preventing fatalities. Consistent zero-fatality months from March 2020 to November 2023 might also reflect improved disease surveillance and prevention measures amidst the COVID-19 response.

#### Distribution





Free, Lightweight, Open-source Smart Surveillance for Chinese Infectious Diseases

Version: 2024-01-05 (UTC+)