

Chinese Notifiable Infectious Diseases Surveillance Report

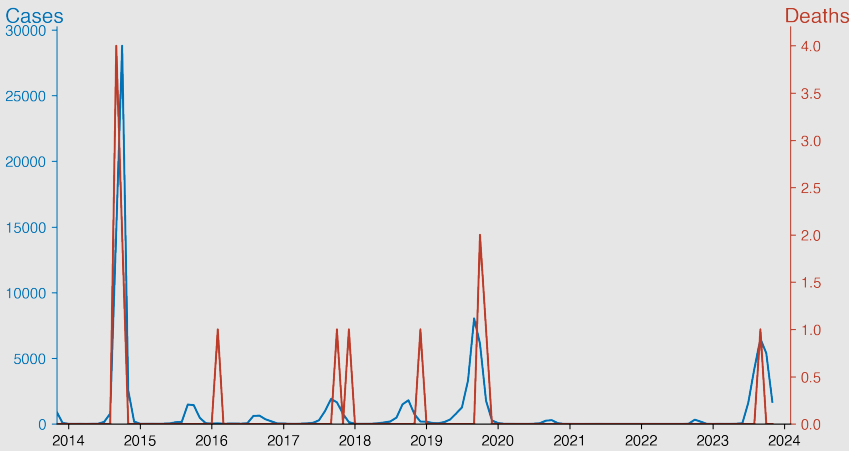
Dengue

November 2023

Introduction

Dengue is a viral disease transmitted by *Aedes* mosquitoes, primarily *Aedes aegypti*. It's prevalent in tropical and subtropical areas worldwide. Symptoms range from mild fever to severe dengue, also known as dengue hemorrhagic fever, and can be fatal. There are four distinct, but closely related, serotypes of the virus that cause dengue. Recovery from infection by one provides lifelong immunity against that particular serotype but confers only partial and transient protection against subsequent infection by the other three serotypes. No specific treatment exists, and prevention relies heavily on avoiding mosquito bites.

Temporal Trend



Highlights

- There has been a significant seasonal pattern over the years, with peak Dengue cases often occurring between July and October.
- The year 2023 saw a notable upsurge in cases, with the highest monthly case counts observed in September (6,494 cases) and August (4,198 cases), which are consistent with the historical seasonal trend.
- Despite the high number of cases in 2023, the mortality rate has remained relatively low, with only one recorded death in September.
- The drastic rise in cases in mid-2023 suggests a potential outbreak, warranting increased vector control measures and public health awareness campaigns to prevent further spread.

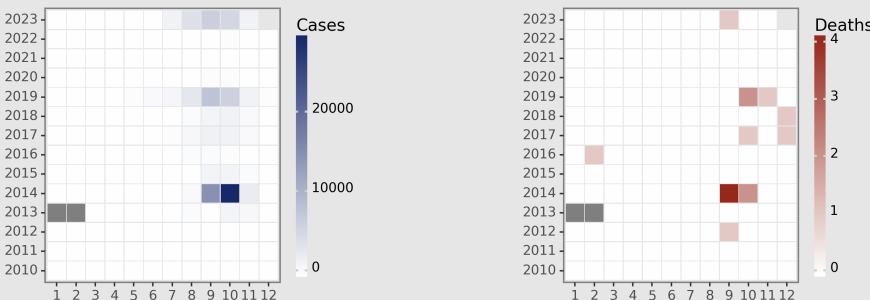
Cases Analysis

The Dengue trend in the Chinese mainland exhibits an annual periodicity with a dramatic peak in the warmer months (July-October), a trend typical for mosquito-borne diseases. After relatively stable low-endemic years (2010-2012), a significant surge occurred from 2013, notably in September and October 2014 with 14,759 and 28,796 cases, respectively. Although 2015–2017 marked a decrease, a resurgence in September, with a case peak exceeding 6,000 in 2019, suggests fluctuating but persistent transmission. Recent data for 2023 shows a concerning uptick with over 4,000 cases in August and September.

Deaths Analysis

Dengue mortality in the Chinese mainland is relatively low, with sporadic fatalities reported annually. From 2010 to 2022, there were years with no recorded deaths, while others had a single death, like in September 2012, or sporadically up to two deaths in October 2019. Notably, six fatalities were recorded in September and October 2014, marking the deadliest period in the dataset. The single death in September 2023 indicates that while case numbers remain high, mortality remains low, possibly reflecting improving clinical management and response strategies.

Distribution



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