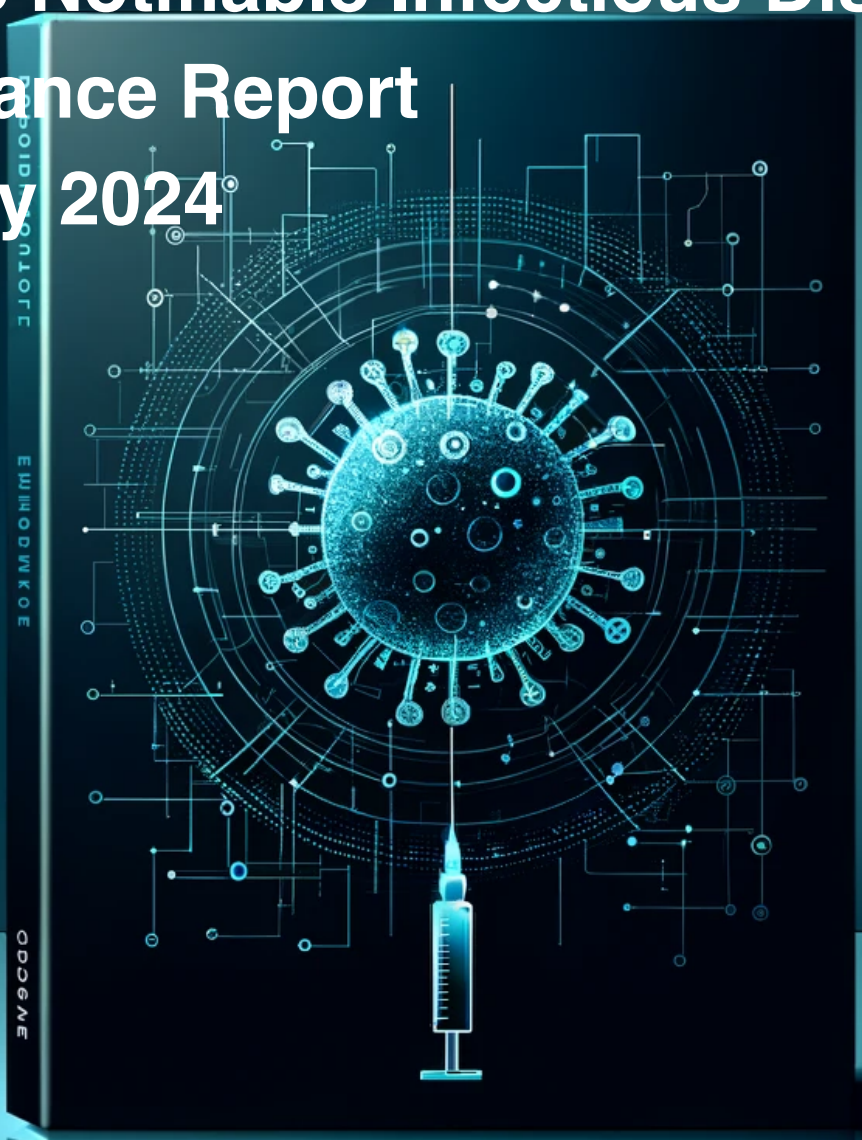
Chinese Notifiable Infectious Diseases Surveillance Report February 2024



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Chinese Notifiable Infectious Diseases Surveillance Report

IMPORTANT

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Chinese Notifiable Infectious Diseases Surveillance Report
February 2024

Disease	Cases			Deaths		
	Reported	MoM*	YoY**	Reported	MoM*	YoY**
Plague	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Cholera	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
SARS-CoV	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Acquired immune deficiency syndrome	3,344	150 (4.70%)	-1,172.0 (-25.95%)	1,360	-370 (-21.39%)	-577.0 (-29.79%)
Hepatitis	142,012	-17,124 (-10.76%)	1,629.0 (1.16%)	74	21 (39.62%)	15.0 (25.42%)
Hepatitis A	857	-145 (-14.47%)	7.0 (0.82%)	0	0 (/)	0.0 (/)
Hepatitis B	122,780	-13,093 (-9.64%)	6,717.0 (5.79%)	28	2 (7.69%)	10.0 (55.56%)
Hepatitis C	15,002	-3,608 (-19.39%)	-5,578.0 (-27.10%)	44	21 (91.30%)	3.0 (7.32%)
Hepatitis D	13	-12 (-48.00%)	-7.0 (-35.00%)	0	0 (/)	0.0 (/)
Hepatitis E	2,869	-127 (-4.24%)	662.0 (30.00%)	2	-2 (-50.00%)	2.0 (/)
Other hepatitis	491	-139 (-22.06%)	-172.0 (-25.94%)	0	0 (/)	0.0 (/)
Poliomyelitis	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Human infection with H5N1 virus	0	0 (/)	-1.0 (-100.00%)	0	0 (/)	0.0 (/)
Measles	31	-20 (-39.22%)	-22.0 (-41.51%)	0	0 (/)	0.0 (/)
Epidemic hemorrhagic fever	247	-264 (-51.66%)	-23.0 (-8.52%)	0	-1 (-100.00%)	0.0 (/)
Rabies	4	-11 (-73.33%)	-11.0 (-73.33%)	2	-9 (-81.82%)	-2.0 (-50.00%)
Japanese encephalitis	0	-3 (-100.00%)	-1.0 (-100.00%)	1	0 (0.00%)	1.0 (/)
Dengue	42	15 (55.56%)	31.0 (281.82%)	0	0 (/)	0.0 (/)
Anthrax	17	10 (142.86%)	5.0 (41.67%)	0	0 (/)	0.0 (/)
Dysentery	1,673	-16 (-0.95%)	-673.0 (-28.69%)	0	0 (/)	-1.0 (-100.00%)
Tuberculosis	51,945	-8,715 (-14.37%)	-19,896.0 (-27.69%)	224	-159 (-41.51%)	-100.0 (-30.86%)
Typhoid fever and paratyphoid fever	190	-95 (-33.33%)	-151.0 (-44.28%)	0	0 (/)	0.0 (/)
Meningococcal meningitis	11	-6 (-35.29%)	7.0 (175.00%)	0	-1 (-100.00%)	0.0 (/)
Pertussis	17,105	1,830 (11.98%)	16,567.0 (3079.37%)	8	3 (60.00%)	8.0 (/)
Diphtheria	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Neonatal tetanus	2	0 (0.00%)	-1.0 (-33.33%)	0	0 (/)	0.0 (/)
Scarlet fever	1,783	-4,472 (-71.49%)	1,313.0 (279.36%)	0	0 (/)	0.0 (/)
Brucellosis	3,758	-449 (-10.67%)	-1,904.0 (-33.63%)	0	0 (/)	0.0 (/)
Gonorrhea	6,350	-2,762 (-30.31%)	-239.0 (-3.63%)	0	-1 (-100.00%)	0.0 (/)
Syphilis	46,868	-9,790 (-17.28%)	3,294.0 (7.56%)	3	-3 (-50.00%)	1.0 (50.00%)
Leptospirosis	9	-10 (-52.63%)	2.0 (28.57%)	0	0 (/)	0.0 (/)
Schistosomiasis	5	0 (0.00%)	2.0 (66.67%)	0	0 (/)	0.0 (/)
Malaria	215	-39 (-15.35%)	98.0 (83.76%)	2	-1 (-33.33%)	2.0 (/)
Human infection with H7N9 virus	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Monkey pox	70	-27 (-27.84%)	/ (/)	0	0 (/)	/ (/)
Influenza	1,179,029	-1,809,885 (-60.55%)	938,342.0 (389.86%)	0	-3 (-100.00%)	-1.0 (-100.00%)
Mumps	3,344	-1,928 (-36.57%)	-1,204.0 (-26.47%)	0	0 (/)	0.0 (/)
Rubella	33	-12 (-26.67%)	-34.0 (-50.75%)	0	0 (/)	0.0 (/)
Acute hemorrhagic conjunctivitis	1,856	-1,183 (-38.93%)	-102.0 (-5.21%)	0	0 (/)	0.0 (/)
Leprosy	24	0 (0.00%)	-16.0 (-40.00%)	0	0 (/)	0.0 (/)
Typhus	45	-23 (-33.82%)	-5.0 (-10.00%)	0	0 (/)	0.0 (/)
Kala azar	18	-15 (-45.45%)	-9.0 (-33.33%)	0	0 (/)	-1.0 (-100.00%)
Echinococcosis	311	-127 (-29.00%)	-13.0 (-4.01%)	0	0 (/)	0.0 (/)
Filariasis	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Infectious diarrhea	125,289	39,326 (45.75%)	28,997.0 (30.11%)	0	0 (/)	0.0 (/)
Hand foot and mouth disease	9,093	-17,289 (-65.53%)	5,158.0 (131.08%)	0	0 (/)	0.0 (/)
Total	1,594,723	-1,832,934 (-53.47%)	970,038.0 (155.28%)	1,674	-524 (-23.84%)	-655.0 (-28.12%)

*MoM: Month on Month change, **YoY: Year on Year change.

Overview

February 2024 has seen a myriad of disease cases across the Chinese mainland, with varying rates of prevalence and mortality. The monthly report from the National Notifiable Disease Reporting System underscores Hand, Foot and Mouth Disease as the most prevalent condition, with 155,696 cases reported, albeit with a relatively low occurrence of related deaths (2 reported). Conversely, Hepatitis emerges notably with a high count of 139,753 cases, out of which 57 resulted in death, revealing a significant impact on public health. The figures underline the urgent need for continuous monitoring and concerted preventive efforts for both communicable diseases.
In terms of mortality, the data for February 2024 indicates a concerning increase in the number of deaths associated with certain diseases, despite a lower incidence rate. Tuberculosis stands out in this respect, with 215 deaths occurring from a total of 101,191 cases reported. This demonstrates that the impact of a disease is not solely dependent on its prevalence. Furthermore, the sporadic cases of Human infection with H7N9 virus, although minimal in occurrence (1 case), had a fatal outcome, which highlights the need for vigilant infectious disease surveillance and rapid response systems.

Concerns

The aforementioned Hand, Foot, and Mouth Disease's high incidence presents a major concern from an epidemiological perspective. The disease's propensity to affect children and spread in community settings such as schools makes it a significant public health challenge. While the mortality rate remains low with the disease, the potential for outbreaks, particularly in urban settings, emphasizes the need for robust public health messaging and outbreak preparedness.
Public concern often correlates with the deadliness of a disease rather than its frequency. Influenza, with 299,939 cases and 13 deaths, and Hepatitis with several sub-categories totaling more than 135,000 cases, capture public and health sector attention due to their potential for rapid transmission and severe health outcomes. Furthermore, while the case of Human infection with H7N9 virus was solitary, it was inevitably fatal, which triggers a higher level of concern due to the lethality of avian influenza viruses and potential for wide-scale outbreaks seen in previous years.

Recommendations

Considering the present disease landscape, specific recommendations should be systematized to mitigate the spread and impact of the infectious agents. Public health education campaigns should be intensified to raise awareness of Hand, Foot, and Mouth Disease, especially within schools and childcare facilities, emphasizing the importance of hand hygiene and prompt medical consultation for symptomatic children. Vaccination strategies against Influenza need to continue unabatedly, with targeted outreach to vulnerable populations such as the elderly and immunocompromised. High-risk populations should also be encouraged to receive Hepatitis B vaccinations, given the large number of cases reported.
Furthermore, China’s CDC should heed the single fatality from H7N9 and maintain strong surveillance for any avian influenza viruses, coordinating with the agricultural sector to ensure rapid reporting of any outbreaks in avian populations.
For Tuberculosis, which remains a significant cause of death, innovative strategies to improve treatment adherence, coupled with active case finding, should be scaled up. This tactic is quintessential as the fight against Tuberculosis is marred by treatment dropout and drug resistance. Additionally, the public should be educated on the early signs of rabies and the critical importance of seeking immediate care after potential exposures, as indicated by the concerning number of rabies-linked deaths (19). Lastly, it is imperative that systematic and real-time disease surveillance continues to be reinforced to swiftly detect and respond to emerging threats to public health. The Chinese healthcare system must also strengthen its infrastructure to ensure adequate treatment and isolation protocols are in place for managing various infectious diseases to minimize mortality.

Notation from Data Source:
* According to the National Bureau of Disease Control and Prevention, not included coronavirus disease 2019 (COVID-19).
† The number of deaths of acquired immune deficiency syndrome (AIDS) is the number of all-cause deaths reported in the month by cumulative reported AIDS patients.
§ Since September 20, 2023, Monkey pox was included in the management of Class B infectious diseases.
¶ Infectious diarrhea excludes cholera, dysentery, typhoid fever and paratyphoid fever.
The number of cases and cause-specific deaths refer to data recorded in National Notifiable Disease Reporting System in China, which includes both clinically-diagnosed cases and laboratory-confirmed cases. Only reported cases of the 31 provincial-level administrative divisions in Chinese mainland are included in the table, whereas data of Hong Kong Special Administrative Region, Macau Special Administrative Region, and Taiwan, China are not included. Monthly statistics are calculated without annual verification, which were usually conducted in February of the next year for de-duplication and verification of reported cases in annual statistics. Therefore, 12-month cases could not be added together directly to calculate the cumulative cases because the individual information might be verified via National Notifiable Disease Reporting System according to information verification or field investigations by local CDCs.

News information since February 2024 in Chinese Mainland

Summary

The infectious disease spectrum in the Chinese mainland, since February 202

News information since February 2024 around world

Summary

The global health environment has been active with known infectious disease outbreaks and

Chinese Notifiable Infectious Diseases Surveillance Report

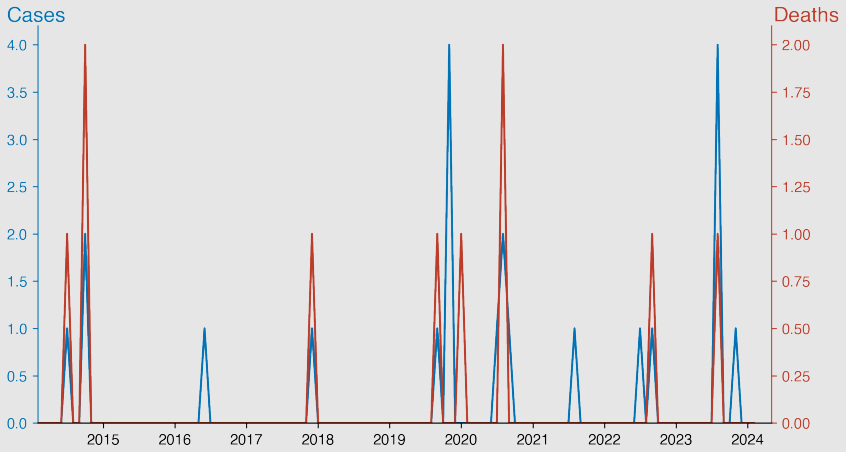
Plague

February 2024

Introduction

Plague is an infectious disease caused by the bacterium Yersinia pestis. It primarily affects rodents but can spread to other animals and humans through fleas that have bitten infected animals. Human plague infections continue to occur in rural areas and are found primarily in Africa, Asia, and the Americas. Plague is infamous for causing severe epidemics throughout history, including the Black Death that wiped out a significant portion of Europe's population in the 14th century. There are three main forms of human plague: bubonic, septicemic, and pneumonic, each presenting with different symptoms and levels of severity.

Temporal Trend



Highlights

- Plague in the Chinese mainland displays sporadic occurrences from 2014 to 2023 with a total of 18 reported cases and 9 deaths.
- The cases are distributed irregularly with occasional spikes such as November 2019 (4 cases, 0 deaths) and August 2023 (4 cases, 1 death), suggesting episodic outbreaks.
- The fatality ratio seems relatively high when cases are reported; however, large periods with no cases are observed, indicating a possible effective surveillance and rapid containment system.
- As of February 2024, no new cases or deaths have been reported, suggesting currently stable control of the disease within the mainland.

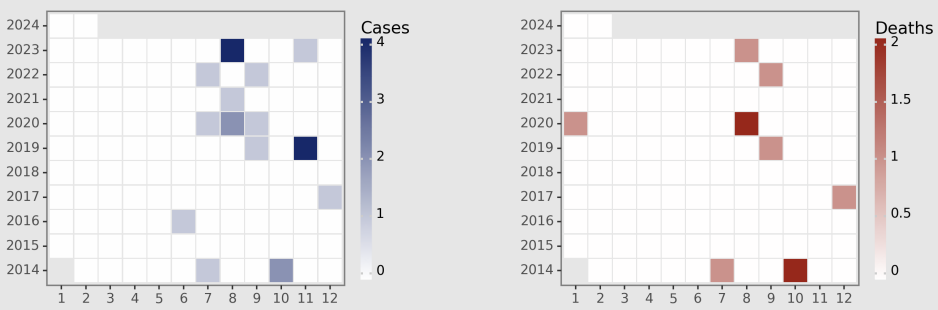
Cases Analysis

From 2014 to 2024, reported cases of plague in the Chinese mainland showed sporadic occurrences without a sustained or widespread outbreak. A total of 14 cases were documented, occurring singularly or in a small cluster, with no more than four cases reported in a single month. The majority of years had zero reported cases, indicating either successful containment and prevention measures or under-reporting of cases.

Deaths Analysis

Out of the 16 reported cases over 10 years, nine deaths were recorded, indicating a high case-fatality ratio (>50%). Highest deaths (2) were observed in October 2014 and August 2020, concurrently with case occurrence. Interestingly, a death was reported in January 2020, despite no reported case in the same month. This could suggest late reporting or a prolonged disease course from a case in the previous month. The significant fatality rate underscores the importance of prompt diagnosis and treatment to reduce plague-associated mortality.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Cholera

February 2024

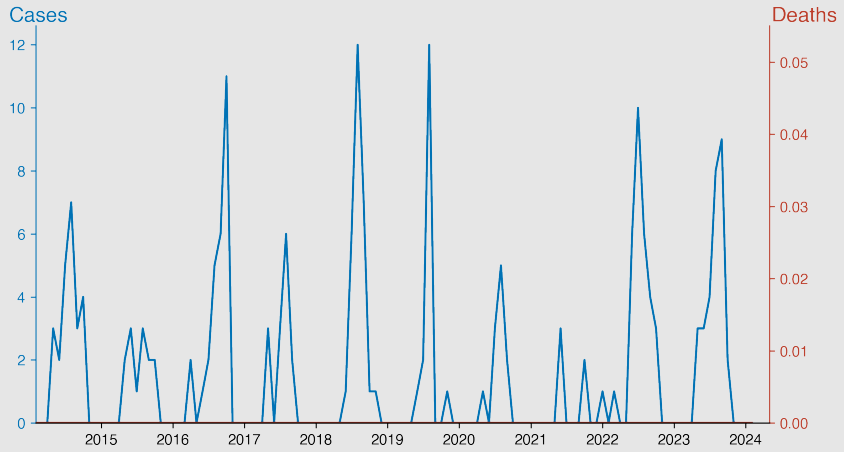
Introduction

Cholera is an acute diarrheal infection caused by ingesting food or water contaminated with the bacterium Vibrio cholerae. Endemic to regions with inadequate water treatment, it is a global public health issue, primarily in developing countries. Symptoms include severe watery diarrhea, which can lead to dehydration and, without prompt treatment, death within hours. Preventive measures include safe water, sanitation, and oral cholera vaccines. Treatment consists of oral rehydration solutions and, in severe cases, intravenous fluids and antibiotics.

Highlights

- Cholera cases in mainland China peak during summer (July, August) and decline during cooler months.
- Incidence fluctuated in the observed period, with the highest in 2018 (12 cases); no clear overall trend is evident.
- No reported deaths suggest efficient disease management with local healthcare measures.
- As of February 2024, zero cases align with lower incidence in cooler months.

Temporal Trend



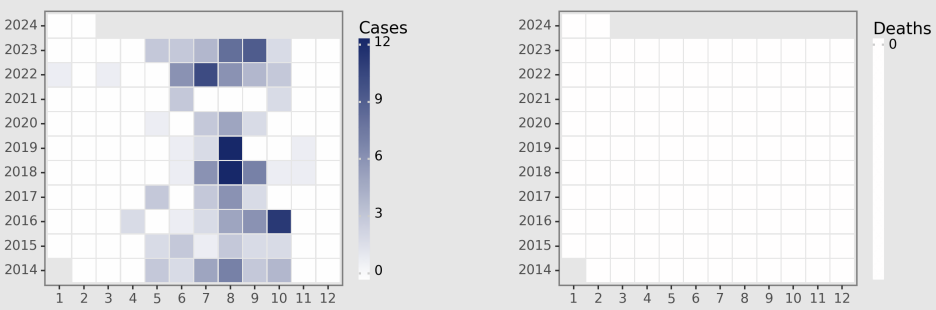
Cases Analysis

Between 2014 and 2024, the reported Cholera cases in Chinese mainland showed a cyclical pattern with most cases occurring in the warmer months of the year, particularly July and August. The incidence of Cholera had a slight uptick in 2018 and 2022, peaking at 12 cases. The year with the least occurrence was 2020, recording the lowest number of 11 cases. Generally, Cholera's incidence might be linked to seasonal climatic conditions and improvements in hygiene and sanitation practices, as evidenced by the significantly low numbers during colder months and recent years.

