

Chinese Notifiable Infectious Diseases Surveillance Report

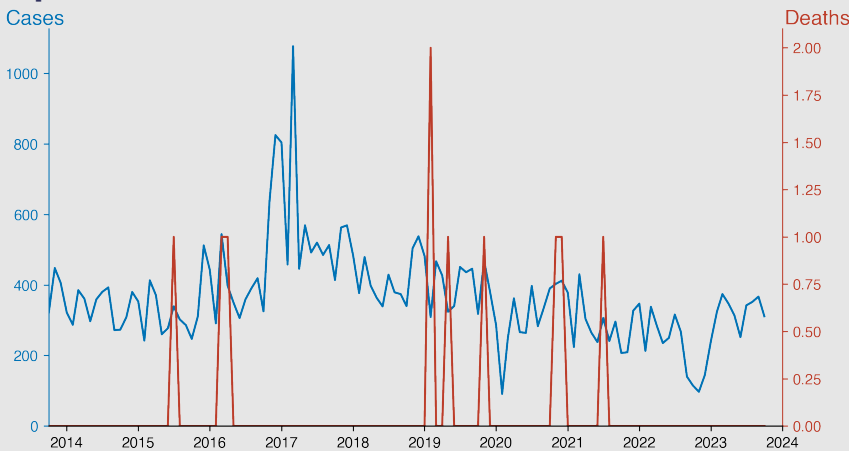
Echinococcosis

October 2023

Introduction

Echinococcosis, also known as hydatid disease, is a parasitic disease caused by the larvae of tapeworms belonging to the genus *Echinococcus*. The two most important forms of the disease in humans are cystic echinococcosis (CE), caused by *Echinococcus granulosus*, and alveolar echinococcosis (AE), caused by *Echinococcus multilocularis*. Humans become accidental intermediate hosts through the ingestion of eggs from contaminated food, water, or soil, or through direct contact with definitive hosts such as dogs and other canids. The disease results in the formation of cysts mainly in the liver and lungs, and can be life-threatening if left untreated.

Temporal Trend



Highlights

Seasonal fluctuations in echinococcosis cases are apparent, with a trend toward higher incidence rates during the warmer months (May through September), suggesting possible seasonal factors in transmission dynamics.

- Despite fluctuations, there is no clear long-term trend in the total number of cases; however, a peak is observed in December 2010 with 1065 cases. Few sporadic peaks occur in subsequent years.
- Mortality rates for echinococcosis remain very low throughout the observed period, with a total of 10 deaths reported from 2010 through October 2023, indicating potentially effective clinical management of the disease.
- Notably, there is a drop in the number of cases reported during February 2020, which may correspond with the outbreak of COVID-19 and subsequent public health measures affecting diagnosis

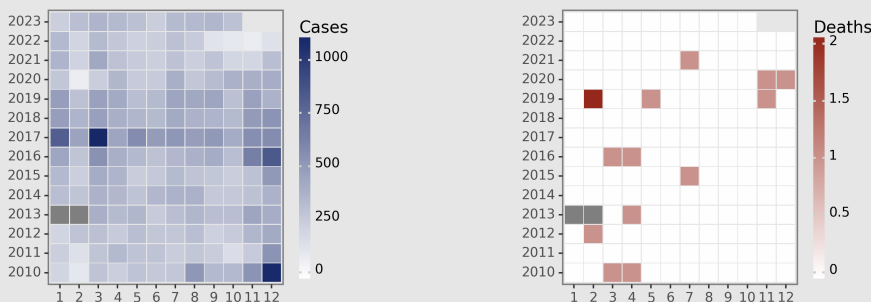
Cases Analysis

Between January 2010 and October 2023, Echinococcosis cases in mainland China exhibited seasonality, peaking mostly towards the year's end. The highest recorded cases occurred in March 2017, with 1,077 incidents. Overall, there were fluctuations with periods of increase and decrease in case numbers, potentially influenced by environmental factors, diagnostic improvements, reporting changes, or control measures. Monthly case numbers ranged from 91 to 1,077, demonstrating considerable variability. Data for January and February 2013 are missing, which represents a gap in this dataset.

Deaths Analysis

The Echinococcosis fatality dataset from January 2010 to October 2023 shows very low mortality, with deaths reaching a count of only two in February 2019, the highest registered in this period. There are a total of 10 reported deaths, indicating a low case-fatality rate given the total number of cases. This may reflect effective clinical management or the non-lethal nature of the condition when appropriately treated. However, under-reporting cannot be dismissed without more context. Additionally, year-on-year death counts remain sporadic, making it difficult to discern any clear temporal trends.

Distribution



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Version: 2023-12-24 (UTC+)

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