

Chinese Notifiable Infectious Diseases Surveillance Report

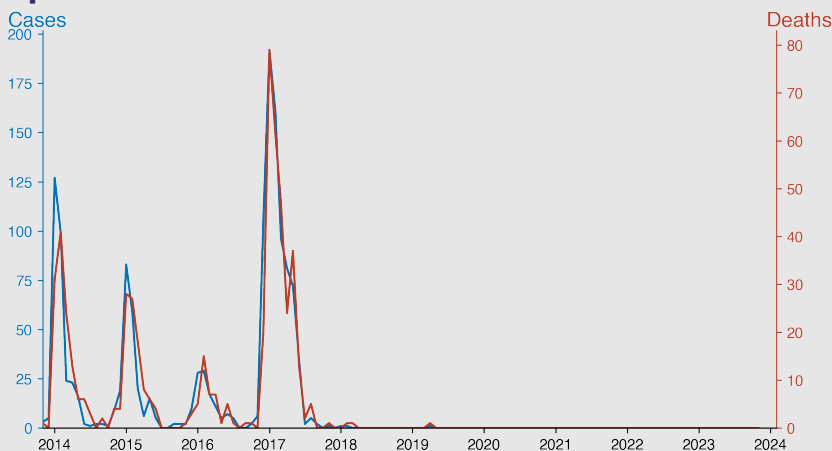
Human infection with H7N9 virus

November 2023

Introduction

H7N9 is a subtype of influenza viruses discovered in humans in 2013, predominantly in China. This virus is originated from avian influenza viruses in both wild and domesticated birds. While human infections are rare, they can be serious, with a high mortality rate. The symptoms range from mild influenza-like illness to severe pneumonia, acute respiratory distress syndrome, and death. There's no evidence of sustained human-to-human transmission. Given its potential to cause a pandemic, global health agencies closely monitor H7N9 outbreaks.

Temporal Trend



Highlights

- Significant decrease in H7N9 cases: The data exhibits a remarkable decrease in the number of H7N9 virus cases in mainland China. Since January 2019, there have been virtually no cases reported.
2. Peak periods observed: The peak months for infection were January and February of the years 2014, 2015, and 2017, with a significant increase in cases in these months.
3. High case fatality rates in early years: A considerable case fatality rate was observed, particularly in the early years (2014-2017) with peaks in February and March.
4. Current Situation in November 2023: As of November 2023, the situation seems under control, with no new cases or deaths reported. However, continuous surveillance and preparedness remain critical.

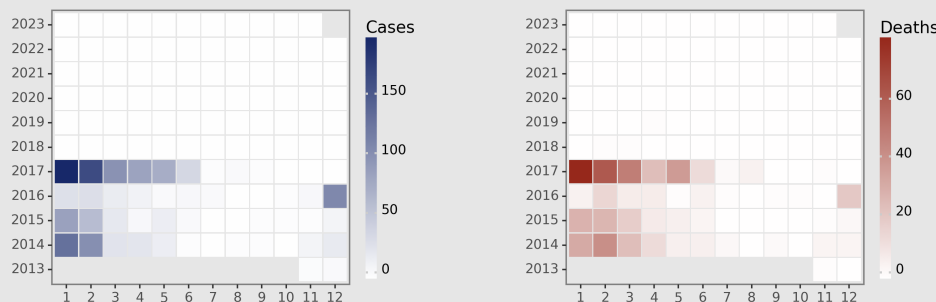
Cases Analysis

Based on the provided data from 2013 to 2023, the reported cases of H7N9 in mainland China showcase a fluctuating trend with several sharp spikes, most notably in early 2014 and early 2017. After these periods, case numbers notably decrease, possibly due to increased public health measures or changes in the virus's transmissibility. Following 2018, there appears to be a significant reduction in reported cases, reaching zero by 2019 and maintaining that level through to 2023, suggesting effective control or elimination of the virus during this period.

Deaths Analysis

Death cases associated with the H7N9 virus also exhibit a fluctuating pattern, with a clear correlation to reported case numbers. Spikes in fatalities closely align with periods of increased case numbers, prominently in early 2014 and 2017. These spikes suggest particularly virulent strains or inadequacies in healthcare strategies at those times. After 2017, a rapid decrease in fatalities is noted, leading to zero deaths post-2018. This may indicate improved medical treatments and interventions or reduced infection rates, creating a significant lull in death tolls from 2019 onwards.

Distribution



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