Deaths Analysis

The startling aspect of the cholera situation in Chinese mainland from 2014 to 2024 is the absolute absence of fatality. Even with sporadic cases throughout a decade, no deaths have been reported. These findings infer a successful management and treatment strategy for cholera in the region, likely due to prompt medical attention and access to rehydration therapies. This zero-mortality rate suggests an effective public health response capable of swift case identification and management. Nonetheless, the persistent occurrence of cases underscores the continuing need for optimal surveillance, sanitation measures, and public awareness.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

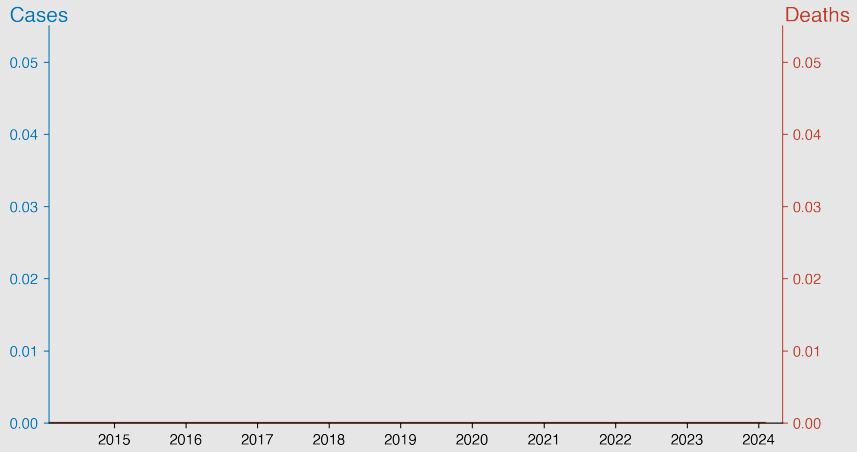
SARS-CoV

February 2024

Introduction

Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) is a pathogen that caused a global outbreak in 2002-2003. Belonging to the Coronaviridae family, it is an enveloped, positive-sense, single-stranded RNA virus. SARS-CoV primarily spreads through respiratory droplets, leading to severe respiratory illness characterized by fever, cough, and in some cases, life-threatening pneumonia. The outbreak originated in Guangdong, China, and swiftly spread to other regions, infecting over 8,000 individuals and causing around 800 deaths. The containment of SARS-CoV was achieved through quarantine measures, travel restrictions, and heightened surveillance, which

Temporal Trend



Highlights

- There have been no reported cases or deaths from SARS-CoV in mainland China from February 2014 to February 2024.
- This ten-year trend suggests effective public health measures and/or natural containment of the virus.
- As of the latest data of February 2024, the SARS-CoV situation in China remains stable and unthreatening.
- Continuous monitoring is recommended to maintain this status and for early detection in the unlikely event of a new outbreak.

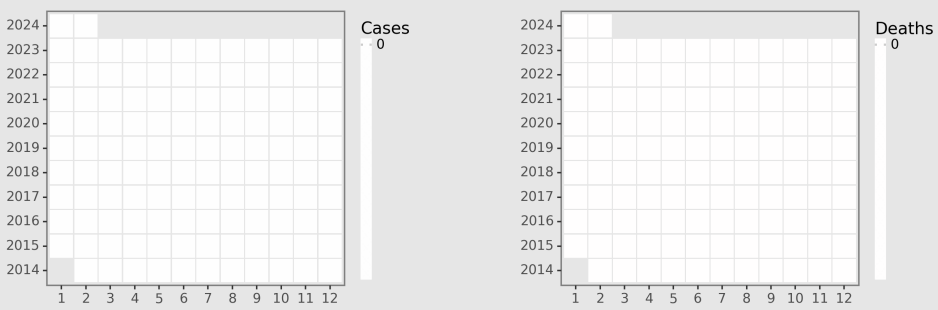
Cases Analysis

The provided dataset indicates no reported cases of SARS-CoV in Chinese mainland from February 2014 through February 2024. This ten-year span shows complete absence of the disease, suggesting highly effective eradication measures or lack of surveillance/reporting. Given the SARS-CoV outbreak was contained by 2004, this data aligns with the expected scenario where no new cases have emerged since then. Consistency across the decade without a single case supports the conclusion of sustained elimination within this geographical context.

Deaths Analysis

The death count for SARS-CoV in the Chinese mainland remains stagnant at zero over a decade-long period (2014-2024), parallel to the case count. This indicates no occurrence of fatal SARS-CoV infections during this time frame. The zero mortality rate can be attributed to the absence of disease spread and effective medical response systems ensuring prompt and efficient clinical management of any potential infections.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Acquired immune deficiency syndrome

February 2024

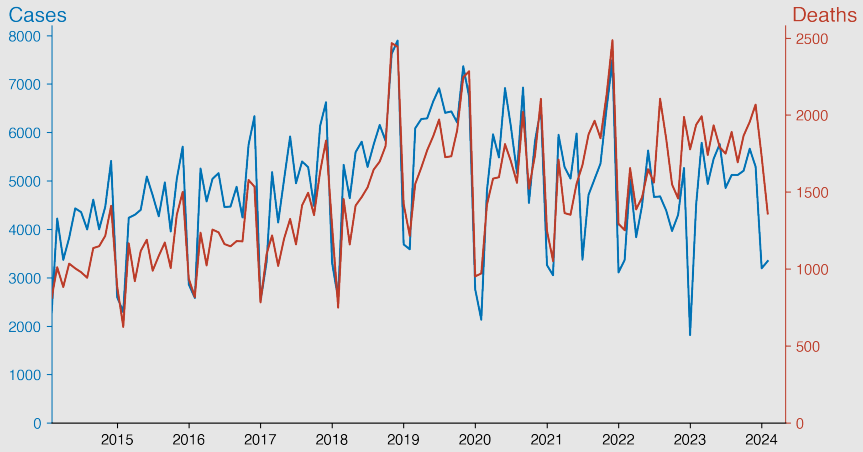
Introduction

Acquired Immune Deficiency Syndrome (AIDS) is a chronic, potentially life-threatening condition caused by the human immunodeficiency virus (HIV). It damages the immune system, hindering the body's ability to fend off diseases. AIDS, the terminal stage of HIV, doesn't occur in all HIV-positive individuals. Without treatment, HIV may develop into AIDS, characterized by a severe fall in CD4 T cells or by specific associated diseases. However, modern antiretroviral therapy can effectively manage HIV, preventing its progression to AIDS.

Highlights

- A significant rise in AIDS cases and deaths marked from 2014 to 2024, underlying a persistent HIV/AIDS epidemic in Chinese mainland.
- Seasonal peaks in new AIDS cases and associated deaths are consistent late in the year, with November and December being notably high.
- Annually, a noticeable decrease in cases and deaths happens around February, possibly due to Lunar New Year reporting disruptions.
- The latest data for February 2024 shows a small decrease in deaths from the prior month, yet the AIDS situation remains pressing with considerable case counts.

Temporal Trend



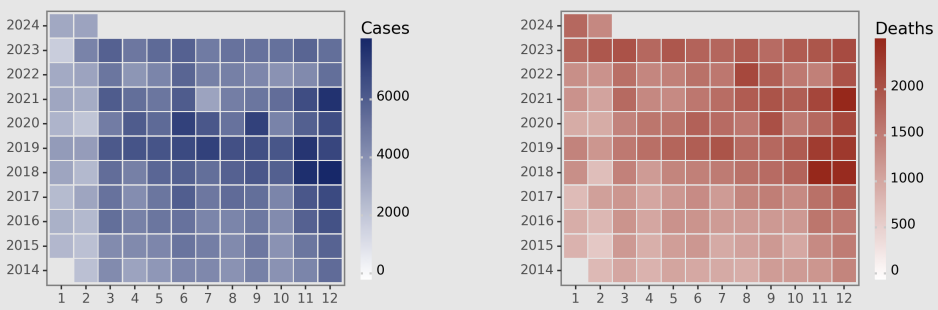
Cases Analysis

From February 2014 to February 2024, a persistent increase in HIV/AIDS cases in mainland China is observed. Initial cases fluctuated around the mid-2000 levels, reaching 5411 cases by December 2014. Despite some variability, a general upward trend is evident with peaks surpassing 7000 cases throughout 2019 and a notable surge to 7490 cases in December 2021. Although a brief dip occurred early in 2020, possibly due to restrictive measures during the COVID-19 pandemic, the uptrend resumed shortly after. By 2024, case numbers stabilized around the mid-3000s, suggesting potential effectiveness of interventions.

Deaths Analysis

The death count related to AIDS fluctuated, with the smallest number recorded as 624 in February 2015 and the highest as 2486 in December 2021. On average, the monthly death count seemed to stay mostly between 900 to 2000 range throughout the duration. Like the AIDS cases, there is a noticeable trend of high death rates at the very end of each year, which could reflect late diagnosis or treatment delays. The data shows an overall rising trend over the period, indicating a growing concern for health providers and policymakers.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Hepatitis

February 2024

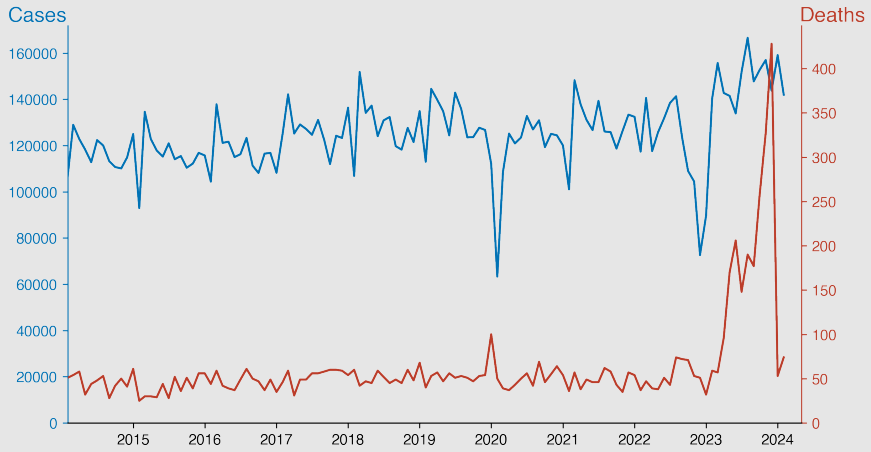
Introduction

Hepatitis is a medical condition characterized by inflammation of the liver, often caused by viral infections. There are five main hepatitis viruses, referred to as types A, B, C, D, and E. These viruses are the most common cause of human hepatitis, with diverse modes of transmission and impacts on health. Hepatitis can lead to acute or chronic disease, with potential outcomes ranging from mild illness to severe liver damage, including cirrhosis and liver cancer. Immunization, improved sanitation, blood screening, and antiviral treatments help manage and prevent hepatitis infection and its consequences.

Highlights

- A gradual increase in Hepatitis cases in mainland China, from 106,868 in February 2014 to 142,012 in February 2024, indicates an ongoing health concern.
- A stark rise in Hepatitis-related deaths from 2023, peaking at 428 in December, highlighting the emergence of a critical health crisis.
- An abrupt decline in cases to 72,630 in December 2022, with a subsequent rebound and rise throughout 2023 into 2024, suggests a variable disease pattern.
- From April 2023 onwards, deaths have escalated markedly, pointing to a need for urgent epidemiological interventions to address the worsening situation.

Temporal Trend



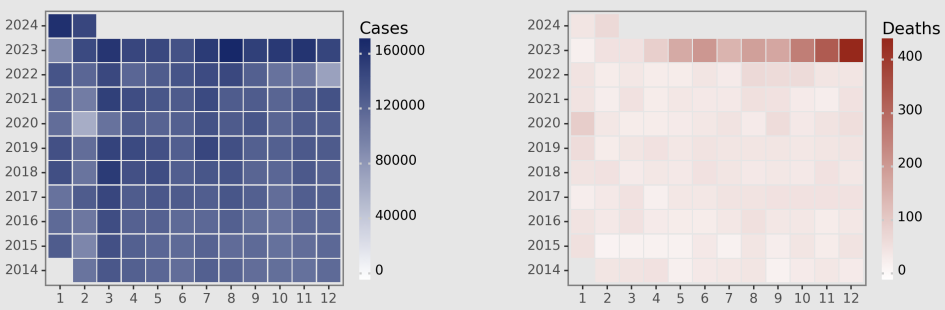
Cases Analysis

Over the observed period from February 2014 to February 2024, there was a general upward trend in the number of Hepatitis cases reported monthly in mainland China. Peaks observed generally occurred in the spring (around March) and summer (around August). The largest reported number of cases recorded in a single month was in August 2023 with 166,606 cases. There was a significant drop in cases in early 2020, likely due to stringent measures in response to the COVID-19 pandemic. However, numbers quickly rebounded, maintaining the consistent upward trend in subsequent years.

Deaths Analysis

The trend in Hepatitis-associated deaths from February 2014 to February 2024 shows variability, with deaths ranging between 25 and 428 per month. A notable rise in fatalities occurred from 2023 onwards, peaking at 428 in December 2023, followed by a decrease to 74 in February 2024. This sudden increase in mortality could be due to a more virulent strain, increased disease burden, or changes in reporting/healthcare access. The decrease in early 2024 could suggest effective intervention strategies or reporting changes.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Hepatitis A

February 2024

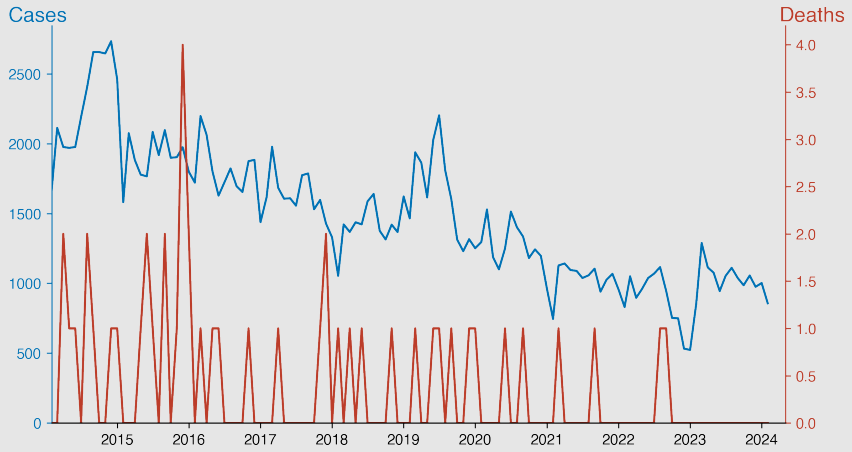
Introduction

Hepatitis A is a highly contagious liver infection caused by the hepatitis A virus. Typically transmitted through the ingestion of contaminated food or water or close contact with an infected person, it can cause a range of symptoms from mild, flu-like symptoms to severe liver damage. The illness is usually self-limiting, with most people making a full recovery within weeks or months. Prevention can be effectively achieved through good hygiene practices and vaccination. Outbreaks are more common in areas with poor sanitation and unsafe water.

Highlights

- Over the past decade, Hepatitis A cases in mainland China have significantly decreased, from monthly cases of 2000-3000 in 2014 to below 1000 in early 2024.
- Intermittent spikes in case numbers can be noted, such as the 1289 cases in March 2023.
- Despite case fluctuations, fatality rate remained extremely low, with most months showing zero deaths.
- As of February 2024, Hepatitis A situation indicated 857 cases and zero deaths, reinforcing the continued decreasing trend and low mortality rate.

Temporal Trend



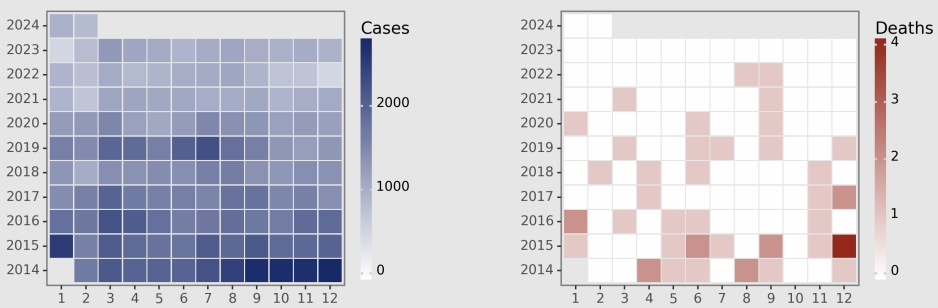
Cases Analysis

The analysis of Hepatitis A cases from February 2014 to February 2024 indicates a fluctuating, but overall decreasing trend in the number of reported cases in the Chinese mainland. Initially, case counts were high, with peaks surpassing 2,400 cases. However, after 2017, a marked decrease became apparent, with cases typically ranging below 1,500. The lowest numbers were observed at the beginning of 2021, continuing through to 2024, where fewer than 1,000 cases were routinely reported, with minimal monthly variations.

Deaths Analysis

Regarding fatalities, the Hepatitis A situation in China appeared relatively mild. Despite minor surges, the death count remained remarkably low throughout the entire timeframe, with no more than 4 fatalities in any given month (December 2015). A number of months had no Hepatitis A related deaths at all. The low fatality rate could be attributed to early detection, effective treatment and preventive measures like vaccination. Despite the fluctuating incidence of Hepatitis A cases, the maintained low mortality suggests successful management of the disease.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Hepatitis B

February 2024

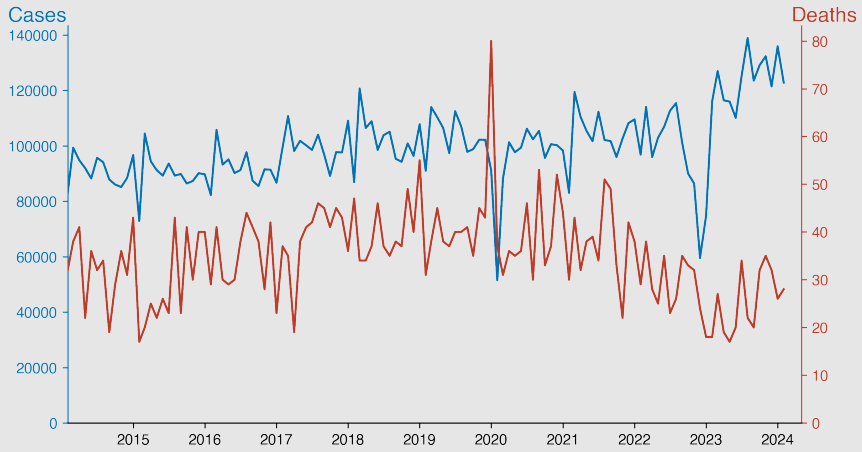
Introduction

Hepatitis B is a viral infection that attacks the liver and can cause both acute and chronic disease. The virus is transmitted through contact with the blood or other body fluids of an infected person. It can be passed from mother to child during childbirth, through shared needles during drug use, and through unprotected sex. The infection can lead to serious conditions such as liver cirrhosis and liver cancer. While a vaccine to prevent hepatitis B has been available since the 1980s, the disease remains a major health problem, particularly in regions with poor access to healthcare.

Highlights

- Increasing case trend: A steady increase in Hepatitis B cases from February 2014, peaking at 138,875 cases in August 2023.
- Deaths relatively stable: Fluctuations in monthly deaths observed, yet remaining below 50 deaths, indicating a possibly low fatality rate.
- Low fatality despite case surge: Despite the rise in cases, low death rates may suggest effective management and treatments.
- Recent surge in cases: A notable rise in cases as of early 2024 with 135,873 in January and 122,780 in February, signaling a potential public health challenge.

Temporal Trend



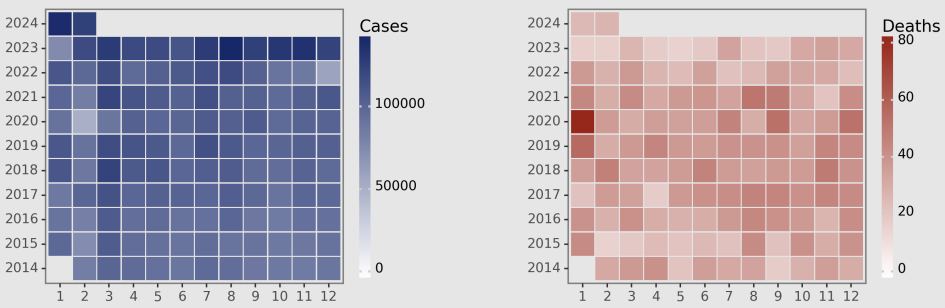
Cases Analysis

From 2014 to 2024, Hepatitis B cases in Chinese mainland have generally experienced a rising trend. There are noticeable peak periods which occur usually in March and in August each year. For instance, in 2014 the highest number of cases was reported in March (99,292) and in August (94,075). This pattern repeated itself throughout the span of the data to 2024. The highest recorded cases occurred in August 2023 with a total of 138,875 cases. However, there were significant drops in cases during the months of February for most years, which could be attributable to various factors including public health interventions.

