Chinese Notifiable Infectious Diseases Surveillance Report

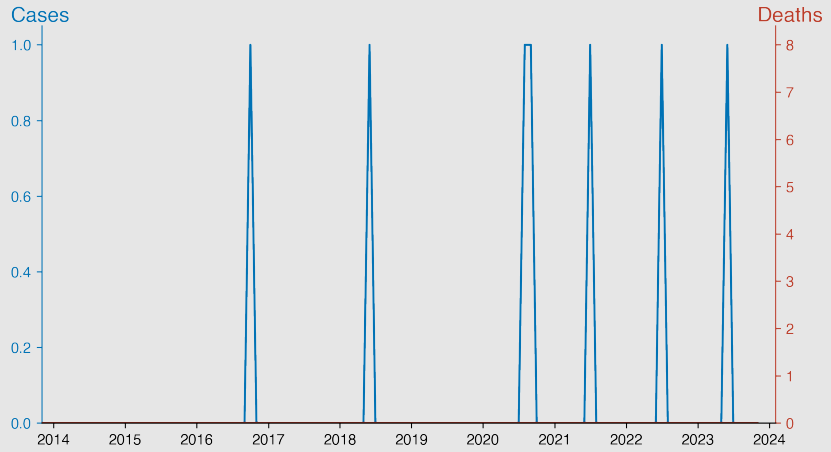
Diphtheria

November 2023

Introduction

Diphtheria is a serious bacterial infection usually affecting the mucous membranes of the nose and throat. Caused by the bacterium Corynebacterium diphtheriae, it spreads through person-to-person contact or through contact with objects contaminated by the bacteria. Symptoms include a sore throat, fever, swollen glands, and weakness. The hallmark sign is a thick, gray membrane covering the back of the throat. Without treatment, diphtheria toxin can cause damage to the kidneys, nerves, and heart. Vaccination is the most effective preventive measure.

Temporal Trend



Highlights

- The data shows a sporadic occurrence of diphtheria cases in Mainland China from 2010 through November 2023, with very few reported cases and only one month reporting deaths (8 deaths in November 2010).
- The vast majority of months report zero cases and zero deaths, suggesting successful control or elimination of endemic diphtheria within the population.
- There is an unusual discrepancy with missing data for January and February 2013, which does not allow for a complete assessment of the trend in that year.
- The sporadic cases observed do not appear to establish a consistent pattern or trend over the years, indicating possibly imported cases or rare outbreaks contained effectively.

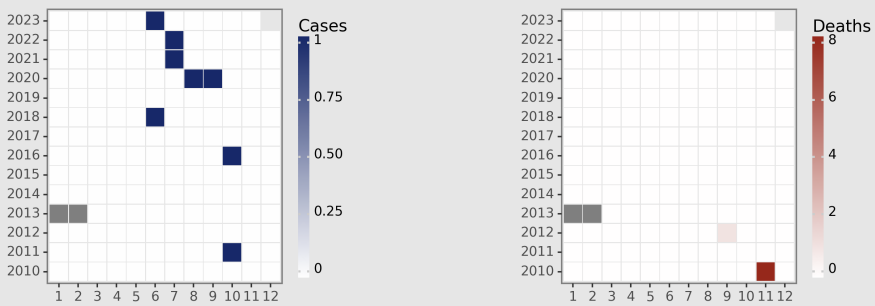
Cases Analysis

From 2010 through 2023, there were sporadic reported cases of diphtheria in mainland China, totaling just six incidents with a single case each: one in October 2011, September 2012, October 2016, June 2018, August and September 2020, and July 2021. June 2023 saw the latest case. Overall, the data indicates an extremely low occurrence of diphtheria cases, with years passing frequently without a single reported case. The absence of multiple cases per reporting period suggests effective control measures and vaccination coverage.

Deaths Analysis

During the same period, nine deaths were documented, concentrated in November 2010. A single death was reported in September 2012. No other fatalities have been associated with diphtheria cases in the years following these events. It is noteworthy that the death toll did not correlate with the total case count, as multiple deaths occurred in a month without reported cases. This discrepancy might be due to reporting delays, misclassification, or indirect effects. However, since 2012 there has been a sustained absence of mortality, indicating successful clinical management and preventive strategies.

Distribution



CNIDs

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

Version: 2024-01-04 (UTC+)

IMPORTANT: The text in boxs is generated automatically by AI.