

# Chinese Notifiable Infectious Diseases Surveillance Report

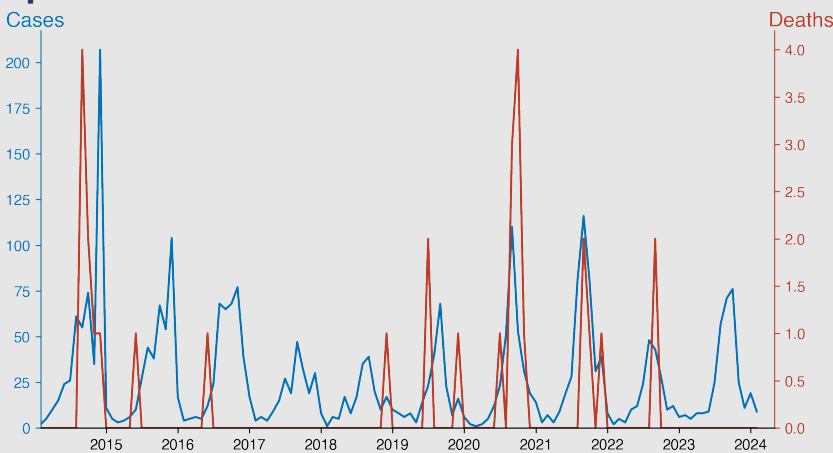
## Leptospirosis

February 2024

### Introduction

Leptospirosis is a bacterial infection caused by the spirochete genus *Leptospira*. It is transmitted through the urine of infected animals, often in water or soil, and can penetrate the human body via skin abrasions or mucous membranes. Symptoms range from mild flu-like illness to severe manifestations, including Weil's disease, characterized by jaundice, kidney failure, and hemorrhagic manifestations. The infection is prevalent in tropical and subtropical regions, affecting those in close contact with animals or contaminated environments. Prevention involves controlling rodent populations, avoiding potentially contaminated water, and using protective

### Temporal Trend



### Highlights

- Leptospirosis displays a seasonal pattern in China, with cases peaking in late summer and early autumn suggesting environmental influences on disease transmission.
- A significant spike of 207 cases in December 2014 hasn't been replicated since, indicating an outbreak that was subsequently controlled.
- Whilst deaths are generally low, surges in September 2014, October 2020, and September 2021 indicate potential severe case clusters.
- Latest data from 2024 indicates continued endemic presence, with low and stable case counts and no deaths, suggesting effective disease control.

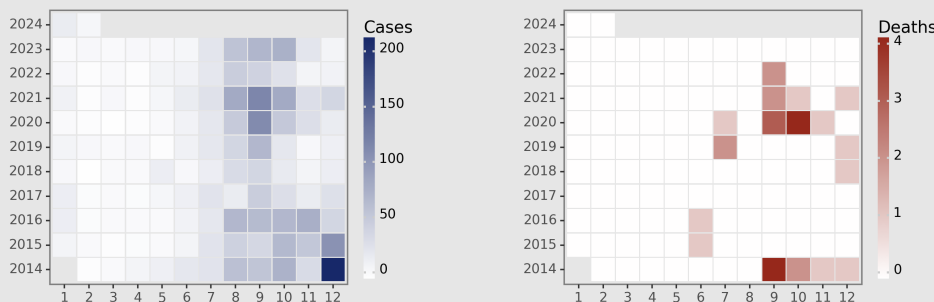
### Cases Analysis

The data shows a distinct seasonality of leptospirosis cases in mainland China, with peaks being experienced towards the end of each year, particularly around August to October. This could be attributed to increased rainfall in these months, as leptospirosis is often associated with water and flooding. The year 2014 recorded the highest number of cases, with a significant spike in December. Over the subsequent years, the peak case numbers appear to have decreased, although there has been a slight rise in cases since 2020. This suggests interventions implemented may be having an impact, albeit gradually.

### Deaths Analysis

Leptospirosis mortality followed an irregular pattern, with relatively few deaths reported annually. The total number of fatalities did not exceed four in any given month throughout the considered timeframe. Deaths are sporadically distributed with some temporal clusters, notably September 2020 and October of the same year, with three and four deaths, respectively. However, the overall case-fatality ratio appears low, suggesting either a mild disease presentation, effective clinical management, or a combination thereof within the Chinese mainland context.

### Distribution



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