Deaths Analysis

Deaths attributed to Hepatitis B over the observed period show less variability, with the numbers generally ranging from 17 to 55 per month. An outlier is seen in January 2020, where 80 deaths were reported, coinciding with the beginning of the COVID-19 pandemic, possibly reflecting healthcare system strain. Despite the seeming increase in cases overall, death counts remained relatively stable, implying that case fatality rates may have decreased or that therapeutic interventions have effectively managed complications, preventing an upsurge in fatalities.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Hepatitis C

February 2024

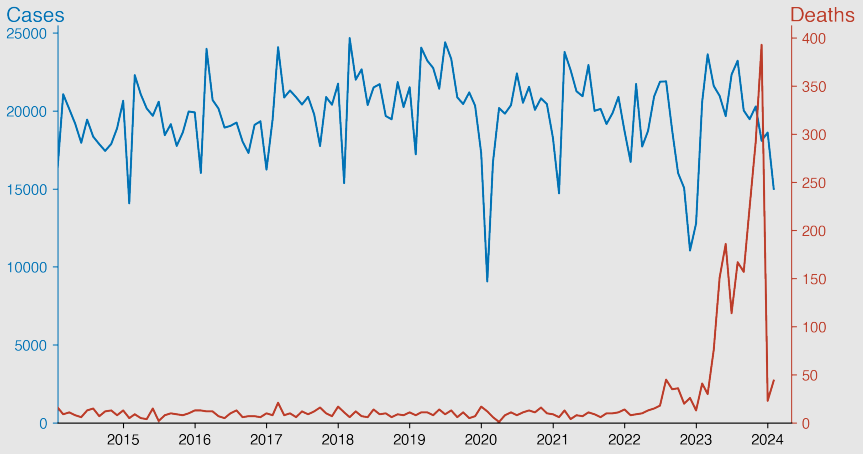
Introduction

Hepatitis C is a liver disease caused by the Hepatitis C virus (HCV). This bloodborne virus leads to hepatic inflammation and can vary in severity, varying from a mild illness lasting a few weeks to a serious, lifelong condition. Chronic hepatitis C can cause liver cirrhosis, liver cancer, and liver failure. It is spread through contaminated blood, such as through needle sharing or transfusions with infected blood. While acute hepatitis C is often asymptomatic, chronic infection can lead to significant morbidity and mortality. Treatments have advanced substantially, with direct-acting antivirals offering a high cure rate.

Highlights

- Hepatitis C mortality in Chinese mainland has significantly increased since 2022, peaking in December 2023 at 393 deaths.
- Despite a reduction in reported cases from November 2022 to February 2024, the fatality ratio has risen.
- Peak cases occurred in March 2018 and 2023, suggesting potential seasonality in transmission.
- From February 2020, fewer cases were reported, possibly due to COVID-19 precautions; however, Hepatitis C deaths have since drastically increased.

Temporal Trend



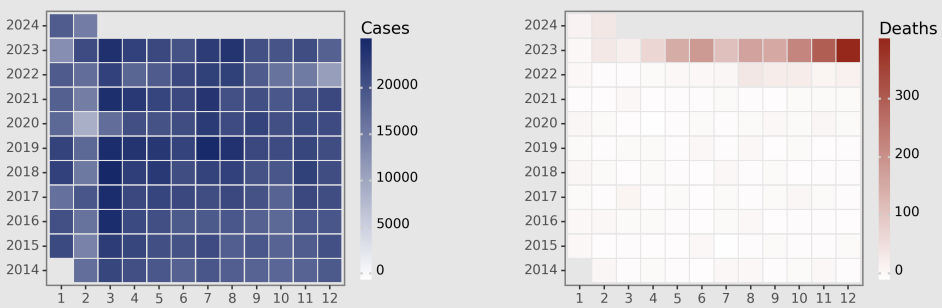
Cases Analysis

Hepatitis C cases in the Chinese mainland from February 2014 to February 2024 show periodic fluctuations with a relatively stable trend from 2014 to 2019. Starting in 2020, there is a notable decrease, with the lowest reported cases (9,068) in February 2020. This could be due to health service disruptions during the COVID-19 outbreak. From 2021, cases gradually return to the previous average levels but reveal a significant reduction again in December 2022. Case numbers slightly recover in early 2024, indicative of fluctuating surveillance or reporting.

Deaths Analysis

The number of deaths due to Hepatitis C from 2014 to 2019 was relatively low, with no more than 21 recorded in any month. However, there was a significant increase in death rates towards the end of 2022 which continued to surge through 2023. Between August and December 2023, death numbers advanced past three-digit figures, reaching the highest of 393 in December 2023. Remarkably, the death rates dropped to two-digits again in January 2024, with continuous decreases into February. Overall, the latter data suggests a concerning rise in Hepatitis C fatality rates over recent years.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Hepatitis D

February 2024

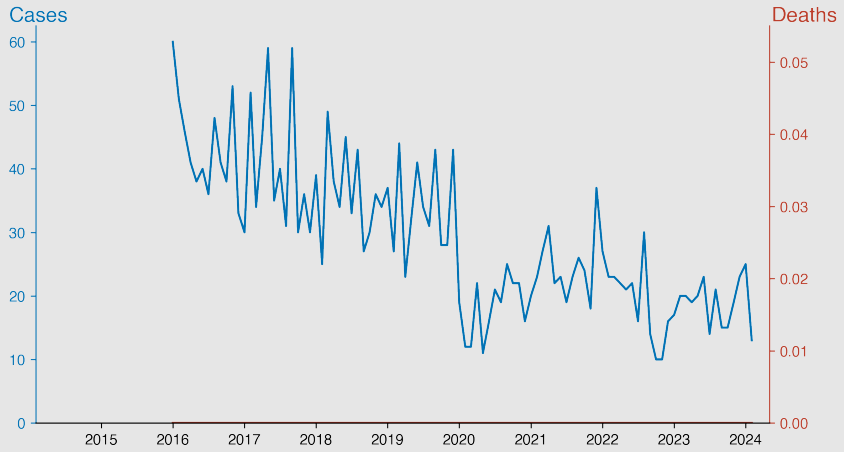
Introduction

Hepatitis D, also known as delta hepatitis, is a liver infection caused by the Hepatitis D virus (HDV) that only occurs in individuals who are simultaneously infected with Hepatitis B virus (HBV). HDV is transmitted through blood-to-blood contact, unprotected sex, and from infected mothers to their newborns. It is known to accelerate the progression to liver cirrhosis and hepatocellular carcinoma in co-infected individuals. Although the global incidence of HDV infection has declined due to HBV vaccination, it remains a concern, particularly in regions with high HBV prevalence.

Highlights

- Noticeable decline in Hepatitis D cases in mainland China observed from 2016-2024, with case counts dropping from 60 to 13 per month.
- Data trend suggests effective disease management practices are being employed.
- Zero mortality from Hepatitis D reported across the eight-year period, implying successful treatment strategies or low disease severity.
- As of February 2024, Hepatitis D is well-controlled in China with low case numbers and no reported deaths.

Temporal Trend



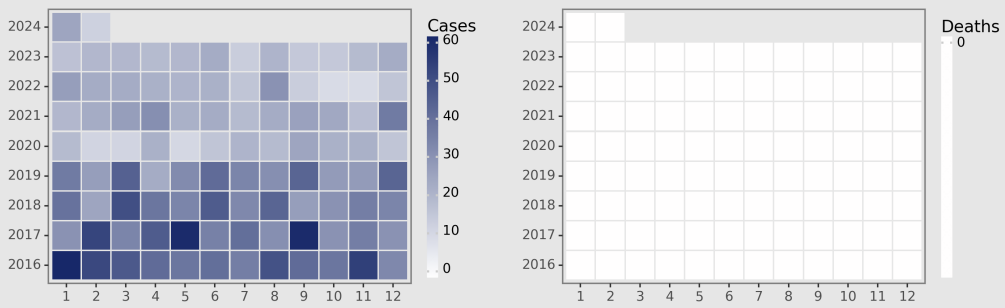
Cases Analysis

Over an 8-year span, Hepatitis D cases in Chinese mainland showed a declining trend with initial monthly cases ranging from 33 to 60 in 2016 to a slight reduction averaging approximately 20 cases by 2024. Notably, there was a significant drop in reported cases in 2020, possibly reflecting the impact of COVID-19 on healthcare access and reporting. The cyclical pattern suggests seasonal variation with higher counts often noticed in the first and last quarters of each year. Despite fluctuations, there is no clear upward trajectory, indicating successful containment or underreporting.

Deaths Analysis

Throughout the data span from 2016 to 2024, there were no reported deaths due to Hepatitis D in the Chinese mainland. This consistent zero fatality rate implies either an effective healthcare response to manage the disease, successful prevention measures, high treatment efficacy, or underreporting of fatal cases. With no mortalities over an 8-year period, the data presents an optimistic scenario for Hepatitis D outcomes in the region. However, without mortality data, it's difficult to infer the true impact of Hepatitis D's severity and fatality within the population.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Hepatitis E

February 2024

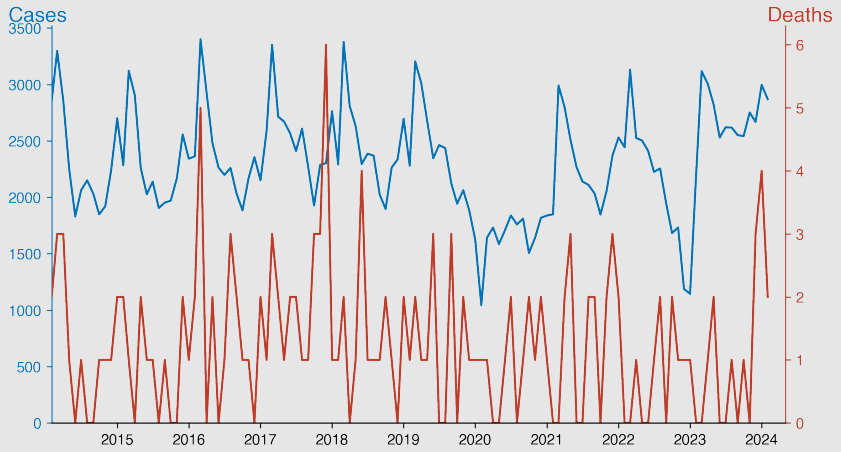
Introduction

Hepatitis E is a liver disease caused by the Hepatitis E virus (HEV), a non-enveloped, single-stranded RNA virus. The transmission is primarily fecal-oral, typically through contaminated water or food. It is most prevalent in areas with poor sanitation. While HEV infection often results in a self-limiting, acute illness, it can develop into fulminant hepatitis, particularly in pregnant women. Chronic infections may arise in immunocompromised individuals. There is currently no specific antiviral treatment for HEV, and prevention relies on maintaining adequate hygiene practices and ensuring safe drinking water.

Highlights

- There's been a notable decrease in yearly case counts for Hepatitis E from a peak in 2014, reflecting effective intervention strategies.
- However, monthly data shows seasonal patterns, with most cases appearing in the first quarter of the year.
- Regarding the mortality rate, despite some isolated higher counts, it generally remained low indicating adequate healthcare measures.
- As of February 2024, case counts are on a rise after the usual dip following the peak in the first quarter. This indicates Hepatitis E remains a public health concern in China mainland.

Temporal Trend



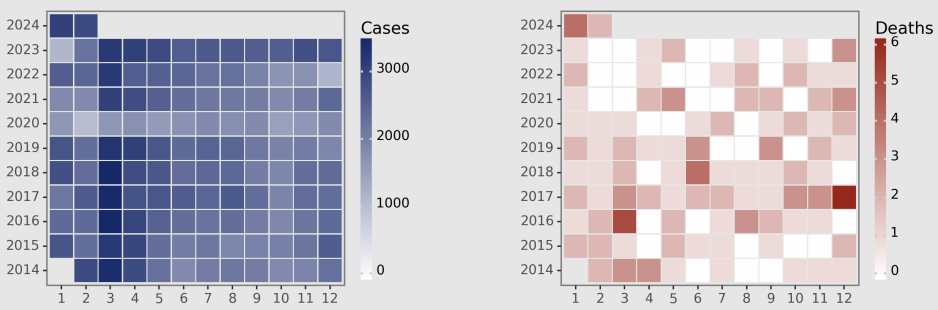
Cases Analysis

The data shows a trend toward an increase in Hepatitis E cases during the first quarter (January to March) each year in mainland China. A slight decline of cases is observed during the mid-year period around June to July, followed by another incremental rise towards the end of the year, peaking again in December-January. The year 2020 saw a significant decrease in reported cases, likely due to public health measures taken in response to the COVID-19 pandemic, but the previous trend seemed to return in 2021.

Deaths Analysis

The number of deaths due to Hepatitis E from 2014 to 2024 shows low fatality, with the majority of months reporting zero to three deaths. December 2017 reported the highest number of deaths at six. While there is no clear trend in fatalities over the years, the fatality rate fluctuates irregularly with no significant peak periods. The overall mortality appears minimal in relation to the number of cases, suggesting Hepatitis E maintains a low case-fatality rate throughout this period.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Other hepatitis

February 2024

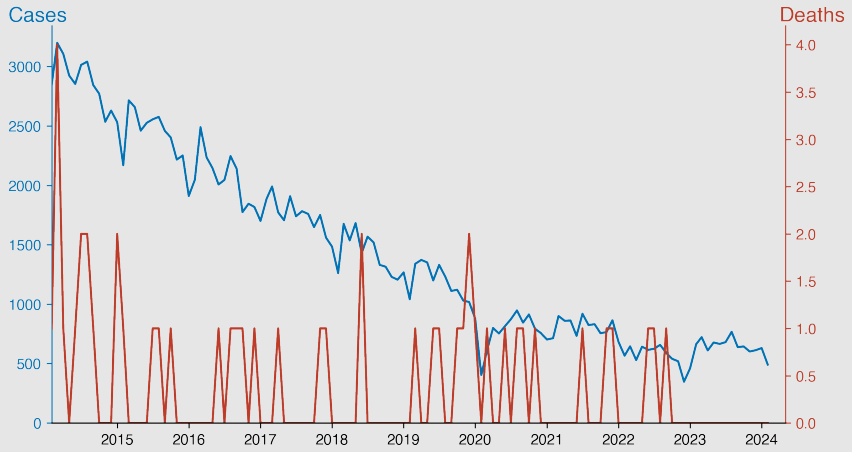
Introduction

Other hepatitis refers to types of viral hepatitis that are not caused by the hepatitis A, B, C, D, or E viruses. These types of hepatitis can be due to various other viruses, toxins, drugs, or autoimmune conditions. Symptoms often resemble those of viral hepatitis, including jaundice, abdominal pain, and malaise. Diagnosis may involve liver function tests, serologic assays, and sometimes liver biopsy. Treatment is dependent on the underlying cause but may range from antiviral medications and immunosuppressants to supportive care. Prevention strategies vary but generally include avoiding known toxins and using medications responsibly.

Highlights

- Data reveals a consistent decrease in Other Hepatitis cases in China from 2014-2024, declining from roughly 2900 monthly cases to around 500.
- The number of deaths linked to Other Hepatitis significantly decreased over this period, with no deaths reported since 2022.
- Case peaks typically occur in warmer months (March-August) despite the overall decreasing trend.
- By February 2024, the situation appears under control, with 491 cases and zero fatalities, indicating effective disease management measures.

Temporal Trend



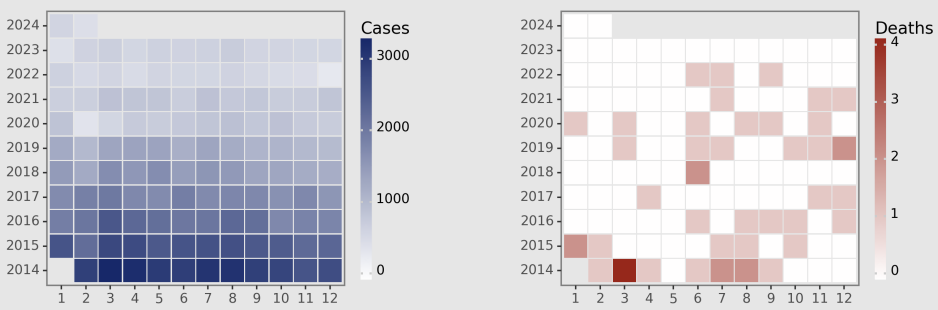
Cases Analysis

The data indicates a consistent downward trend in the number of cases of other hepatitis in mainland China over the past decade. From February 2014 to February 2024, case numbers notably and steadily decreased, from peaks of around 2800-3200 cases per month in early 2014 to lows of approximately 400-700 cases per month in recent years. The sharpest drop seems to be observable in 2020, potentially attributable to incorporation of expanded public health measures related to the COVID-19 pandemic impacting the surveillance or reporting of other hepatitis cases.

Deaths Analysis

The mortality associated with 'Other hepatitis' in the Chinese mainland indicates extremely low fatality rates over the same period. Deaths peaked in March 2014, July 2014, and December 2019, with 4, 2, and 2 deaths respectively. However, since the beginning of 2015, monthly deaths never exceeded two, and there were numerous intervals, especially post-2017, where no deaths were reported for several consecutive months. The overall trend shows that while cases of Other hepatitis have declined, the condition remains non-fatal in most reported instances.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

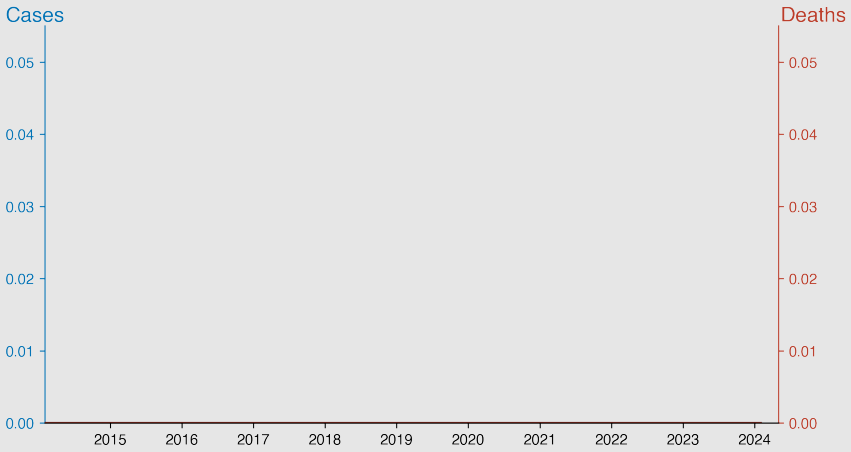
Poliomyelitis

February 2024

Introduction

Poliomyelitis, commonly known as polio, is a highly infectious viral disease caused primarily by the poliovirus. It predominantly affects young children and can lead to irreversible paralysis. While infection often occurs without symptoms, it can cause permanent disability and, in severe cases, can be fatal when breathing muscles are immobilized. The virus spreads person to person, typically through contaminated water or food. Polio has been largely eradicated in most countries through the successful use of vaccines. Nonetheless, pockets of polio outbreaks still occur globally, necessitating continued immunization and vigilance.

Temporal Trend



Highlights

- Zero reported cases and deaths from Poliomyelitis from February 2014 through February 2024 suggest successful eradication efforts within the Chinese mainland.
- Continued absence of Poliomyelitis over a decade indicates high vaccination coverage and effective public health surveillance systems.
- The data reflects the sustained effectiveness of the Polio eradication program in China, suggesting no known transmission of wild poliovirus.
- Maintaining vigilance is crucial to prevent re-introduction of the virus, calling for ongoing immunization and monitoring strategies.

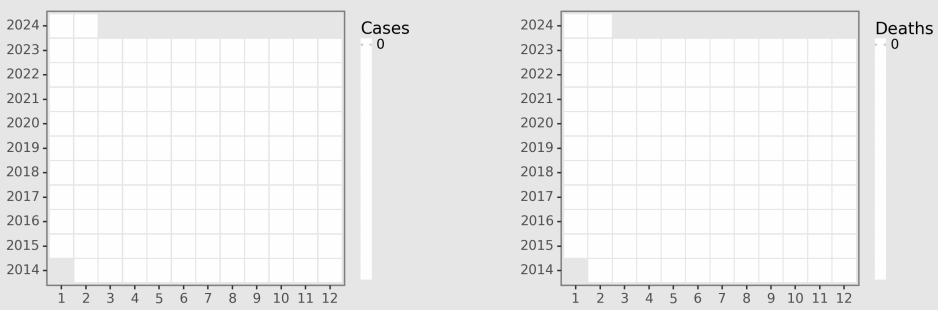
Cases Analysis

The data for Poliomyelitis in the Chinese mainland spanning 2014 through to 2024 manifests a consistent record of zero cases throughout these years. This is indicative of the robustness of the preventive interventions, particularly the immunization programs rolled out in the region. The persistent absence of any reported incidence of the disease may imply that the Chinese mainland has been successful in eradication strategies and maintaining a polio-free status during this period.

