

# Chinese Notifiable Infectious Diseases Surveillance Report

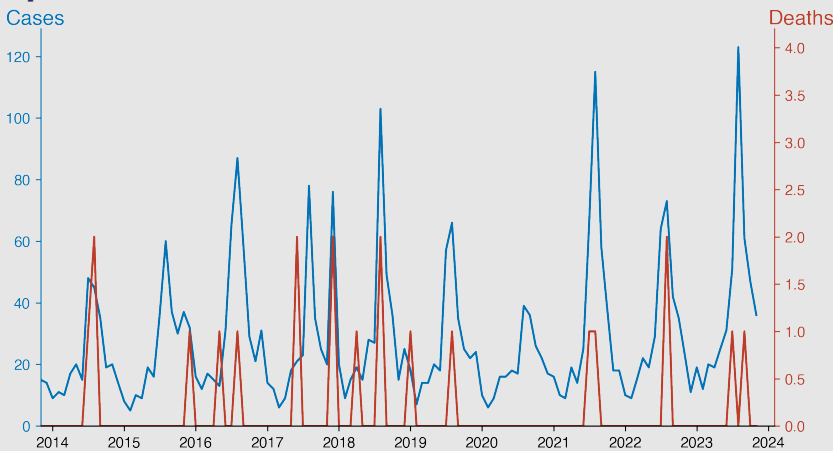
## Anthrax

November 2023

### Introduction

Anthrax is a serious, sometimes lethal infectious disease caused by the spore-forming bacterium *Bacillus anthracis*. Most common in wild and domesticated animals, it can also occur in humans exposed to infected animals or specific environments. Human transmission forms include cutaneous, gastrointestinal, inhalation, and injection. Symptoms vary by form and range from skin ulcers to severe breathing problems and shock. Effective vaccination and antibiotics are available for prevention and treatment. It's notable as a potential agent for biological warfare and bioterrorism due to spore resilience.

### Temporal Trend



### Highlights

- Periodic Spikes:** A clear, recurring seasonal pattern is evident, with peak occurrences in summer (July and August).
- Minimal Fatality Rate:** Despite fluctuating cases, the fatality rate remains remarkably minimal, indicating effective treatment protocols.
- Increasing Trend:** The peak case number is generally rising from 66 cases in August 2010, to 123 cases in August 2023, indicating a slowly increasing trend.
- Recent Stabilization:** As of November 2023, an apparent stabilization is occurring, with 36 cases reported, down from the August peak.

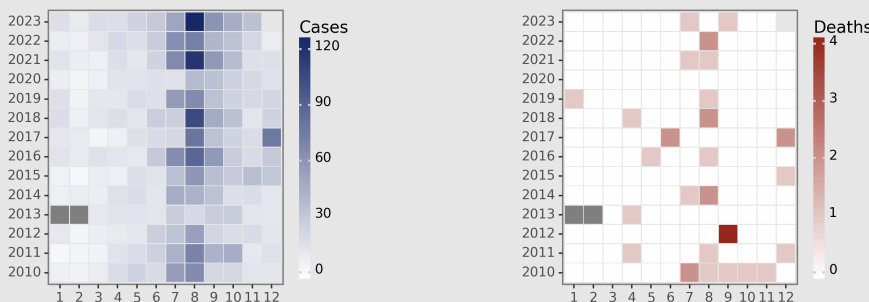
### Cases Analysis

Anthrax cases in mainland China seem seasonal, peaking during summer (July-August) every year. While fluctuations exist across years, an apparent general increase in cases could be observed from 2010's peak of 66 cases in August to 123 cases in August 2023. Transitional seasons (spring & fall) typically show moderate numbers, while winter months report the least – possibly because Anthrax spores survive better in warm and humid conditions. Although there's insufficient data to establish a pattern for the entire year, the recent spike in 2023's peak period suggests a need to strengthen surveillance and preventive measures.

### Deaths Analysis

Anthrax-related mortality in mainland China has remained relatively low throughout the years, with most months reporting zero deaths. The highest death toll registered was in September 2012, with four reported deaths despite lesser cases compared to peak months. Summer, despite having most cases, doesn't correspondingly reflect a high death count, signalling effective case management and treatment. Flukes of single deaths are noticed intermittently throughout the year in no specific pattern, indicating sporadic severe cases or instances of poor case management. This warrants continued monitoring and further investigations into specific mortality causes.

### Distribution



**CNIDs**

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

All rights reserved.

Version: 2023-12-27 (UTC+)

**IMPORTANT:** The text in boxes is generated automatically by ChatGPT.