Chinese Notifiable Infectious Diseases Surveillance Report

Human infection with H5N1 virus

February 2024

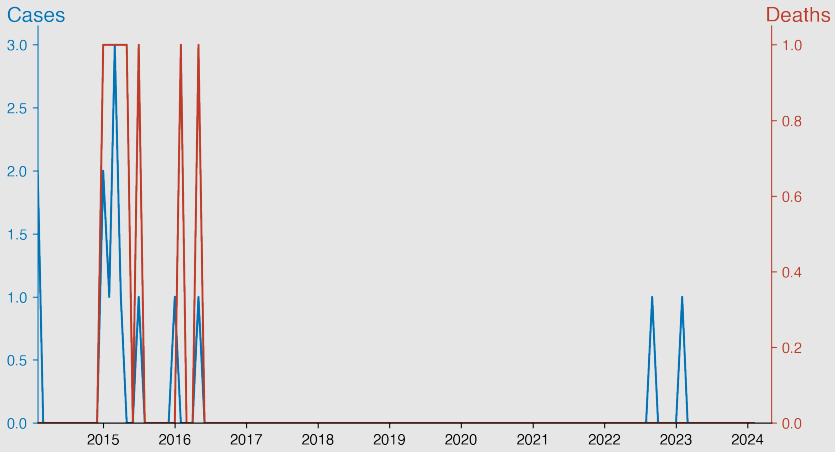
Introduction

Human infection with H5N1 virus, also known as avian influenza or bird flu, is caused by a highly pathogenic strain of influenza A viruses found primarily in birds, but with the potential to infect humans. First identified in 1997, H5N1 infections in people can be severe and often fatal. Transmission from birds to humans is rare and typically occurs through direct or close contact with infected poultry or contaminated environments. Human-to-human transmission is extremely uncommon. Symptoms resemble those of regular seasonal influenza but can lead to severe respiratory illness and other complications.

Highlights

- The H5N1 virus in mainland China has seen a significant decrease in incidence since 2016, with sporadic cases reported thereafter.
- Notably, from January 2020 to August 2022, there were no recorded cases, underlining the effectiveness of preventative measures.
- However, a single case in September 2022 and February 2023 shows that the disease is still present, albeit at incredibly low levels.
- As of February 2024, there have been no reported cases or deaths for two years, indicating a successful containment of the virus.

Temporal Trend



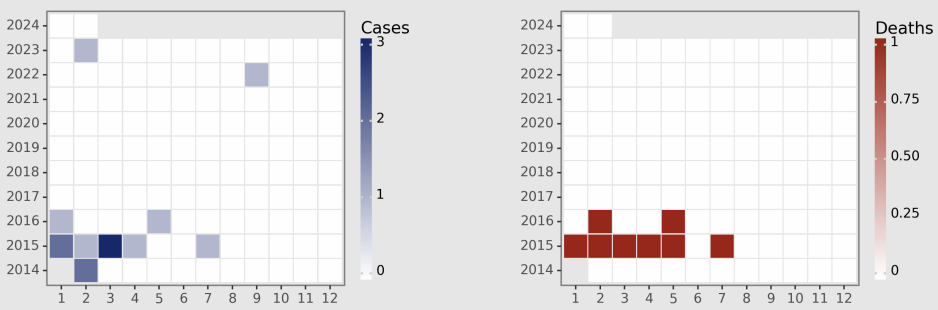
Cases Analysis

From 2014 to 2024, total number of H5N1 virus human infection cases on the Chinese mainland is sporadic and relatively low. Peak activity occurred in 2015, accounting for 7 out of the 11 total cases during the entire decade. It included a substantial increase of 3 cases reported in March and sporadic cases appearing throughout the year. After 2016, the instances of human infection decreased significantly with only sporadic cases occurring in 2016, 2022 and 2023, and none reported for the years 2017-2021 or 2024. This indicates a successful control of potential outbreaks.

Deaths Analysis

In light of the total 11 reported cases of H5N1 infections, there have been 6 deaths linked to the disease. The severity of the infection highly stands out in 2015, with 5 people deceased, incurring heavy fatality rates. Oddly, a fatality is registered in May 2015 with no corresponding case, potentially pointing to delayed reporting. The death-to-case ratio thus roughly hovers around 54%, marking high lethality. Since 2016, fatality rates manifest a downward trend, aligning with the downtrend of cases.

Distribution



CNIDs

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

Version: 2024-03-20 (UTC+)

The text in report is generated automatically by generative AI.