Deaths Analysis

There have been zero deaths reported from Poliomyelitis in Chinese mainland according to the dataset provided for the period from February 2014 to February 2024. The absence of fatalities over these ten years corroborates the case analysis findings, emphasizing the success of the polio eradication initiatives, routine immunization programs, and a maintained state of vigilance against possible resurgence or importation of the virus.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Human infection with H5N1 virus

February 2024

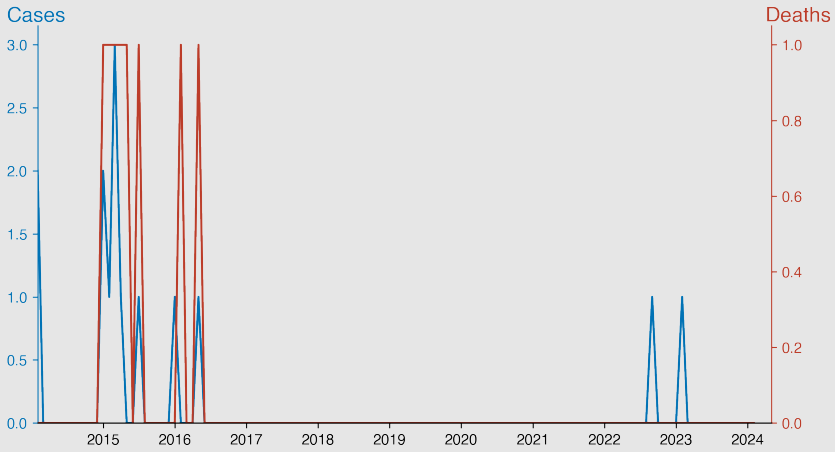
Introduction

Human infection with H5N1 virus, also known as avian influenza or bird flu, is caused by a highly pathogenic strain of influenza A viruses found primarily in birds, but with the potential to infect humans. First identified in 1997, H5N1 infections in people can be severe and often fatal. Transmission from birds to humans is rare and typically occurs through direct or close contact with infected poultry or contaminated environments. Human-to-human transmission is extremely uncommon. Symptoms resemble those of regular seasonal influenza but can lead to severe respiratory illness and other complications.

Highlights

- The H5N1 virus in mainland China has seen a significant decrease in incidence since 2016, with sporadic cases reported thereafter.
- Notably, from January 2020 to August 2022, there were no recorded cases, underlining the effectiveness of preventative measures.
- However, a single case in September 2022 and February 2023 shows that the disease is still present, albeit at incredibly low levels.
- As of February 2024, there have been no reported cases or deaths for two years, indicating a successful containment of the virus.

Temporal Trend



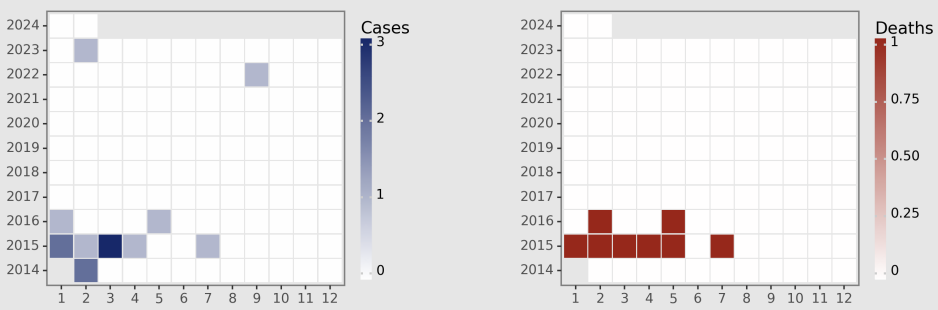
Cases Analysis

From 2014 to 2024, total number of H5N1 virus human infection cases on the Chinese mainland is sporadic and relatively low. Peak activity occurred in 2015, accounting for 7 out of the 11 total cases during the entire decade. It included a substantial increase of 3 cases reported in March and sporadic cases appearing throughout the year. After 2016, the instances of human infection decreased significantly with only sporadic cases occurring in 2016, 2022 and 2023, and none reported for the years 2017-2021 or 2024. This indicates a successful control of potential outbreaks.

Deaths Analysis

In light of the total 11 reported cases of H5N1 infections, there have been 6 deaths linked to the disease. The severity of the infection highly stands out in 2015, with 5 people deceased, incurring heavy fatality rates. Oddly, a fatality is registered in May 2015 with no corresponding case, potentially pointing to delayed reporting. The death-to-case ratio thus roughly hovers around 54%, marking high lethality. Since 2016, fatality rates manifest a downward trend, aligning with the downtrend of cases.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Measles

February 2024

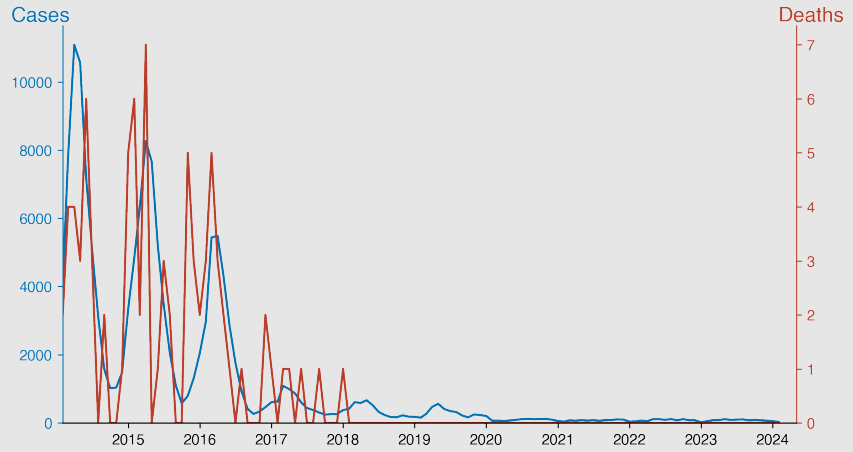
Introduction

Measles is a highly contagious viral disease characterized by fever, cough, runny nose, inflamed eyes, and a distinctive red rash. It mainly affects children but can occur at any age. The measles virus is transmitted via droplets from the nose, mouth, or throat of infected persons. Complications can include pneumonia, encephalitis, and death. Although it is preventable with vaccination, measles remains a leading cause of vaccine-preventable deaths among young children globally, particularly in areas with low vaccination coverage. Measles outbreaks can occur in populations with decreased immunity or where vaccination rates have fallen.

Highlights

- Measles cases in mainland China have significantly decreased from 4091 cases in February 2014 to only 31 cases in February 2024.
- The rate of reported measles-related deaths has also greatly improved over the decade, with no reported deaths since December 2016.
- Apart from a single peak in 2015 (8265 cases in April), the general trend indicates a steady decline in the number of cases over the years.
- Despite minor fluctuations in the monthly case count, recent years (since 2020) have consistently recorded less than 120 cases per month, signifying effective control measures.

Temporal Trend



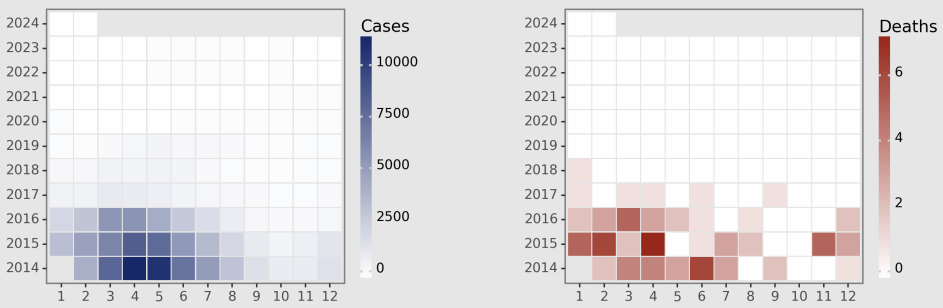
Cases Analysis

The data indicates a clear downward trend in reported measles cases in mainland China over an approximate decade (2014-2024). High numbers of measles cases were reported initially with a peak of 11,089 cases in April 2014. The data then shows a consistent decrease over the years, with a particularly sharp decline between 2016 and 2018. Despite small surges notably around spring, the numbers essentially remained below a thousand after 2017. By 2024, monthly reported cases fell to double digits, indicating a potential 98% reduction in the prevalence of measles in approximately a decade.

Deaths Analysis

The mortality data reveals a low fatality rate from Measles in the Chinese mainland over the decade, with maximum recorded deaths at 7 in April 2015. Deaths dropped to zero post-August 2016 and remained so up to February 2024. This zero mortality could reflect improvements in healthcare, effective case management, heightened immunization efforts, and possibly reduced transmission due to overlapping public health measures for COVID-19. Nevertheless, continuous surveillance is essential to maintain measles elimination status and promptly address any potential resurgence.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

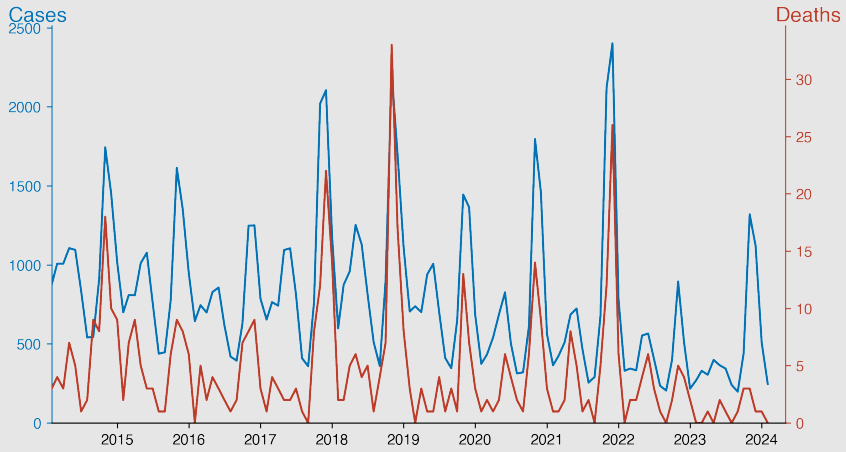
Epidemic hemorrhagic fever

February 2024

Introduction

Epidemic hemorrhagic fever is a group of viral diseases characterized by fever, bleeding disorders, and often kidney damage. These diseases can be caused by several distinct families of viruses like Arenaviridae, Bunyaviridae, Filoviridae, and Flaviviridae. Notable examples include Ebola, Dengue, Yellow Fever, and Hantavirus. Transmission varies, encompassing vectors like mosquitoes and ticks or contact with infected animal excreta. Outbreaks can cause severe public health challenges, with certain forms having high fatality rates. Control measures hinge on vector control, improved sanitation, and in some cases, vaccine deployment.

Temporal Trend



Highlights

- There's a seasonal pattern in the Epidemic Hemorrhagic Fever cases and deaths in the Chinese mainland, with peaks occurring primarily in winter months, specifically between November and January of each year.
- From 2014 to 2024, there is a general trend towards the reduction in both cases and deaths, demonstrating the efficacy of control and prevention measures.
- The mortality rate remained low across the years, indicating effective clinical management for most cases.
- As of February 2024, there are 247 cases with no reported deaths, showing a good prognosis for current cases.

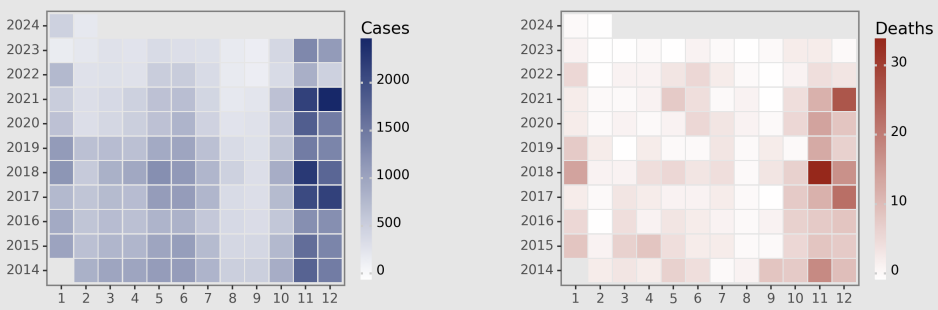
Cases Analysis

The data indicates a seasonal pattern for Epidemic hemorrhagic fever with peaks typically in November and lower incidence in late summer. The highest number of cases occurred in November 2021 (2120 cases), followed by a smaller, yet significant, surge in November 2014 (1744 cases). Notably, the overall trend in cases seems to peak in late autumn with a decrease seen towards the early months of the following year. A potential outlier is observed in December 2017, with cases rising to 2105. Patterns suggest a correlation with agricultural activities and rodent population dynamics.

Deaths Analysis

Although there has been a significant number of reported cases, the death rate remained relatively low throughout the decade. Deaths generally followed the pattern of cases, with more deaths occurring during peak months. However, there were instances where the death toll deviated significantly from the number of cases - September 2014, November 2018, and December 2021 are such examples. Overall, despite increases in reported cases during specific periods, advances in healthcare or improved reporting may be contributing to the relatively low and stable mortality rates.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

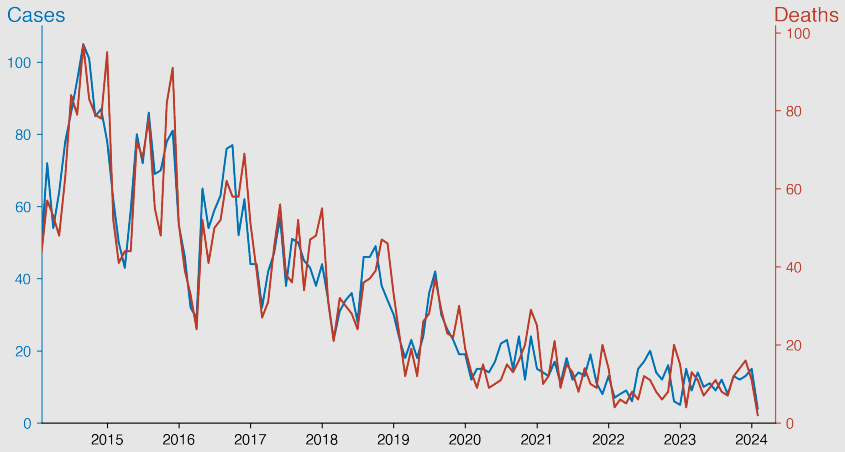
Rabies

February 2024

Introduction

Rabies is a viral disease that primarily affects mammals, transmitted through the saliva of infected animals via bites or scratches. It is caused by the rabies virus, a member of the Lyssavirus genus. The virus attacks the central nervous system, leading to brain inflammation and, if untreated before symptoms appear, it is almost invariably fatal. Symptoms include fever, tingling at the site of exposure, progressing to violent movements, uncontrolled excitement, fear of water, inability to move parts of the body, confusion, and loss of consciousness. Vaccination after exposure (post-exposure prophylaxis) is highly effective in preventing the disease.

Temporal Trend



Highlights

- Overall trend of the number of Rabies cases and deaths in mainland China from 2014 to 2024 shows a consistent decrease.
- Despite seasonal fluctuations, there's a clear downward trend in both cases and deaths, contribution possibly due to better vaccination and awareness methods.
- In February 2024, there were 4 recorded cases and 2 deaths from Rabies, representing a significant decrease compared to numbers from 10 years prior.
- Yearly analysis also suggests that despite the reduction, the disease remains persistent in the region, indicating ongoing transmission and a need for continuous surveillance.

Cases Analysis

The reported rabies cases in Chinese mainland from 2014 to 2024 shows an overall trend of decreasing over time, going from a high of 105 in September 2014 to a low of 4 in February 2024. Increasing awareness, better vector control, as well as improvements in diagnostic methods and reporting might contribute to this reduction. There was a notable surge of cases during mid-2014 to early 2016, but a steady decline has followed since then. Despite slight periodic increases, possibly related to seasonality or under-reporting, the general trend signifies a decline in rabies cases.

Deaths Analysis

Deaths due to rabies in the same period also demonstrate an overall decreasing pattern but with less pronounced seasonality than cases. The highest mortality was observed in 2014 and 2015, with July 2014 having the highest recorded fatalities (84 deaths). The fatality numbers closely mirror the case counts, suggesting a consistent case-fatality rate across the years. 2019 onwards shows a significant drop in deaths, which may correlate with the reduced number of reported cases, improved access to medical care, or enhanced effectiveness of clinical management of rabies exposure. The spike in deaths in December 2020 and 2021 requires further investigation to understand the underlying causes.

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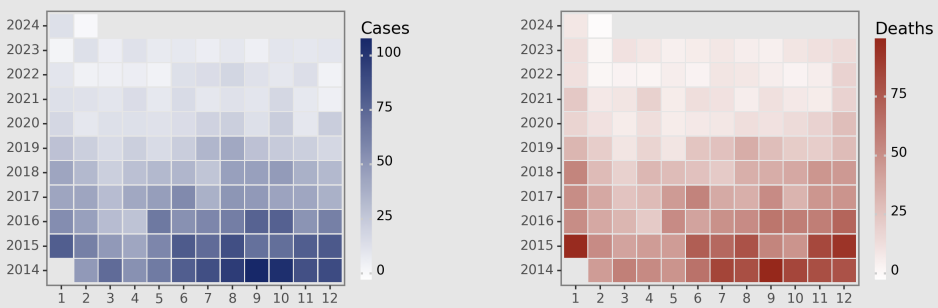

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Chinese Notifiable Infectious Diseases Surveillance Report

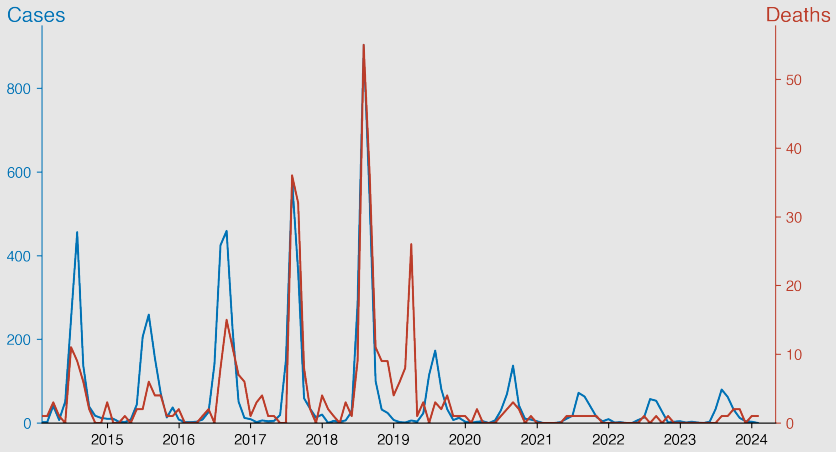
Japanese encephalitis

February 2024

Introduction

Japanese encephalitis (JE) is a viral disease that is spread through the bite of infected Culex mosquitoes. The virus primarily affects the central nervous system, potentially leading to inflammation of the brain, known as encephalitis. While most JE virus infections are mild or asymptomatic, a small percentage can result in severe clinical illness. Symptoms of severe infection include high fever, headache, neck stiffness, disorientation, coma, seizures, spastic paralysis, and ultimately can be fatal. JE is most prevalent in rural agricultural areas in Asia and the Western Pacific. Vaccination is the most effective preventive measure against the disease.

Temporal Trend



Highlights

- Seasonal pattern: Cases peak annually in the summer months (July-August), suggesting a relationship with seasonal vectors and host availability.
- Gradual decline in cases: A marked decrease in cases is observed over the years, with a high of 904 cases in August 2018 dropping to 80 in August 2023, indicating improved control measures.
- Mortality rates vary: Despite lower case numbers in recent years, deaths still occur, underscoring the necessity for ongoing public health interventions and access to medical care.
- Recent stability: A relative stabilization in the number of cases and deaths has been noted in the latest full year, 2023, suggesting effectiveness of current preventive strategies.

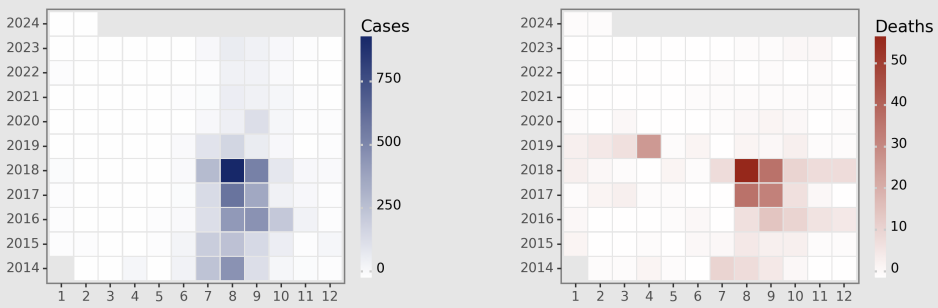
Cases Analysis

The cases of Japanese encephalitis in the Chinese Mainland vary from year to year, with generally low case numbers in the winter months (January-March), increasing dramatically as we move into the summer months (June-August). The most significant outbreaks have occurred in the summer months, most notably in July 2018, with 904 cases. However, post-2018, we've seen a gradual decline in the number of cases during the peak months, suggesting a potential improvement in preventive measures or disease control efforts.

