

# Chinese Notifiable Infectious Diseases Surveillance Report

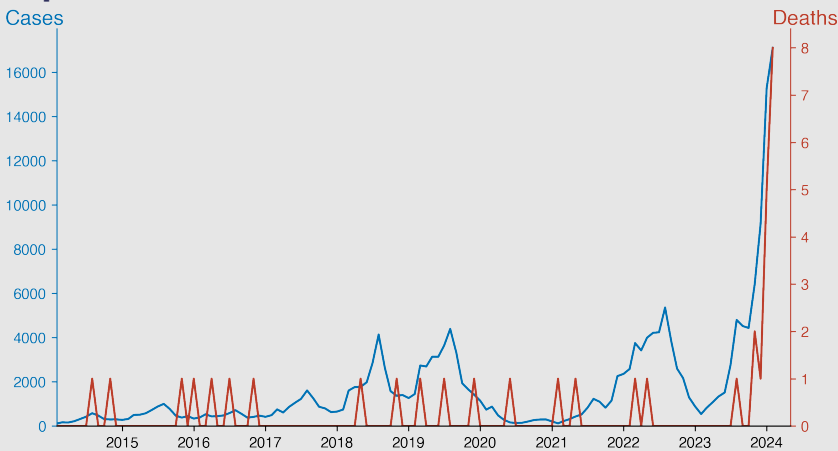
## Pertussis

February 2024

### Introduction

Pertussis, also known as whooping cough, is a highly contagious respiratory disease caused by the bacterium *Bordetella pertussis*. It is characterized by severe coughing fits that can result in a "whooping" sound when the person breathes in. Although it can affect individuals at any age, it is most dangerous for infants and young children. Pertussis is preventable through vaccination, but it remains a significant public health concern worldwide, particularly in areas with low immunization coverage. Complications can include pneumonia, seizures, brain damage, and in severe cases, death.

### Temporal Trend



### Highlights

- Pertussis cases in mainland China have been increasing notably, with a significant surge in 2024, reaching 17105 cases in February from 15275 in January, accompanied by deaths increasing from 5 to 8.
- Periodic peaks are observable approximately every year with a declining trend seen in 2020 followed by a gradual resurgence since 2021.
- Despite the recent surge, mortality remains relatively low with intermittent single-digit deaths per month, indicating possible improvements in treatment or vaccination rates.
- Prior to 2024, the highest number of cases was reported in December 2023 with 9126 cases and a mortality count of 1.

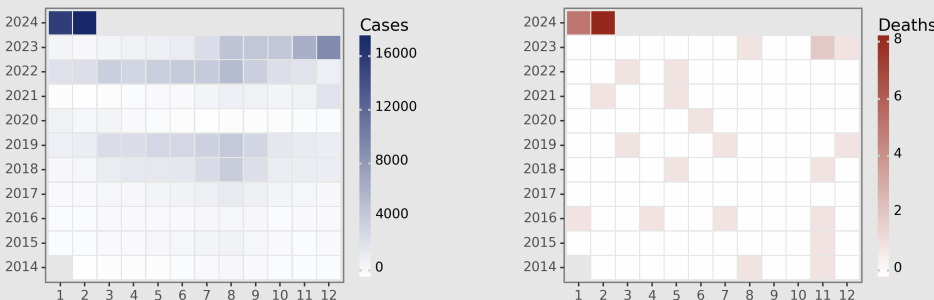
### Cases Analysis

The reported cases of Pertussis in Chinese mainland has shown a rising trend from February 2014 through February 2024. A natural ebb and flow can be observed over time, with peaks generally occurring in the summer months and valleys in the winter months. Interestingly, a significant upsurge can be noticed starting from mid-2017, suggesting either an increase in infection rates or enhancements in diagnostic procedures and reporting. We also observe an extraordinary rise in numbers between late 2023 and early 2024, which suggests a severe outbreak, requiring further investigative actions.

### Deaths Analysis

The reported deaths from pertussis remain sporadic and relatively low compared to the number of cases, indicating a low mortality rate associated with the disease in the Chinese mainland. From 2014 to February 2024, deaths have occasionally punctuated the data, with the highest mortality (8 deaths) reported in February 2024, coinciding with the peak in cases. This escalation in fatalities could be attributed to the increased burden of disease or potential changes in the pathogen's lethality, patient demographics, or healthcare access. The overall trend suggests that while pertussis remains generally a non-lethal disease, the increase in case fatality in 2024 is concerning and necessitates public health intervention.

### Distribution



**CNIDs**

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

Version: 2024-03-20 (UTC+)