

Chinese Notifiable Infectious Diseases Surveillance Project

Neonatal tetanus

November 2023

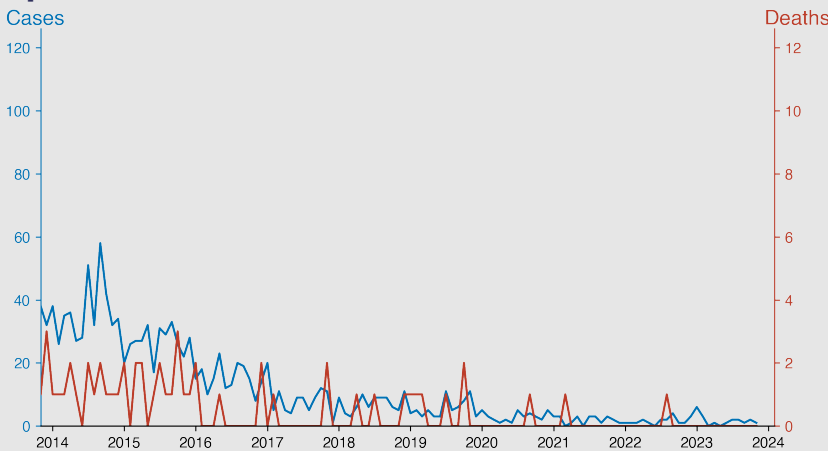
Introduction

Neonatal tetanus is a severe bacterial infection affecting newborns, predominantly in areas with inadequate sanitary conditions. Caused by *Clostridium tetani*, it enters the body through the unhealed umbilical stump, particularly when non-sterile equipment is used to cut the umbilical cord. Symptoms include muscle rigidity, spasms, and high mortality rates without prompt treatment. Despite significant global decline due to hygienic birthing practices and maternal vaccination, neonatal tetanus remains a public health problem in several low and middle-income countries.

Highlights

- Significant reduction in cases and deaths from neonatal tetanus observed between 2010 and 2023 on the Chinese mainland, indicating effective public health interventions.
- A consistent downward trend in reported cases, from 89 cases (8 deaths) in January 2010 to 1 case (no deaths) by November 2023.
- From 2010 to 2017, a gradual decline in cases was noted, but the sharpest declines occurred after 2017, which could be associated with improved maternal and neonatal healthcare practices.
- As of November 2023, neonatal tetanus appears to be nearly eliminated, with isolated cases and no fatalities, highlighting the success of ongoing vaccination and prevention programs.

Temporal Trend



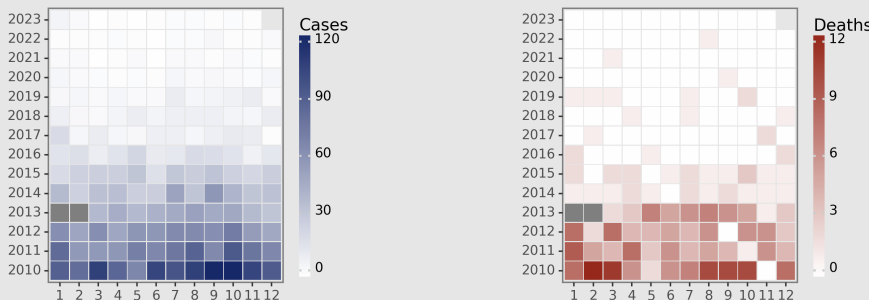
Cases Analysis

The data for neonatal tetanus cases in Chinese mainland from 2010 to 2023 shows a significant reduction over time. Initially, the number of cases per month was relatively high, with a peak of 120 cases in September and October 2010. However, there has been a steady decline since then, with single-digit monthly cases from 2016 onwards. This trend suggests successful intervention measures, possibly including improved neonatal care, sanitation, and increased maternal immunization coverage.

Deaths Analysis

Mortality due to neonatal tetanus also follows a downward trend similar to the observed case decline. Starting with the highest recorded monthly death toll of 12 in February 2010, fatalities dropped consistently, with no deaths reported in many months from 2016 onwards. The data indicates effective case management and possible enhancement in prevention strategies, reflecting the WHO goal for maternal and neonatal tetanus elimination.

Distribution



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