Deaths Analysis

Death tolls have similarly followed a seasonal trend, with peaks occurring usually in the same high-incidence months as cases. The deadliest month recorded was August 2018 with 55 fatalities. Overall, mortality rates appeared to peak in 2018, with a subsequent notable decline in the following years. However, certain anomalies, like the rise in death rates during low-case months in 2019 (e.g., April with 26 deaths), suggest variations in disease severity, reporting accuracy, or potentially the impact of other health interventions or factors.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

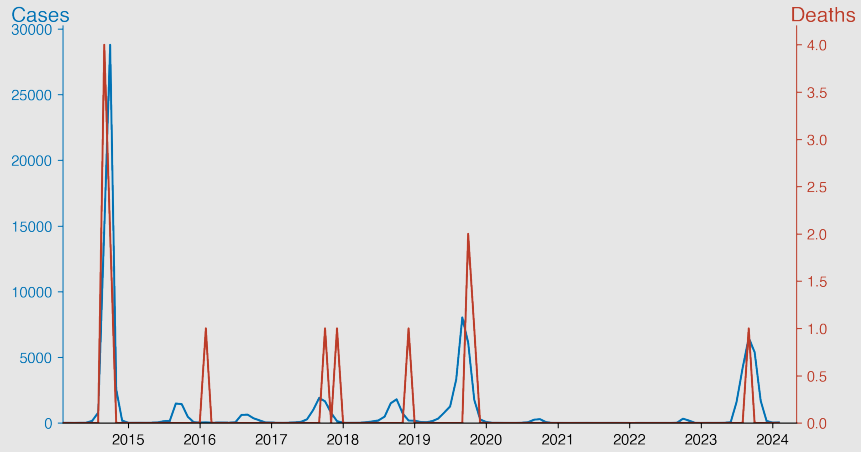
Dengue

February 2024

Introduction

Dengue is a mosquito-borne viral infection causing a flu-like illness that can occasionally develop into a potentially lethal complication called severe dengue. The dengue virus is transmitted by female mosquitoes mainly of the species Aedes aegypti and, to a lesser extent, Ae. albopictus. These mosquitoes also transmit chikungunya, yellow fever, and Zika infection. Dengue is widespread throughout the tropics, with local variations in risk influenced by rainfall, temperature, and unplanned rapid urbanization. There are four dengue viruses (DENV 1-4) that can cause dengue infection, and it is possible to be infected four times.

Temporal Trend



Highlights

- There's an apparent seasonality in Dengue Fever cases in mainland China with peaks occurring around August to October every year.
- Since 2020, there's been a significant decrease in Dengue cases throughout the year. However, there was a drastic surge in cases in the mid-2023, indicating a potential outbreak.
- The mortality rate of Dengue remains relatively low with few recorded deaths despite fluctuating case numbers, demonstrating effective medical response.
- The situation in February 2024 shows 42 cases and no deaths, indicating an overall control of the disease, in comparison with the previous year's spike in cases during this period.

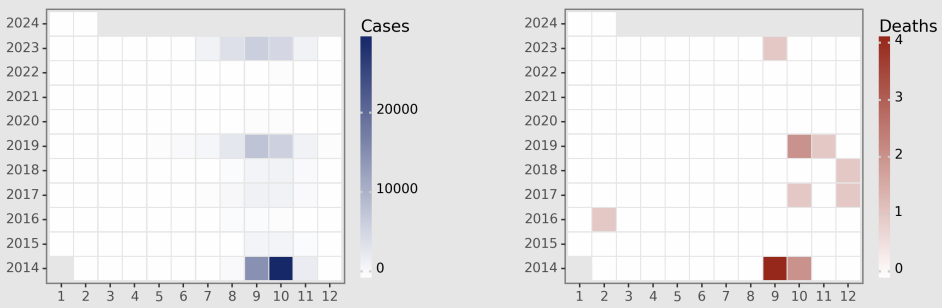
Cases Analysis

Dengue cases on Chinese mainland experience spikes during the late summer to autumn transition, specifically from August to October consistently throughout the years under review. The highest number of cases was reported in October 2014 with 28,796 cases. A fluctuating decline in number can be observed from 2014 through to 2020. The reported cases were lowest in 2021, however, a sudden rise can be seen again in July 2023, with 1,604 cases leading to a recurrent cycle of climbing cases during the last few months of the year, demonstrating a noticeable seasonal pattern.

Deaths Analysis

Dengue-associated mortality in Chinese mainland has been relatively low despite high incidence in certain years. The highest number of deaths occurred in 2014 with 6 fatalities, correlating with the extraordinary outbreak that year. The following years until 2019 saw occasional deaths, never exceeding two per month. Notably, from February 2020 onwards, only one death was reported through September 2023, indicating either effective clinical management, reporting discrepancies, or a change in virus virulence. The sharp decline in deaths despite some resurgence in cases suggests improved healthcare responses or underreporting.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Anthrax

February 2024

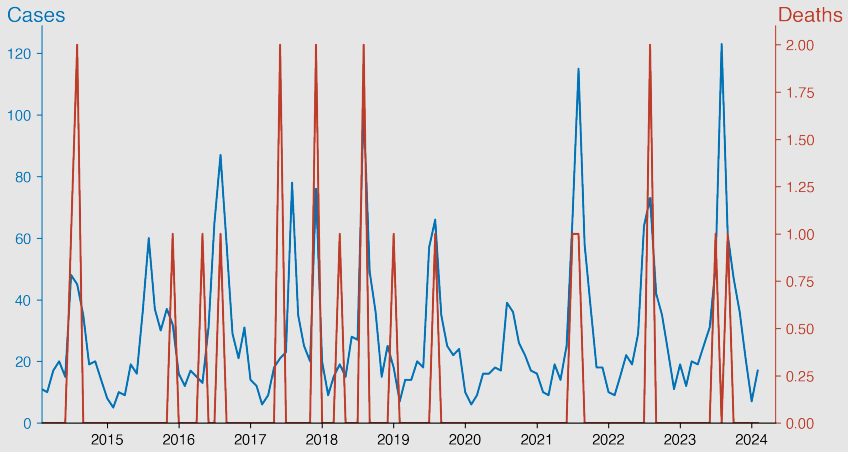
Introduction

Anthrax is a serious infectious disease caused by the bacterium Bacillus anthracis. It primarily affects livestock and wild animals, but humans can become infected through direct or indirect contact with sick animals. In humans, it can manifest in different forms, including cutaneous, inhalational, and gastrointestinal anthrax, depending on the route of infection. While cutaneous anthrax is the most common and least lethal form, inhalational anthrax is the most deadly. Effective vaccines and antibiotics are available, and prompt treatment is crucial for survival in severe cases.

Highlights

- The data reflects a clear seasonal trend with increased anthrax cases reported during the summer months consistently across the years; peak cases reported in August.
- Although the death rates have been very low compared to the total cases, there is a very sporadic trend with no consistent patterns.
- Despite occasional spikes, the overall trend from 2014 to February 2024 shows a stable situation with no major outbreaks or escalation in terms of reported cases or deaths.
- The most recent data for February 2024 shows a standard number of cases (17) with no deaths, indicating no imminent crisis.

Temporal Trend



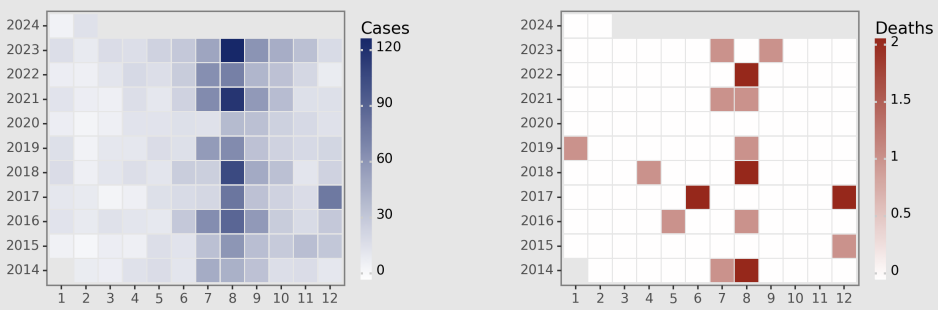
Cases Analysis

Anthrax cases in mainland China are cyclical, rising and falling with each year, peaking in the months of July through September. This pattern is likely attributable to increased human-animal contact during these peak agricultural months, as Anthrax is primarily transmitted via spores that affect grazing animals. Over the past decade, there's an overall upward trend, most notably with the highest number of cases reaching 123 in August 2023. This increase might be connected to changes in agricultural practices, climatic conditions, or surveillance and reporting capabilities.

Deaths Analysis

Deaths due to Anthrax are state-wise low throughout the ten-year period. A total of 14 deaths were reported across the decade. Two semi-regular patterns can be observed: Peaks in deaths often coincide with peaks in case counts, particularly in summer months, such as in August 2016, 2018, and 2021. The highest number of deaths occurs in August of 2014, 2016, 2018, and 2021, each reporting 2 deaths. The overall mortality rate appears to be quite low, suggesting effective medical treatment for diagnosed cases.

Distribution



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Dysentery

February 2024

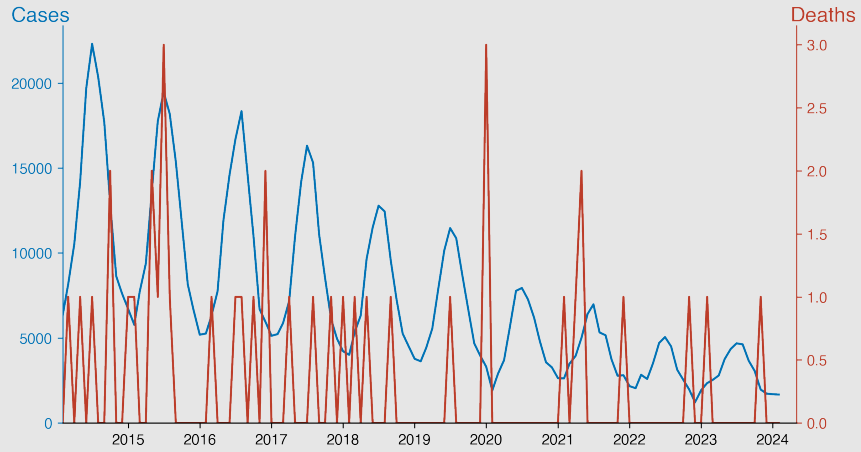
Introduction

Dysentery is an inflammatory disorder of the intestine, particularly of the colon, that results in severe diarrhea containing blood and mucus in the feces with frequent and painful bowel movements. It can be caused by various infectious pathogens such as bacteria (e.g., Shigella, Campylobacter, Salmonella), protozoan parasites (e.g., Entamoeba histolytica), or viruses. Transmission typically occurs through contaminated food or water, or through person-to-person contact. Comprehensive management includes rehydration, electrolyte replacement, and, in some cases, antibiotic or antiparasitic medications. Good hygiene practices are crucial in preventing the spread of

Highlights

1. The overall trend of Dysentery in mainland China from February 2014 to February 2024 shows a significant reduction in the number of cases.
2. Noticeable seasonal trend with the cases peaking between May to August each year, indicating potential environmental factors at play.
3. The mortality rate is very low, typically 0-3 deaths per month irrespective of the number of cases.
4. As of February 2024, the number of cases (1673) continues the decreasing trend, which indicates successful control and prevention measures.

Temporal Trend



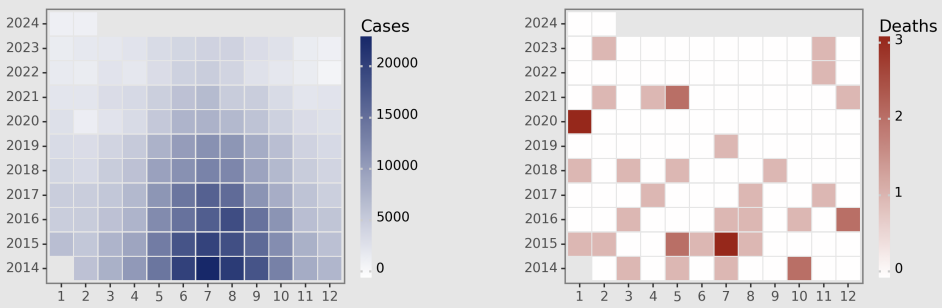
Cases Analysis

The reported cases of Dysentery in Mainland China display a clear seasonal trend over the given period from 2014 - 2024. The number of cases typically increased significantly from the start of the year to peak around the mid-year, often July. This pattern suggests a susceptibility of the population to this disease in the warmer months. Across the entire period, a general downward trend is also observed, with the peak number of cases decreasing each year, representing a successful effort in combating the disease.

Deaths Analysis

Dysentery-related deaths in China are extremely low considering the number of reported cases. Between February 2014 and February 2024, there were only 22 recorded deaths resulting from Dysentery. The data also shows a random distribution of deaths throughout the years with no clear pattern or correlation with the number of cases. The highest mortality (3 deaths) was reported in July 2015 and January 2020, however, these spikes were not necessarily linked with the highest case numbers, suggesting an efficient management system in handling severe dysentery cases to prevent fatalities.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

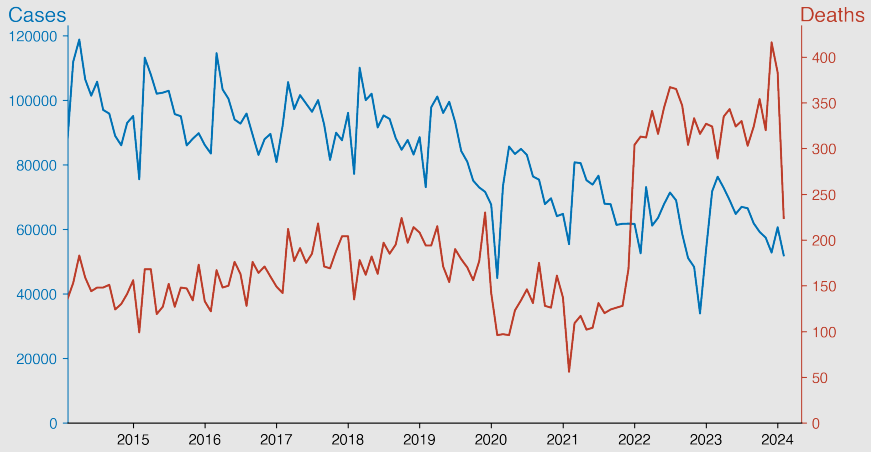
Tuberculosis

February 2024

Introduction

Tuberculosis (TB) is an infectious disease primarily affecting the lungs and caused by the bacterium Mycobacterium tuberculosis. It is transmitted through airborne droplets when people with pulmonary TB cough, speak, or sneeze. TB can be latent, where the bacteria remain inactive within the body without causing symptoms, or active, leading to illness. Symptoms of active TB include a persistent cough, fever, night sweats, and weight loss. Without proper treatment, TB can be life-threatening. A combination of antibiotics over an extended period is required to fully eradicate the infection. Vaccination, using the Bacille Calmette-Guerin (BCG) vaccine, offers partial protection.

Temporal Trend



Highlights

- Tuberculosis (TB) cases in mainland China show a downward trend from averages of 100,000 per month in 2014 to 50,000-70,000 in 2024.
- TB-related deaths have alarmingly more than doubled from 2014 (150-200/month) to 2024 (300-400/month), suggesting higher virulence or treatment issues.
- Case numbers usually peak around March-April and fall to their lowest in November-December, a consistent annual trend.
- Death numbers lack a seasonal pattern, implying factors like healthcare availability or disease strain severity may drive mortality rates.

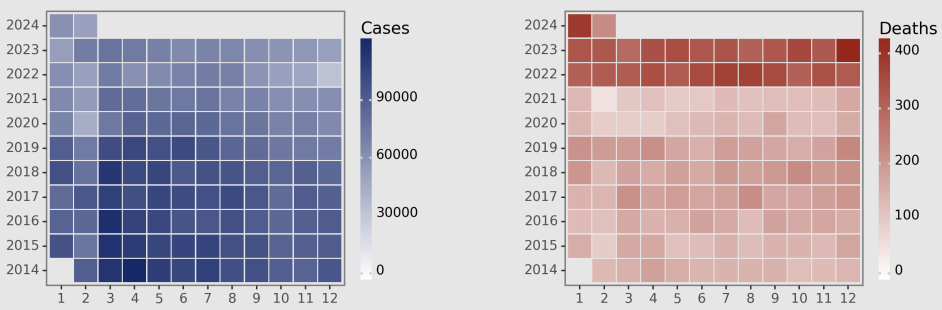
Cases Analysis

Over time, reported tuberculosis cases in mainland China have shown a significant decline, with a noticeable dip in 2020 February, which coincides with the COVID-19 pandemic's escalation that may have disrupted both reporting and transmission patterns. A gradual recovery follows, but the numbers remain below pre-pandemic levels. The previous peaks around March yearly could suggest seasonal effects or a culmination of reporting from prior months. Post-2020, there is not a clear return to previous trends, indicating potential long-term impacts on tuberculosis case rates.

Deaths Analysis

Reported deaths from tuberculosis in China show a gradual increase from 2014 through 2019. Despite the drop in reported cases in 2020, the number of reported deaths fluctuates with no clear trend. A dramatic increase in mortality is observed beginning in January 2022, which persists throughout the year. This sharp rise could be due to several factors, such as changes in reporting accuracy, delayed healthcare access due to COVID-19, or actual increases in tuberculosis mortality. It is crucial to investigate these changes to determine the direct causes and address the heightened mortality rates.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

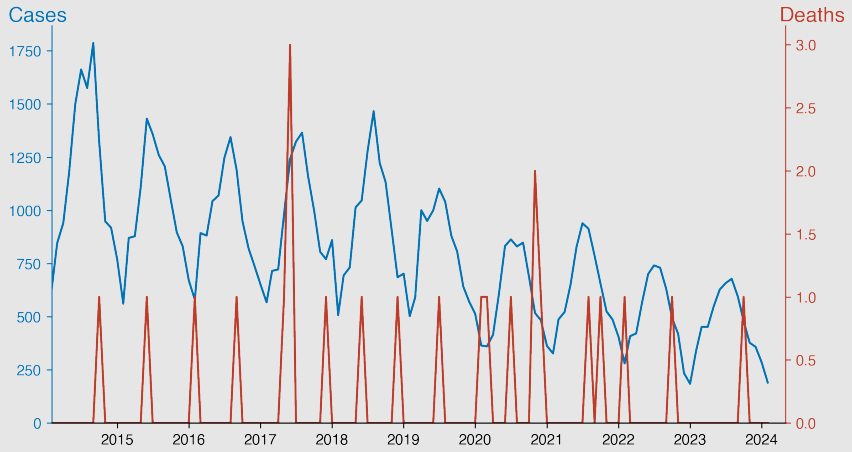
Typhoid fever and paratyphoid fever

February 2024

Introduction

Typhoid and paratyphoid fevers are caused by the bacteria Salmonella Typhi and Salmonella Paratyphi, respectively. These systemic infections are characterized by fever, headache, constipation or diarrhea, rose-colored spots on the chest, and an enlarged spleen and liver. Transmission occurs primarily through ingestion of contaminated food or water. These diseases are endemic in regions with inadequate sanitation. Typhoid fever can lead to severe complications and death if not treated promptly, typically with antibiotics. Preventative measures include vaccination and ensuring safe drinking water and food practices.

Temporal Trend



Highlights

- Steady decline in typhoid and paratyphoid fever cases from 2014 to 2024, with higher incidences typically in summer months (June-August).
- Low mortality rate, with deaths sporadically occurring over the decade.
- Lowest case count recorded in February 2024 with 190 cases and no deaths, indicative of continued decline.
- Possible seasonal pattern with case spikes in warmer months, suggesting a relationship with temperature or behavioral changes.

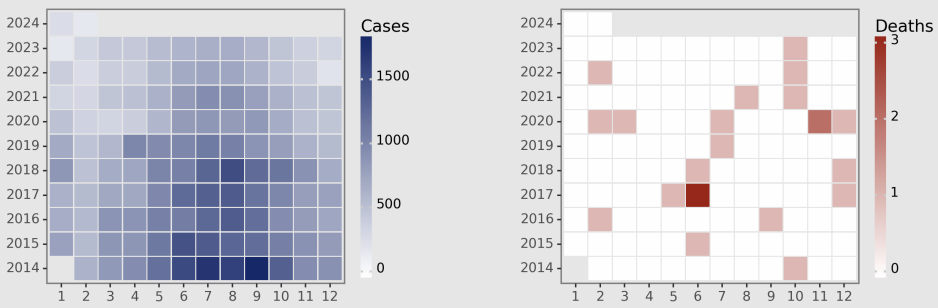
Cases Analysis

From 2014 to 2024, a marked cyclical pattern emerges in the reported Typhoid and Paratyphoid fever cases, with yearly peaks occurring typically in the summer months, from June through September, and valleys observed generally in winter months, from December to February. The highest number of cases was recorded in July 2014 with 1662 cases, while the lowest was in February 2024 at 190 cases. Despite minor variances, over the ten-year period a gradual year-on-year decrease in reported cases is observed, indicating a potentially effective disease intervention strategy.

