

Chinese Notifiable Infectious Diseases Surveillance Report

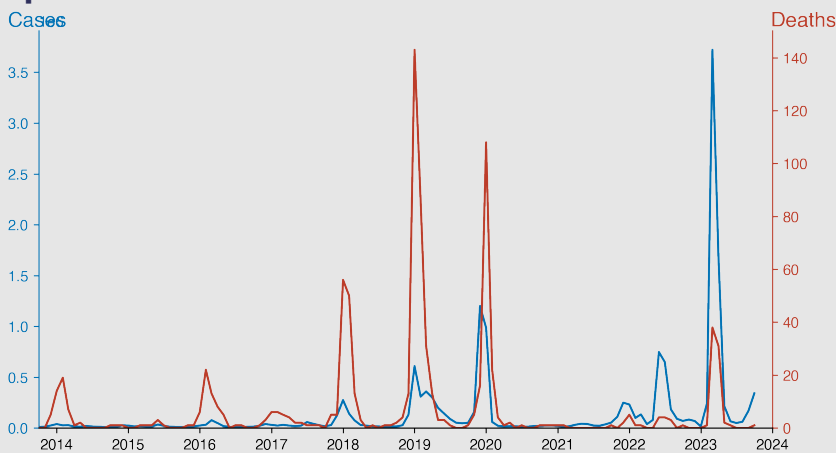
Influenza

October 2023

Introduction

Influenza, commonly known as the flu, is a highly contagious respiratory infection caused by influenza viruses. It can lead to mild to severe illness, and at times can result in hospitalization or death. Seasonal flu epidemics occur yearly, typically in colder months, affecting various age groups, but particularly severe among the elderly, young children, and those with underlying health conditions. Influenza viruses are categorized into types A, B, C, and D, with A and B causing seasonal outbreaks. Flu symptoms include fever, cough, sore throat, muscle aches, and fatigue. Vaccination is the primary prevention strategy against influenza.

Temporal Trend



Highlights

A staggering increase of influenza cases was observed in March 2023 reaching 3,721,370 cases with 38 deaths, indicating a substantial outbreak or enhanced surveillance/reporting.

- Despite a reduction in cases to 167,7011 by April 2023 and further to 340,969 by October 2023, the figures are significantly higher than in previous years, suggesting a continued elevated transmission rate.
- The fatality rate in the context of cases is relatively low, with October 2023 reporting a single death; however, the increase in cases requires ongoing public health attention.
- Seasonal trends show a pronounced peak in cases during the winter months, yet the outbreak in the spring/summer of 2023 is an anomaly calling for investigation into viral strains and contributing factors.

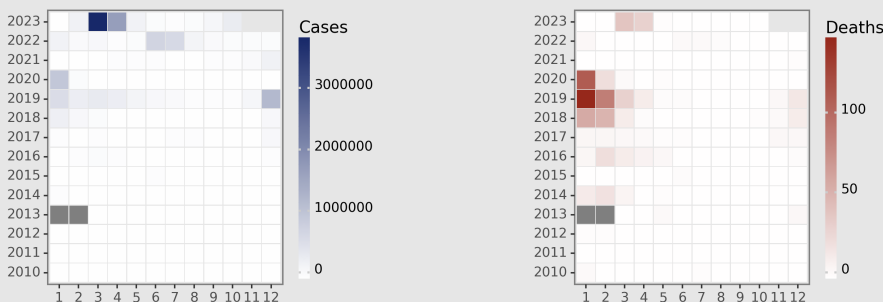
Cases Analysis

From 2010 to 2023, Influenza cases in mainland China show a pattern of fluctuation with peaks typically occurring in the winter months, indicative of seasonal outbreaks. Notable spikes are observed in December through February, consistent with enhanced transmission in colder weather when people are more likely to stay indoors. There is a marked increase in cases starting from 2018, with the largest spikes in early 2019 and again in early 2023. This suggests changes in either the virus' prevalence or improvements in surveillance and reporting. The sharp rise in March 2023 to over 3.7 million cases may indicate an emerging pandemic or a significant change in data collection/reporting practices.

Deaths Analysis

Deaths due to Influenza in mainland China have remained relatively low compared to the number of cases, with the case-fatality rate fluctuating over the years. Mortality peaks do not always align with the highest case numbers, implying variable lethality or possible improvements in clinical treatment over time. The highest mortality reported was in January 2019, with 143 deaths, which coincides with the peak influenza season. Notably, there is a high number of deaths in early 2023, which, along with the surge in cases, raises concern for a possibly more virulent strain of the virus or overstretched healthcare services leading to increased fatalities.

Distribution



CNIDs

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