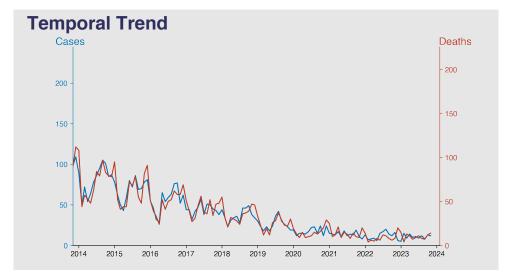
Chinese Notifiable Infectious Diseases Surveillance Project

Rabies

November 2023

Introduction

Rabies is a viral zoonotic disease primarily transmitted through the bite of an infected animal. It affects the central nervous system, ultimately causing encephalitis and death if left untreated. The rabies virus belongs to the Lyssavirus genus and Rhabdoviridae family. Common reservoirs for the virus include dogs, bats, raccoons, skunks, and foxes. A key diagnostic symptom is hydrophobia, or fear of water, due to painful swallowing. Vaccination and post-exposure prophylaxis can prevent the progression of the disease if administered promptly.



Highlights

- Significant decline in rabies cases and deaths from 2010 to 2023 in mainland China, reflecting effective control and prevention measures.
- Notable fluctuations in death rates, occasionally disproportionate to case numbers, perhaps indicating variable reporting or case severity, as seen in December 2022 with fewer cases but higher deaths.
- Continued occurrence of fatal outcomes underlines rabies' ongoing public health threat and the necessity for sustained vaccination and awareness programs.
- The latest data for November 2023 shows 12 cases and 14 deaths, suggesting a persistently high case fatality rate and the need for consistent post-exposure prophylaxis.

Cases Analysis

Rabies cases in the Chinese mainland show a significant decrease from 2010 to 2023. Initial years recorded high case counts, peaking in September of 2010 and 2011 with over 230 cases each month. However, from 2016 onward, there is a consistent decline, dropping to single-digit monthly cases by 2021. This downward trend likely reflects improved public health interventions, vaccinations, and awareness programs. The data suggest a successful containment of rabies spread over the period, potentially indicating effective control measures and increased vaccination of domestic animals.

Deaths Analysis

The analysis of deaths due to rabies in Chinese mainland from 2010 to 2023 presents a parallel decline similar to case counts. The initial years exhibit high fatalities, with certain months in 2010 showing deaths approaching the number of reported cases, indicating a near 100% fatality rate post-diagnosis. A major decrease in deaths is observed from 2016, with numbers significantly reducing to less than 20 from 2020 forward. The consistent decline in rabies-related deaths mirrors the decrease in cases and possibly indicates improvements in medical care, post-exposure prophylaxis, and preventive strategies. Notably, the data for September 2012 show a surprising