Deaths Analysis

The mortality data reveals a very low death count associated with Typhoid and Paratyphoid fevers, with only 12 deaths reported over the near-decade span. Isolated fatalities occurred sporadically without a clear temporal pattern. The highest number of deaths in a single month was 3, observed in June 2017. The low fatality rates suggest effective clinical management and treatment of diagnosed cases. However, the presence of deaths underscores the need for continuous surveillance, vaccination, and water sanitation measures to control and prevent outbreaks.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

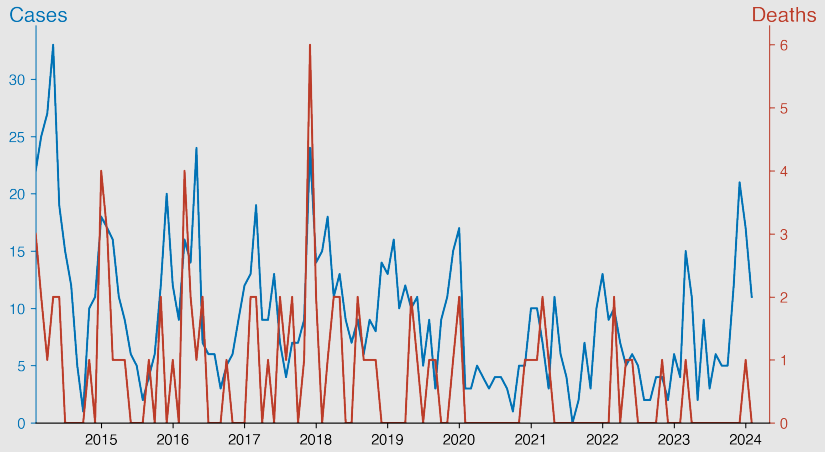
Meningococcal meningitis

February 2024

Introduction

Meningococcal meningitis is an acute bacterial infection of the meninges, the protective membranes covering the brain and spinal cord. Caused by Neisseria meningitidis, it can result in severe illness or death if not treated promptly. It is characterized by sudden onset of fever, headache, and stiff neck, often accompanied by nausea, vomiting, increased sensitivity to light, and confusion. Transmission occurs through respiratory droplets or close contact. Vaccines are available for prevention, and immediate antibiotic treatment is crucial for affected individuals. It primarily affects infants, young children, and adolescents.

Temporal Trend



Highlights

1. There's a significant decrease in the number of both Meningococcal meningitis cases and deaths in Chinese mainland from 2014 through February 2024. The most reported cases were 33 in May 2014, whereas February 2024 saw only 11 cases.
2. The months of January and December recurrently peak in the number of cases, suggesting a seasonal trend.
3. The overall case fatality rate has considerably declined over the years, indicating possible advancements in early detection and treatment.
4. Despite fluctuations, there's a general downward trend in the incidence of Meningococcal meningitis over this decade, suggesting effective disease control measures.

Cases Analysis

From the February 2014 to February 2024 data, there is no clear increasing or decreasing trend in the number of Meningococcal meningitis cases in mainland China. The number of reported cases per month ranges from 0 to 33. Peak incidents prominently occur between March to May and November to January, pointing out to a seasonal pattern of the disease. In contrast, cases notably diminish in the late summer and early autumn months. The disease might has a potential correlation with temperature, rainfall, or other seasonal factors.

Deaths Analysis

Mortality due to meningococcal meningitis in this region shows significant variability, with the highest recorded deaths being 6 in December 2017. Overall, the trend in deaths is less clear than that of case numbers, yet there's a general decrease over time with several months reporting zero fatalities, especially from 2020 onwards. This trend may indicate improved clinical management and possibly the implementation of more effective public health measures.

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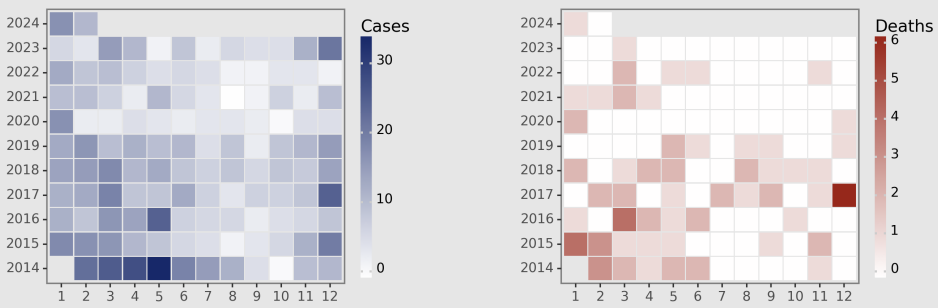

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Chinese Notifiable Infectious Diseases Surveillance Report

Pertussis

February 2024

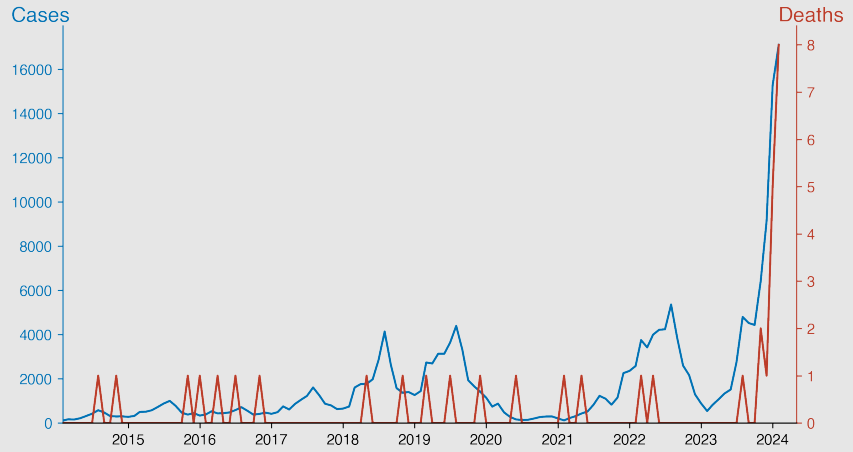
Introduction

Pertussis, also known as whooping cough, is a highly contagious respiratory disease caused by the bacterium Bordetella pertussis. It is characterized by severe coughing fits that can result in a "whooping" sound when the person breathes in. Although it can affect individuals at any age, it is most dangerous for infants and young children. Pertussis is preventable through vaccination, but it remains a significant public health concern worldwide, particularly in areas with low immunization coverage. Complications can include pneumonia, seizures, brain damage, and in severe cases, death.

Highlights

- Pertussis cases in mainland China have been increasing notably, with a significant surge in 2024, reaching 17105 cases in February from 15275 in January, accompanied by deaths increasing from 5 to 8.
- Periodic peaks are observable approximately every year with a declining trend seen in 2020 followed by a gradual resurgence since 2021.
- Despite the recent surge, mortality remains relatively low with intermittent single-digit deaths per month, indicating possible improvements in treatment or vaccination rates.
- Prior to 2024, the highest number of cases was reported in December 2023 with 9126 cases and a mortality count of 1.

Temporal Trend



Cases Analysis

The reported cases of Pertussis in Chinese mainland has shown a rising trend from February 2014 through February 2024. A natural ebb and flow can be observed over time, with peaks generally occurring in the summer months and valleys in the winter months. Interestingly, a significant upsurge can be noticed starting from mid-2017, suggesting either an increase in infection rates or enhancements in diagnostic procedures and reporting. We also observe an extraordinary rise in numbers between late 2023 and early 2024, which suggests a severe outbreak, requiring further investigative actions.

Deaths Analysis

The reported deaths from pertussis remain sporadic and relatively low compared to the number of cases, indicating a low mortality rate associated with the disease in the Chinese mainland. From 2014 to February 2024, deaths have occasionally punctuated the data, with the highest mortality (8 deaths) reported in February 2024, coinciding with the peak in cases. This escalation in fatalities could be attributed to the increased burden of disease or potential changes in the pathogen's lethality, patient demographics, or healthcare access. The overall trend suggests that while pertussis remains generally a non-lethal disease, the increase in case fatality in 2024 is concerning and necessitates public health intervention.

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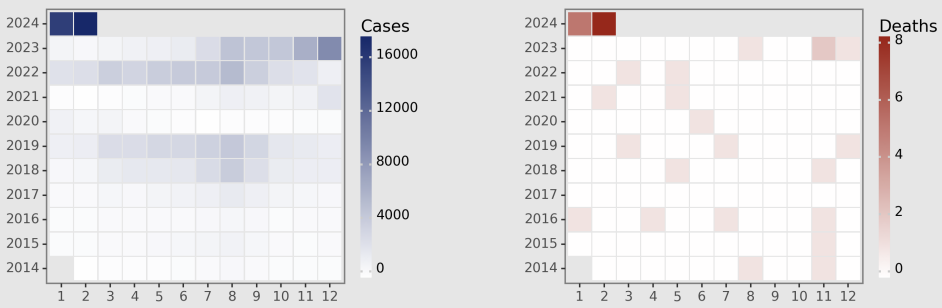

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Diphtheria

February 2024

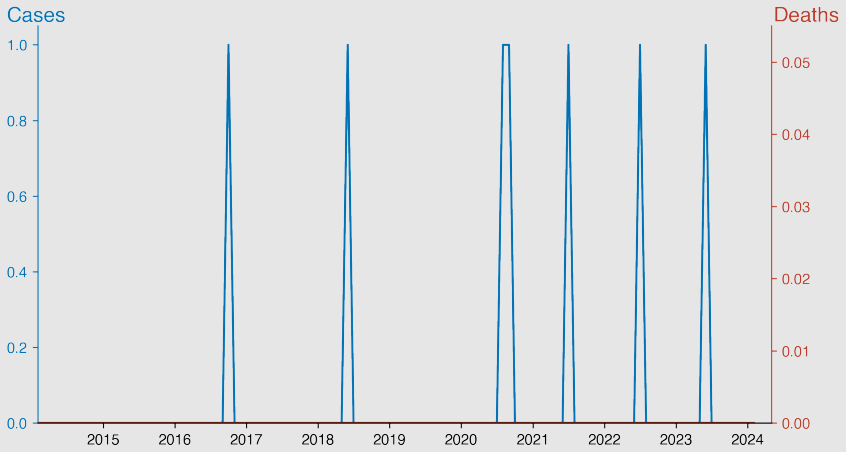
Introduction

Diphtheria is a serious bacterial infection caused by Corynebacterium diphtheriae. It primarily affects the mucous membranes of the respiratory tract, producing a thick, gray coating in the nose, throat, or airway, which can lead to difficulty breathing, heart failure, paralysis, or even death. Diphtheria is highly contagious and is spread through respiratory droplets or close contact. Thanks to widespread vaccination, diphtheria is now rare in many parts of the world. However, it can still occur, especially in areas where immunization rates are low. Vaccination remains the most effective means of prevention.

Highlights

- Over the past decade, Diphtheria has been exceptionally rare in mainland China, reflecting a highly effective national vaccination program.
- The data suggests a sporadic occurrence rate, with only 5 reported cases between 2014 and 2024. The cases occurred in 2016, 2018, twice in 2020, and in 2021.
- There were no recorded Diphtheria-induced deaths in China from 2014 right through to February 2024.
- What is notable is a repeated pattern; minimal cases of infection were observed consistently around July and August over the years 2016, 2018, 2020, 2021, and 2023. More data and investigations are needed to determine if this pattern holds significance.

Temporal Trend



Cases Analysis

The reported data from the Chinese mainland for Diphtheria from February 2014 until February 2024 shows a remarkably low incidence rate with a total of just 6 cases over a decade. In fact, there are multiple years of no reported cases at all. The cases that do appear are sporadic with a single case reported in October 2016, June 2018, August and September 2020, July 2021, and June 2023. No discernible pattern exists for these individual cases as they occur at different times of the year.

Deaths Analysis

The mortality rate for Diphtheria in the Chinese mainland between 2014 and 2024 was consistently zero, as no deaths were reported throughout this ten-year timeline. Given the incidences of the disease over the same period, this suggests a robust health response and effective treatment of identified cases. This zero fatality rate could be attributable to factors such as timely diagnosis and intervention, access to adequate healthcare resources, and the use of efficient therapeutic protocols. Regardless, the data reveals a promising trend and encourages the continuation of current health strategies aimed at Diphtheria management.

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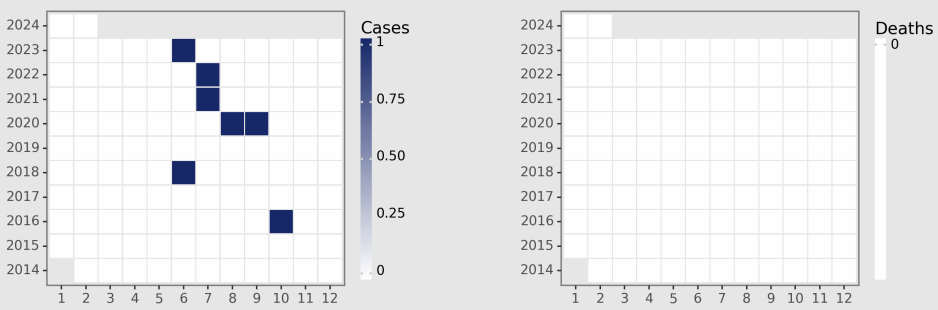

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Chinese Notifiable Infectious Diseases Surveillance Report

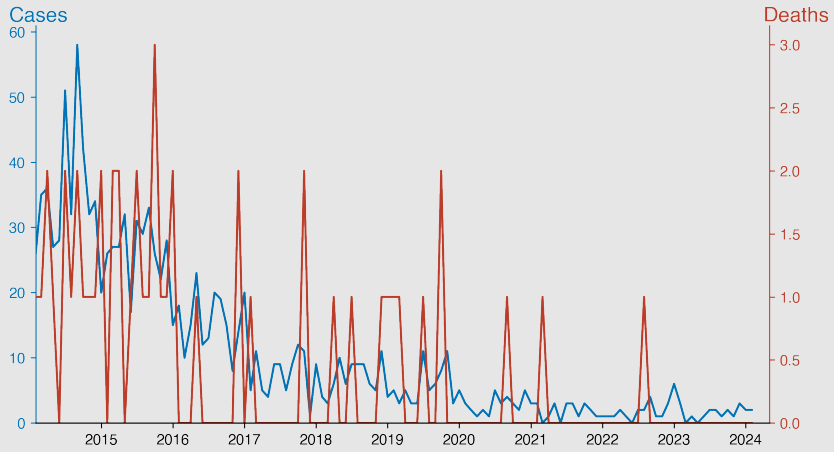
Neonatal tetanus

February 2024

Introduction

Neonatal tetanus is an acute, often fatal disease caused by the neurotoxin produced by Clostridium tetani, which enters the body through unsterile umbilical cord practices. This bacterial infection primarily affects newborns typically between 3 to 14 days after birth, when unhygienic conditions and contaminated instruments are used during delivery and cord care. Symptoms include muscle stiffness and spasms, inability to feed, and respiratory distress. Despite being preventable through maternal immunization and antiseptic practices, neonatal tetanus remains a significant health challenge in many low-income countries.

Temporal Trend



Highlights

- Significant Decline in Cases: Neonatal tetanus cases have dramatically decreased from 26 in February 2014 to 2 in February 2024, showing successful disease control.
- Mortality Reduction: Deaths have become rare, with many months reporting zero fatalities since 2020, highlighting improved healthcare outcomes.
- Effective Public Health Interventions: The consistent reduction in cases and deaths suggests that vaccination and hygiene initiatives have been effective.
- Need for Continued Vigilance: Occasional cases continue to appear, underlining the importance of maintaining preventive measures and surveillance.

Cases Analysis

From 2014 to 2024, Chinese mainland reported a decreasing trend in neonatal tetanus cases. Initially, the number of monthly cases fluctuated, with a peak of 58 cases in September 2014. Over the years, a gradual decline is evident, with notably fewer cases per month from 2017 onwards. By 2023, the cases dwindled to single digits, often fewer than five, with no month exceeding six cases. This consistent reduction suggests effective intervention measures, such as improved maternal vaccination, antenatal care, and sterile birthing practices, significantly diminishing disease incidence.

Deaths Analysis

Neonatal tetanus deaths follow a similar decreasing trend, from 1-3 monthly deaths in 2014 down to none or very rare occurrences from 2020 onward. The fatality rate fluctuates, with no deaths reported in most months from 2016. This improvement implies successful enhancement in both preventive and clinical management aspects. While some months (e.g., 2015 October) reported higher mortality, the overall decline denotes long-term success in reducing neonatal mortality from tetanus.

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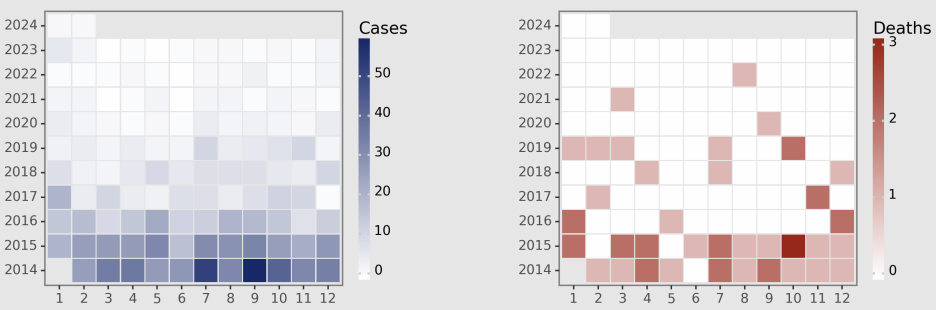

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Chinese Notifiable Infectious Diseases Surveillance Report

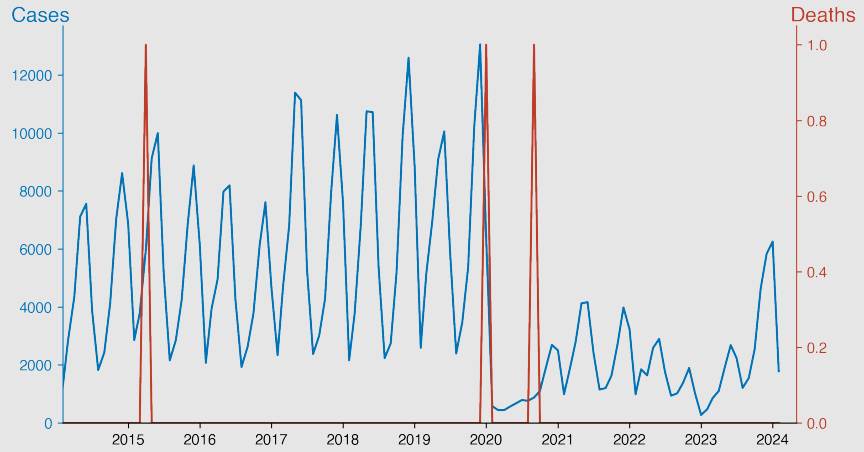
Scarlet fever

February 2024

Introduction

Scarlet fever is an infectious disease caused by the bacterium Streptococcus pyogenes, which often affects children. Characterized by a distinctive red rash that feels like sandpaper to the touch, it is typically accompanied by a high fever and sore throat. Other symptoms may include swollen glands, headache, and nausea. The illness spreads through respiratory droplets and is treatable with antibiotics. Left untreated, scarlet fever can lead to serious complications, but with prompt medical care, most individuals recover fully. Vaccinations for scarlet fever are not available, making good hygiene and early treatment essential.

Temporal Trend



Highlights

- Scarlet fever notably peaks during spring and early summer each year across the Chinese mainland with highest cases observed in May and June.
- The number of cases substantially dropped after a peak in December 2019 from 13053 to 580 in February 2020.
- Recent data suggests a steady increase again since March 2023, with January 2024 witnessing 6255 cases, highest since January 2020.
- Despite periodic surges, the disease's fatality rate remained almost nil, with only three deaths over a decade.

Cases Analysis

The data reveals a recurrent seasonal pattern in Scarlet fever cases in mainland China from 2014 to 2024, with a significant increase in the warmer months, from April to August, and a drop in the colder months. Monthly cases seem to increase each year up until 2020, where there is a significant decline, possibly due to interventions such as vaccinations or public health measures. Post-2020, the numbers began to rise again, yet not to the pre-2020 levels, suggesting a possibly successful long-term impact of such measures.

Deaths Analysis

In the ten-year span of data provided for Scarlet fever, there were only three reported deaths despite fluctuations and peaks in case numbers. The rarity of deaths indicates that, while infections could be widespread, the condition might be considerably non-fatal under the prevailing treatment and management protocols. The three deaths occurred in April 2015, January 2020, and September 2020, demonstrating no direct correlation between the number of cases and fatalities. The low mortality rate suggests effective clinical management of Scarlet fever in China during the reporting period.

