Chinese Notifiable Infectious Diseases Surveillance Report

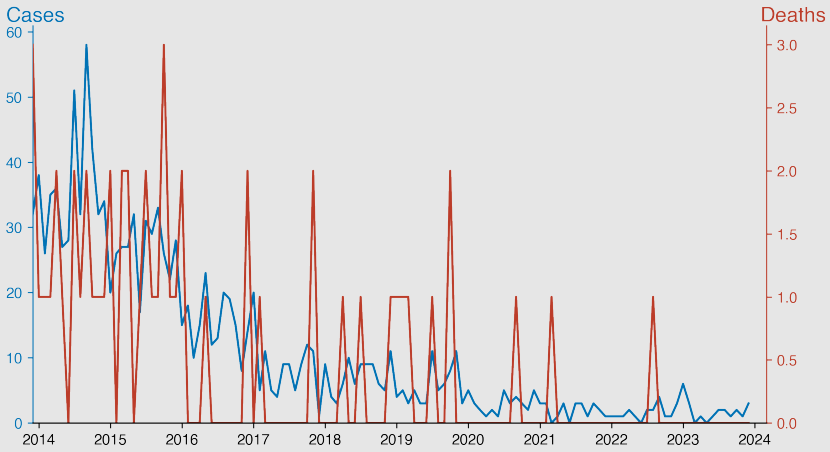
Neonatal tetanus

December 2023

Introduction

Neonatal Tetanus (NT) is a severe bacterial infection caused by Clostridium tetani. It primarily affects newborns and infants, typically through unhygienic birthing practices. The infection occurs when spores of the bacteria, present in soil and animal excrement, contaminate the umbilical stump. Symptoms include generalized rigidity, spasms, and a high mortality rate. NT is preventable through immunization of pregnant women with tetanus toxoid and clean birthing practices. Despite immunization efforts, it remains a significant cause of neonatal mortality in developing countries.

Temporal Trend



Highlights

- A significant decline in both neonatal tetanus cases and deaths from December 2013 (32 cases, 3 deaths) to December 2023 (3 cases, 0 deaths).
- No reported deaths since March 2021, indicating improved case management and possibly better access to healthcare.
- The highest number of cases within the data set was recorded in September 2014 (58 cases), followed by a general declining trend over the years.
- Fluctuations in monthly case numbers are evident, with some months like March 2023 and May 2023 reporting zero cases, showcasing potential seasonal patterns or effects of intervention measures.

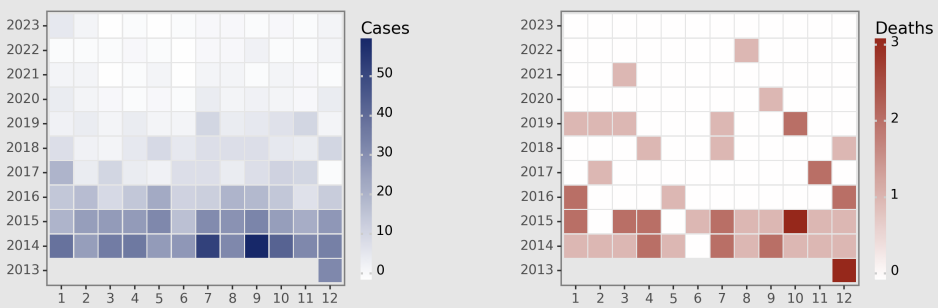
Cases Analysis

Over the past decade, Neonatal tetanus cases in the Chinese mainland have shown a marked decrease from 32 cases in December 2013 to single-digit monthly cases since February 2017, and zero cases in several months of 2021 and 2022. The highest monthly cases (58) were reported in September 2014, with sporadic peaks observed. The data indicates successful strides in immunization and maternal healthcare practices. However, occasional increases suggest the need for continuous monitoring and prevention efforts.

Deaths Analysis

Neonatal tetanus deaths followed a downward trend with a decline from three deaths in December 2013 to no fatalities reported in most months post-2020. The mortality peak was recorded in October 2015 with three deaths, but from 2016, a decline is evident with zero deaths across all months from June 2016 to January 2021, barring isolated instances of single-death reports. This suggests improved clinical management and healthcare interventions. Ongoing vigilance is essential to sustain this progress.

Distribution



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