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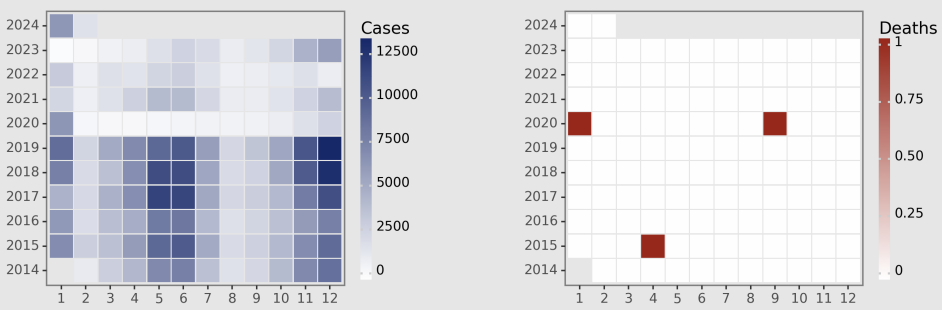

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Chinese Notifiable Infectious Diseases Surveillance Report

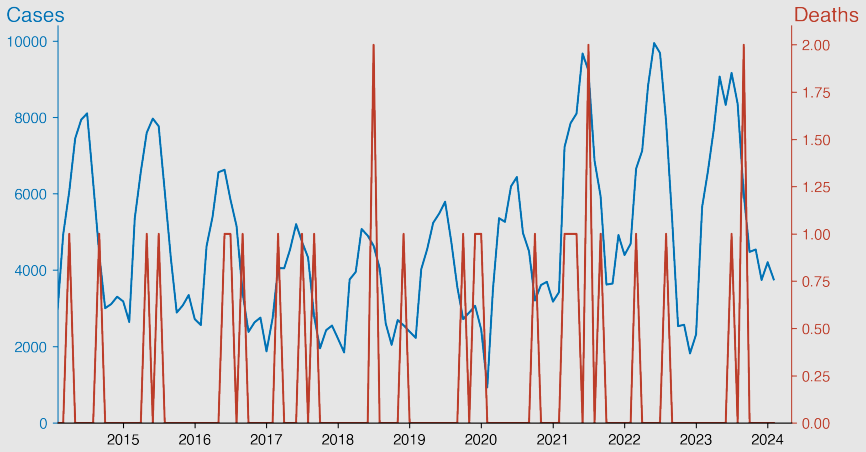
Brucellosis

February 2024

Introduction

Brucellosis, also known as Malta fever or undulant fever, is a zoonotic infection caused by the bacterial genus Brucella. It primarily affects various animals, including sheep, cattle, goats, pigs, and dogs. Humans can contract the disease through direct contact with infected animals, or by ingesting contaminated animal products, particularly unpasteurized milk or cheese. The bacterium induces a range of symptoms such as fever, sweats, malaise, anorexia, headache, muscle pain, and joint involvement. The infection can become chronic and may involve multiple organ systems, potentially leading to more severe complications if not appropriately treated.

Temporal Trend



Highlights

- Despite occasional lulls, the overall trend of Brucellosis appears to be an increase in case numbers annually, with significant peaking occurring typically in the mid-year months.
- The disease's mortality rate remains incredibly low, rarely resulting in more than one death per month, and often none at all. This could indicate an effective management of the infection.
- Interestingly in the latest data from 2024, the case numbers have shown a noticeable decline compared to the previous year for the same period (February).
- Despite the recent drop, continuous vigilance and Proactive measures are paramount as Brucellosis remains significantly prevalent in mainland China.

Cases Analysis

The data spanning from 2014 to 2024 shows a distinct annual pattern of fluctuating Brucellosis cases in mainland China. Incidences generally increase from February to peak in the summer months, primarily June and July, before declining towards the end of the year. The pattern suggests a possible link with heat-affected zoonotic transmission or seasonal variations in human activities that might expose individuals to Brucellosis. There are occasional exceptions, such as the sharp surge in cases in March 2021. Although no discernible long-term trend over the decade, an overall increase in cases seems to be evident in recent years (2022-2023).

Deaths Analysis

The number of deaths due to Brucellosis throughout the years remained relatively low despite the growth in the number of cases. From the data, 99.9% of cases resulted in recovery, emphasizing how rarely Brucellosis is fatal. However, 2021 represented the year with the most deaths, totaling at 5. It's worth noting that deaths didn't follow the seasonal pattern observed in cases, suggesting that the timing of fatalities doesn't necessarily correlate with peak case incidence. In conclusion, while Brucellosis posed a growing health challenge in terms of morbidity, it is infrequently lethal.

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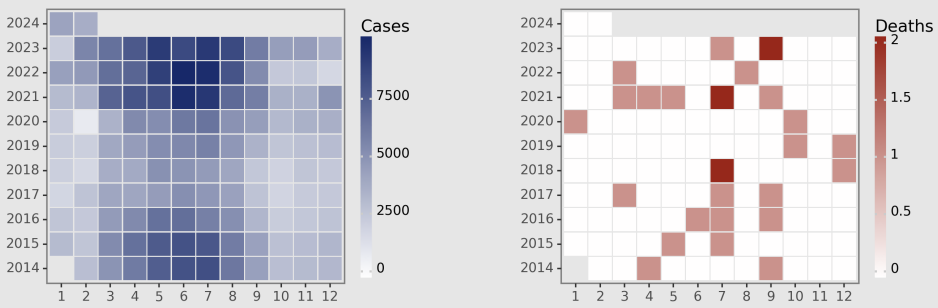

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Chinese Notifiable Infectious Diseases Surveillance Report

Gonorrhea

February 2024

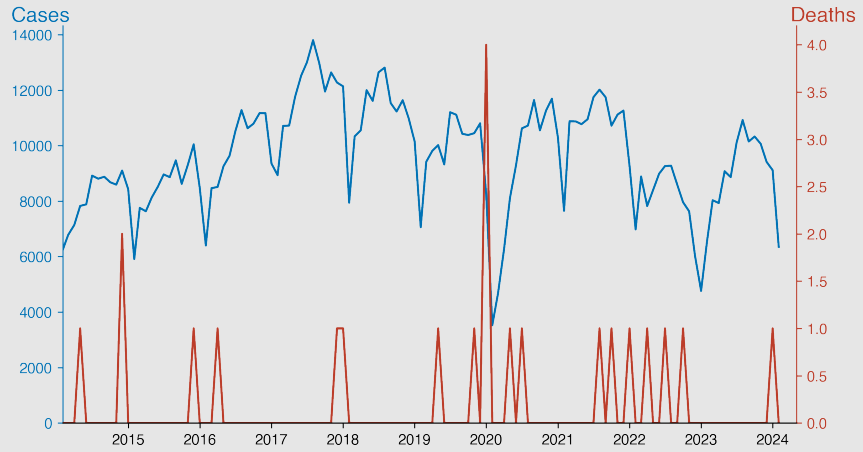
Introduction

Gonorrhea is a sexually transmitted infection caused by the bacterium Neisseria gonorrhoeae. It can affect both men and women, targeting moist and warm areas of the body including the urethra, throat, anus, and female reproductive tract. The infection is typically transmitted through sexual contact with an infected individual. Gonorrhea is characterized by symptoms such as painful urination, and abnormal genital discharge, though some infected individuals may remain asymptomatic. If left untreated, gonorrhea can lead to serious health complications, including infertility. It is usually treatable with antibiotics, though antibiotic resistance is a growing concern.

Highlights

- Gonorrhea cases fluctuated from 2014 to 2024 in the Chinese mainland, with the highest in August 2017 (13,803 cases).
- A general decline is observed post-2017, with the lowest in February 2024 (6,350 cases).
- Sporadic deaths occurred, peaking in January 2020 (four deaths), however, overall death rate is low.
- Despite the decline since 2017, Gonorrhea remains a significant public health issue in the Chinese mainland as of February 2024.

Temporal Trend



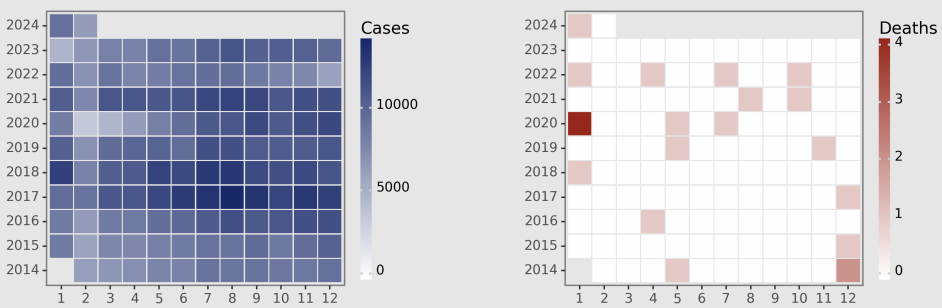
Cases Analysis

Over a decade (2014-2024), cases of gonorrhea in mainland China displayed a general upward trend, with a notable drop in 2020. The reported cases started at 6238 in February 2014 and peaked at 13803 in August 2017. After a gradual decrease in the following years, there was a significant plunge in cases in early 2020, possibly due to the onset of the COVID-19 pandemic and related social distancing measures. Post-2020, the numbers started to rise again, reaching levels comparable to the pre-2020 years by the end of 2024. Monthly fluctuations, potentially related seasonal variations, were also observed.

Deaths Analysis

Deaths from gonorrhea in Chinese mainland are extremely rare throughout the observed period, with only 14 deaths reported over ten years. The sporadic nature of these fatalities, with occasional occurrences in May 2014, December 2014, April 2016, December 2017, January and May 2018, November 2019, January 2020, May and July 2020, August and October 2021, January, April, and July 2022, and January 2024, suggests no clear temporal trend. The data indicate that while gonorrhea cases are relatively common, associated mortality is exceptionally infrequent.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

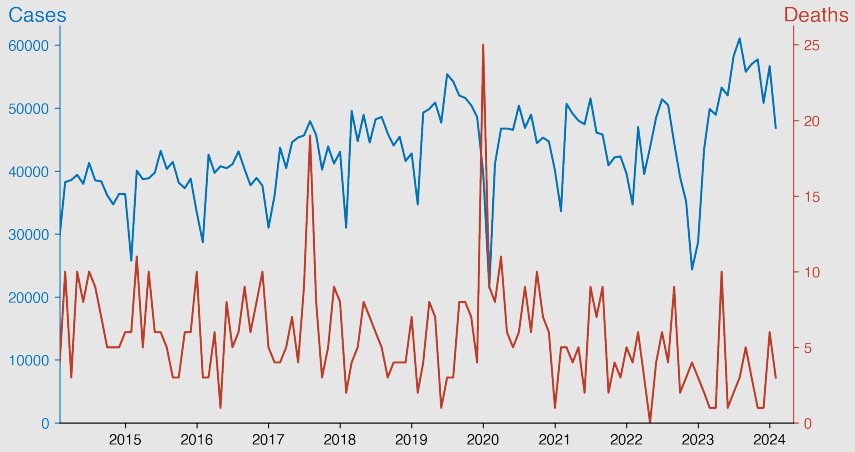
Syphilis

February 2024

Introduction

Syphilis is a sexually transmitted infection caused by the bacterium Treponema pallidum. Characterized by distinct stages, including primary, secondary, latent, and tertiary, it is spread through direct contact with a syphilitic sore during sexual activity or from mother to child during pregnancy. Initial symptoms may include a painless ulcer at the site of infection. If untreated, the disease can progress, leading to serious systemic effects and even death. Diagnosis is typically through blood tests, and treatment usually involves antibiotics like penicillin. Prevention includes safe sex practices and regular testing.

Temporal Trend



Highlights

1. Syphilis cases in Chinese mainland generally increase over time, peaking in the summer months, with the highest occurring in August 2023 (61068 cases).
2. Despite case fluctuations, related deaths remain relatively low, implying effective disease management or treatment.
3. As of 2024 February, the trajectory suggests an ongoing increase in cases but not proportional deaths.
4. With 46868 cases and 3 deaths in February 2024, prevention of transmission remains a substantial challenge.

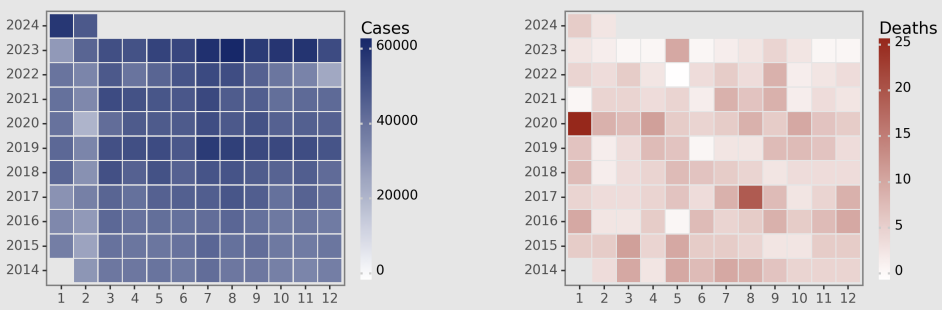
Cases Analysis

Since February 2014, Syphilis cases in Chinese mainland have shown a generally increasing trend, with occasional fluctuations. Notable peaks occur each year, typically in the middle and later months such as May, July, and August. The highest recorded case count appears in August 2023 at 61,068. A slight decline in cases can generally be observed towards the year-end. Furthermore, a significant dip occurred in February 2020, possibly due to the COVID-19 pandemic's impact on healthcare access and reporting. Lastly, case numbers have steadily increased from the start of 2023, indicating a potential worsening of the epidemic situation.

Deaths Analysis

Reported deaths due to syphilis fluctuated minimally between 2014 and 2024, with monthly deaths commonly in the single digits. A spike in January 2020 with 25 deaths is a clear outlier. Overall, deaths remained rare against the backdrop of increasing cases, suggesting improved treatment outcomes or underreporting of syphilis-associated mortality. The consistently low death rate throughout the decade indicates that while syphilis infections are prevalent, they are seldom directly fatal, possibly due to advances in detection and treatment protocols.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Leptospirosis

February 2024

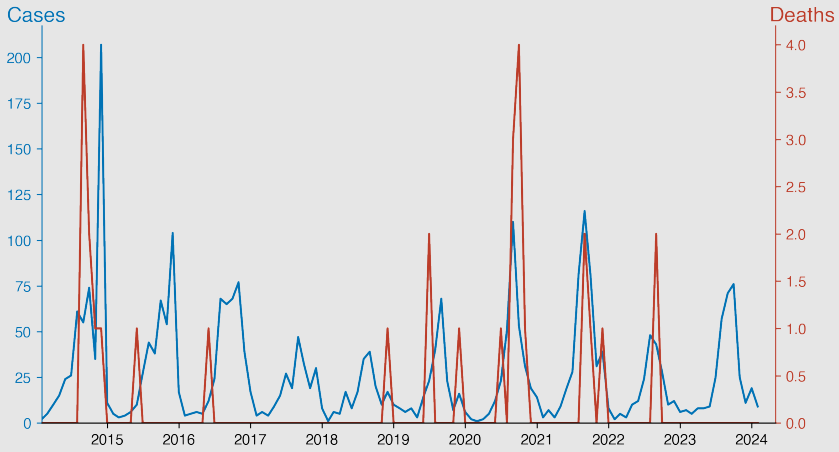
Introduction

Leptospirosis is a bacterial infection caused by the spirochete genus Leptospira. It is transmitted through the urine of infected animals, often in water or soil, and can penetrate the human body via skin abrasions or mucous membranes. Symptoms range from mild flu-like illness to severe manifestations, including Weil's disease, characterized by jaundice, kidney failure, and hemorrhagic manifestations. The infection is prevalent in tropical and subtropical regions, affecting those in close contact with animals or contaminated environments. Prevention involves controlling rodent populations, avoiding potentially contaminated water, and using protective

Highlights

- Leptospirosis displays a seasonal pattern in China, with cases peaking in late summer and early autumn suggesting environmental influences on disease transmission.
- A significant spike of 207 cases in December 2014 hasn't been replicated since, indicating an outbreak that was subsequently controlled.
- Whilst deaths are generally low, surges in September 2014, October 2020, and September 2021 indicate potential severe case clusters.
- Latest data from 2024 indicates continued endemic presence, with low and stable case counts and no deaths, suggesting effective disease control.

Temporal Trend



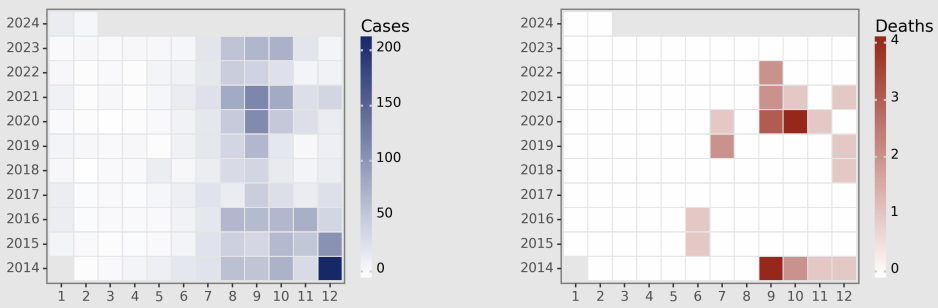
Cases Analysis

The data shows a distinct seasonality of leptospirosis cases in mainland China, with peaks being experienced towards the end of each year, particularly around August to October. This could be attributed to increased rainfall in these months, as leptospirosis is often associated with water and flooding. The year 2014 recorded the highest number of cases, with a significant spike in December. Over the subsequent years, the peak case numbers appear to have decreased, although there has been a slight rise in cases since 2020. This suggests interventions implemented may be having an impact, albeit gradually.

Deaths Analysis

Leptospirosis mortality followed an irregular pattern, with relatively few deaths reported annually. The total number of fatalities did not exceed four in any given month throughout the considered timeframe. Deaths are sporadically distributed with some temporal clusters, notably September 2020 and October of the same year, with three and four deaths, respectively. However, the overall case-fatality ratio appears low, suggesting either a mild disease presentation, effective clinical management, or a combination thereof within the Chinese mainland context.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Schistosomiasis

February 2024

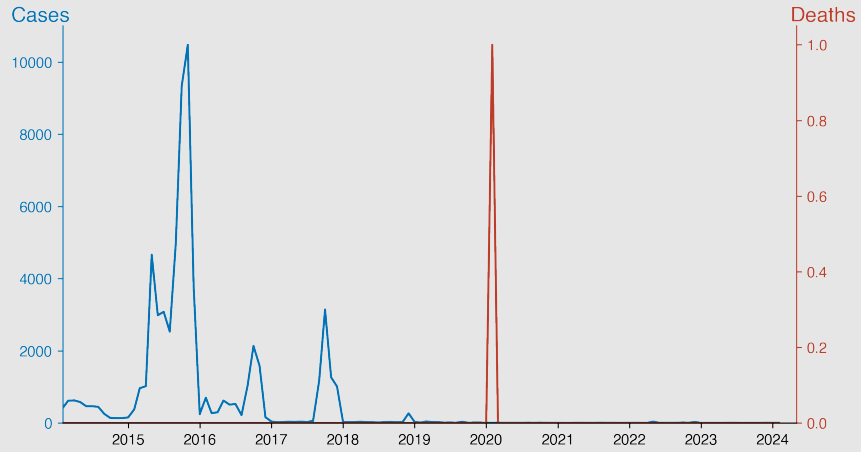
Introduction

Schistosomiasis, also known as bilharzia, is a disease caused by parasitic flatworms called schistosomes. The urinary or intestinal systems of humans can be affected. People become infected when they come into contact with freshwater that contains the larvae of the parasite, released by freshwater snails. The disease is found in tropical and subtropical regions, primarily in Africa, Asia, and South America. Chronic infection can lead to organ damage, and it's a significant cause of morbidity, affecting millions worldwide. Prevention focuses on reducing exposure to contaminated water and mass deworming with praziquantel.

Highlights

- Schistosomiasis cases in Chinese mainland have been generally decreasing over the past decade, with a steep drop observed from 2015 to 2017.
- There is also a consistent seasonal trend, with cases often peaking in the second half of each year (April–October) and remaining lower during the rest of the year.
- Mortality is extremely low, with only one death reported over the entire period, which occurred in February 2020.
- By February 2024, schistosomiasis cases remain relatively low, indicating successful control measures over the years.

Temporal Trend



Cases Analysis

Schistosomiasis cases in mainland China witnessed noticeable fluctuation between 2014 and 2024. The highest surge was recorded in 2015 with November having the highest number of cases (10,481) during this period. A broad general trend of reduction in cases can be seen post-2015, with sporadic, smaller increases in certain months. The year 2021 and 2022 saw resurgence in cases, with a notable spike in May 2022 (39 cases). However, these numbers are significantly lower than the peak in 2015. Overall, vigilant monitoring still appears necessary despite overall reduction in cases.

Deaths Analysis

Schistosomiasis-associated mortality remained consistently at zero from February 2014 until the singular death recorded in February 2020. This suggests a low fatality rate or effective management of severe cases in this period. The absence of further deaths post-2020 indicates continued successful medical intervention and possibly improved healthcare accessibility or public health campaigns leading to early detection and treatment. Despite occasional case spikes, the control of fatal outcomes appears to have been effectively sustained throughout the years.

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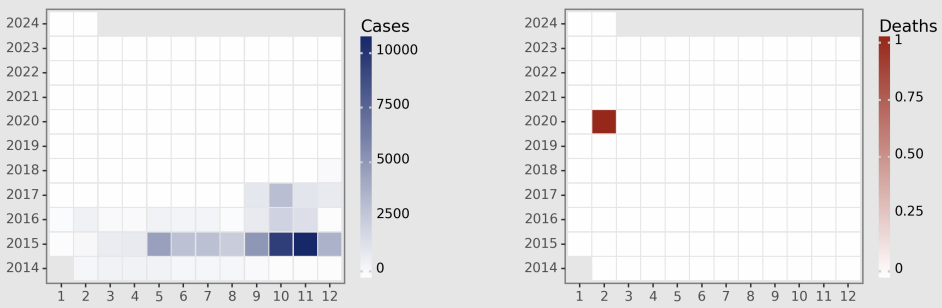

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Chinese Notifiable Infectious Diseases Surveillance Report

Malaria

February 2024

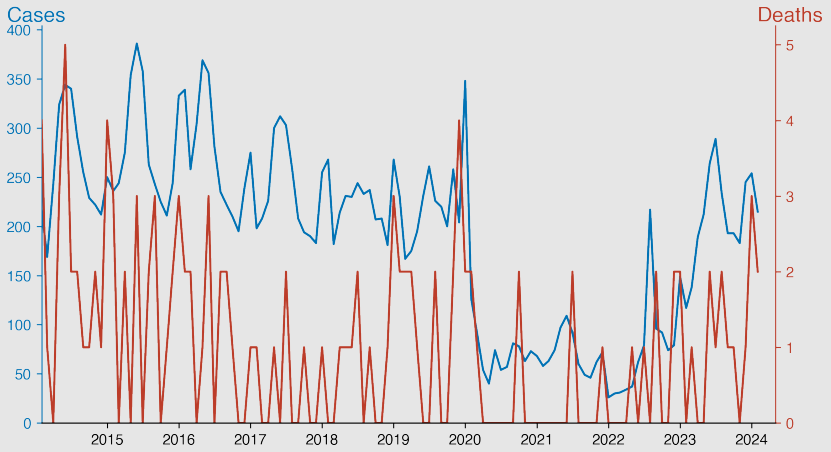
Introduction

Malaria is a life-threatening disease caused by parasites transmitted to humans through the bites of infected Anopheles mosquitoes. The most severe and prevalent form of malaria is caused by Plasmodium falciparum, but other species such as P. vivax also contribute to the disease burden. Symptoms include fever, headache, chills, and can lead to severe illness and death if untreated. Prevention and control measures include insecticide-treated mosquito nets, indoor residual spraying, and antimalarial drugs. Despite ongoing efforts, malaria remains a major public health challenge, particularly in tropical and subtropical regions.

Highlights

- Malaria in China has been experiencing a downward trend from 2014 to 2022, with a significant decrease seen particularly in 2020.
- However, a gradual resurgence in cases is observed from late 2022 and throughout 2023, into early 2024.
- The average number of deaths has remained relatively low, averaging one to three a month, signifying high disease management.
- As of February 2024, there were 215 cases and 2 deaths, showing that despite recent increases, the situation is far improved from a decade earlier.

Temporal Trend



Cases Analysis

Malaria cases in the Chinese mainland showed a fluctuating trend from 2014 to 2024. The highest number of cases was reported in June 2015 (386), while the lowest was seen in April 2020 (54). There's a noticeable overall decline in cases from 2014 to 2020, followed by a gradual increase from 2021 onward. Peaks are typically seen in the summer months, especially between May and August, indicating that malaria transmission might be seasonal in this region. However, year-to-year variability is present, indicating that other factors such as climate anomalies, control measures, and migration may be affecting malaria incidence.

Deaths Analysis

Malaria-related deaths in the same period display a downward trend with no fatalities in several months post-2019. The reduced lethality could be attributed to improved healthcare, effective control measures, and awareness. The initial yearly fatalities were low but sporadic with occasional peaks (June 2014). The post-2020 decline in cases likely contributed to reduced death incidence. The few reported deaths even with lower case counts may indicate persistent focal areas of transmission or challenges in access to treatment for specific populations.

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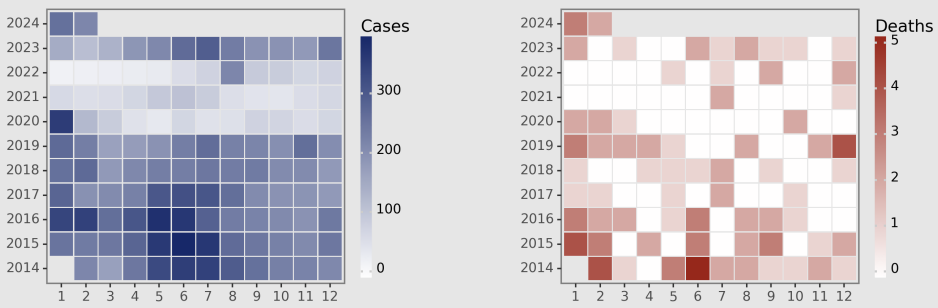

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Chinese Notifiable Infectious Diseases Surveillance Report

Human infection with H7N9 virus

February 2024

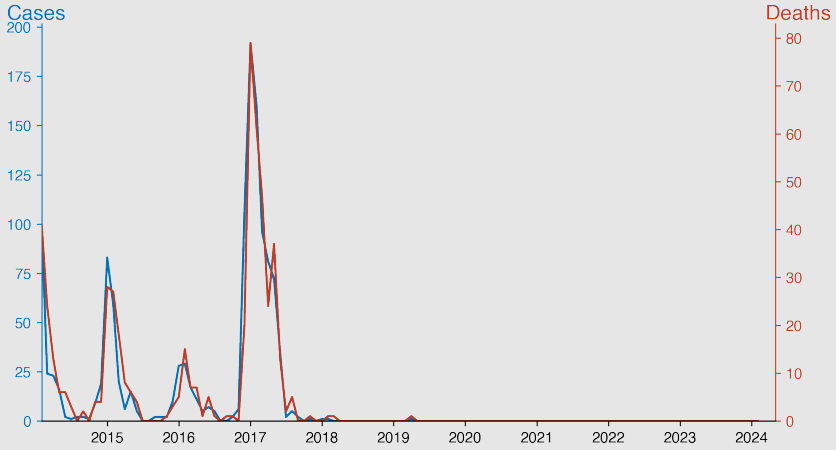
Introduction

Human infection with the H7N9 virus is a respiratory illness caused by a subtype of influenza A viruses. First reported in China in 2013, the majority of human cases have been linked to exposure to live poultry or contaminated environments. H7N9 infections can range from mild or asymptomatic to severe and even fatal. There is potential for human-to-human transmission, but it remains limited. The virus continues to pose a significant public health risk with pandemic potential, due to possible mutations that could facilitate easier transmission among humans. Vaccines and antiviral drugs are used for prevention and treatment respectively.

Highlights

- The H7N9 virus saw a peak of human infection cases (192) and deaths (79) in mainland China in January 2017.
- Category-wise, major outbreaks were observed in the early parts of the years (January-March) between 2014 to 2017, with a concerning mortality rate.
- From January 2018 onwards, there has been a significant decline in both new cases and consequent deaths, virtually dropping to zero.
- As of February 2024, there have been no new reported cases or deaths from the H7N9 virus. This may suggest either effective containment measures or a return to the virus's primarily avian transmission, with limited human impact.

Temporal Trend



Cases Analysis

H7N9 virus infections showed a discernible seasonal pattern, with significant spikes in cases documented in early months of each year, particularly between January and April from 2014 to 2017. The highest case count was recorded in January 2017 with 192 cases. From 2018 onwards, human infections became sporadic, then ceased altogether from July 2019. It is worth noting the sharp decline in incidences post-2017 indicating effective control measures or changes in virus prevalence or transmission.

Deaths Analysis

The fatality count peaked concurrently with case surges, highlighting the 2017 spike with 79 deaths in January. The Case Fatality Rate (CFR) fluctuates, with several months like 2014 March and 2017 August showing 100% fatality. Deaths ceased post-April 2019, which mirrors the case pattern. The absence of deaths from May 2019 onwards could align with the hypothesis of effective containment strategies or lack of detection/reporting, assuming no underreporting of fatalities.

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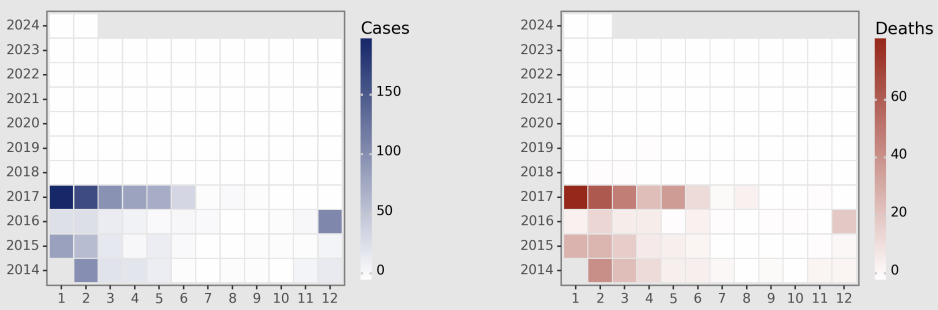

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Chinese Notifiable Infectious Diseases Surveillance Report

Monkey pox

February 2024

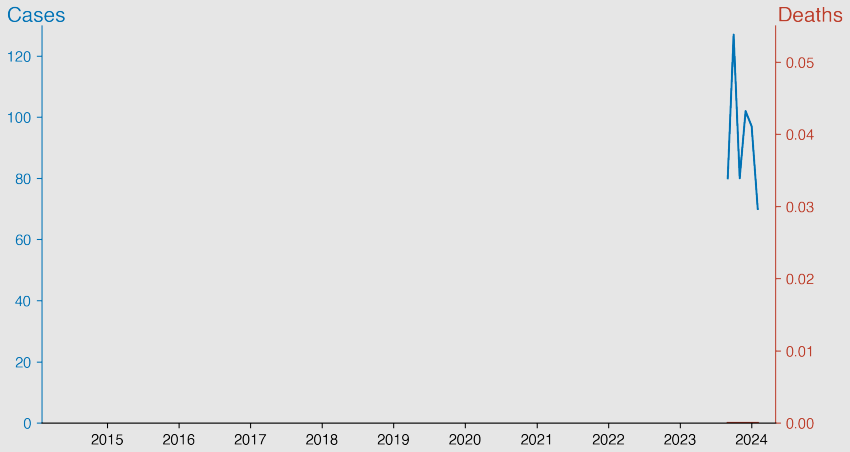
Introduction

Monkeypox is a zoonotic infectious disease caused by the monkeypox virus. It belongs to the Orthopoxvirus genus, which also includes the variola virus responsible for smallpox. The disease originates in wild animals like rodents and primates and can transmit to humans. Clinical presentations are similar to smallpox, featuring a fever, headache, muscle aches, and a distinctive bumpy rash. The infection typically resolves on its own, but support and treatment can ease symptoms. Monkeypox is primarily found in Central and West Africa, with occasional outbreaks in other regions. Vaccination against smallpox also offers some protection against monkeypox.

Highlights

1. There's a steady presence of Monkeypox in the Chinese mainland with cases being reported every month since September 2023.
2. The peak occurred in October 2023 with 127 reported cases before subsequently declining.
3. Cases have decreased from January 2024 to February 2024, showing a potential decreasing trend.
4. Fortunately, there have been no recorded deaths despite the continued presence of the disease, indicating either low fatality rates or effective treatments.

Temporal Trend



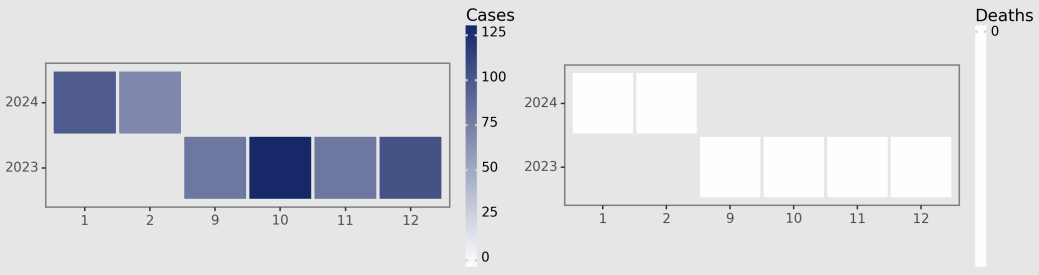
Cases Analysis

The data indicates a fluctuating trend of Monkeypox cases in Chinese mainland, with an initial rise from 80 cases in September 2023 to 127 cases in October. A subsequent drop to 80 cases in November suggests an intermittent decline or effective response. December 2023 saw a minor resurgence to 102 cases, hinting at ongoing transmission. The slight decrease in January and February 2024, to 97 and 70 cases respectively, implies a possible gradual control of the outbreak. This trend could be attributed to response measures, natural disease progression, or changes in public behavior.

Deaths Analysis

The reported Monkeypox data for the Chinese mainland over the six-month period from September 2023 to February 2024 show zero fatalities. This could reflect either or a combination of the following: the efficacy of the healthcare response, the virulence strain in circulation being less lethal, or successful containment measures limiting spread to the most vulnerable populations. It's imperative that further analysis is conducted to confirm these findings, considering the potential for underreporting or misclassification of Monkeypox-related deaths.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Influenza

February 2024

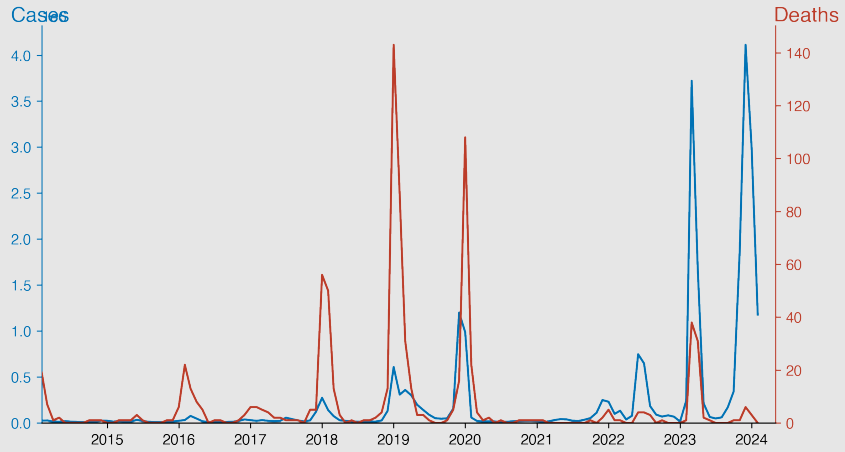
Introduction

Influenza, or the flu, is a contagious respiratory illness caused by influenza viruses. It affects the nose, throat, and occasionally the lungs. It spreads through airborne droplets from coughs or sneezes of infected individuals, leading to mild to severe disease. Severe cases can cause fatal complications. The disease intensity varies seasonally, with vaccines designed to mitigate its effects. Symptoms include fever, cough, sore throat, and fatigue. Antiviral medications can treat severe cases or those at risk of complications.

Highlights

- Major influenza outbreak observed in March 2023 with over 3.7 million cases, followed by 1.7 million in April 2023.
- High case numbers persisted in November and December 2023, indicating continuous disease transmission.
- By February 2024, substantial case decrease observed (1,179,029 cases), with zero influenza-associated deaths, hinting improved control measures.
- Clear seasonal influenza pattern: peaks during winter months, with record numbers in January 2019 and December 2023.

Temporal Trend



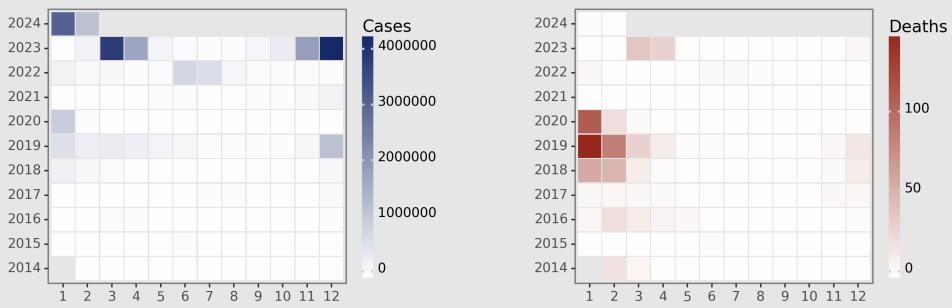
Cases Analysis

The data demonstrate a seasonal pattern with peaks in cases typically during the early months of each year, indicating increased influenza activity in the winter season. The most notable surge occurred in 2023, with a record 3,721,370 cases in March and 4,113,326 in December. Additionally, extraordinary high caseloads occurred in January and November 2024, suggesting a possible major epidemic or changes in reporting practices. Conversely, summer months usually exhibited significantly lower case counts, although the summer of 2022 was an outlier with an exceptionally high number of cases in June and July.

Deaths Analysis

Despite the large number of influenza cases, the overall deaths remained relatively low. The highest death count was recorded in January 2019 with 143 deaths. Collectively, the death rate appeared to rise during seasons with higher reported influenza cases, specifically around winter months. However, the mortality rate remained relatively stable and did not exceed 0.02% in any given month. This suggests that while the transmissibility of the disease might be high, its fatality rate is considerably low in the context of the Chinese mainland.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Mumps

February 2024

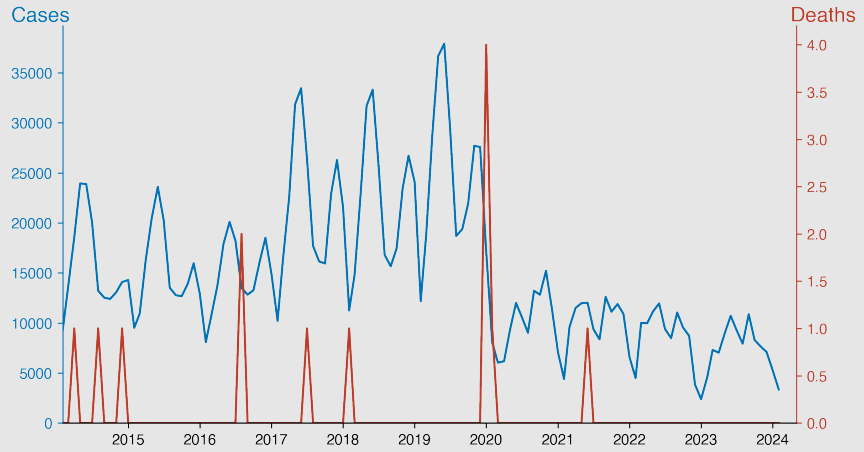
Introduction

Mumps is a contagious viral infection characterized by swelling of the parotid glands, which are the major salivary glands located near the ears. Common symptoms include fever, muscle pain, headache, and fatigue. The virus spreads through respiratory droplets or direct contact with an infected individual. Historically common among children, the incidence of mumps has markedly decreased with the advent of the measles, mumps, and rubella (MMR) vaccine. Complications can include meningitis, encephalitis, orchitis, and hearing loss. Outbreaks can still occur, especially in settings with close contact, like schools or colleges.

Highlights

- There's been a significant decrease in mumps cases in mainland China from 2014 to 2024, with peak cases dropping from around 33,000 in June 2018 to just over 10,000 in June 2023.
- Despite fluctuations, a downward trend appears in recent years, as February 2024 only recorded 3344 cases.
- Fatalities have always been extremely low, with the highest recorded being 4 deaths in January 2020.
- The disease shows a clear seasonal pattern, with more cases appearing in the spring and summer months compared to fall and winter.

Temporal Trend



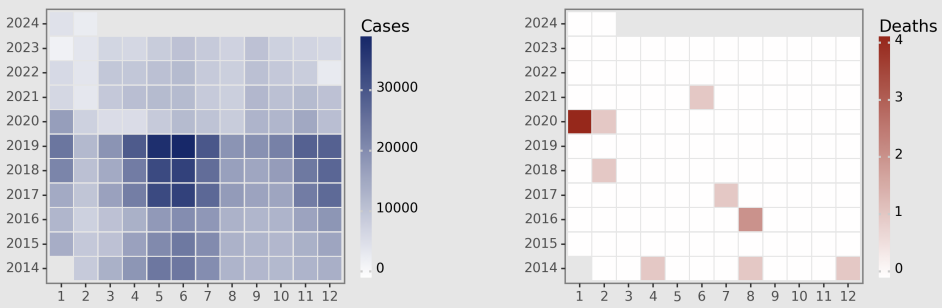
Cases Analysis

Analyzing the mumps cases in Chinese mainland from February 2014 through February 2024, a clear seasonal pattern emerges with peaks often occurring in the spring and early summer months, as shown by spikes in April-June each year. The highest number of cases were reported in June 2019 with 37,913 cases. The years 2017 to 2019 witnessed a gradual increase in reported cases, suggesting a potential worsening of the situation. Notably, there was a marked decrease in cases beginning in 2020, continuing to 2024. This decline could be associated with improved vaccination efforts or social and environmental changes, such as those prompted by the COVID-19 pandemic.

Deaths Analysis

Over the same period, mumps-associated deaths were incredibly rare, with only 7 reported fatalities out of hundreds of thousands of cases, resulting in a very low case-fatality ratio. Deaths sporadically occurred in April 2014, August 2014, December 2014, August 2016, July 2017, February 2018, and June 2021, with no clear seasonal pattern or trend over time. The absence of mumps-related deaths after June 2021 up to February 2024 suggests that while mumps remains a public health concern, the risk of death from the disease is extremely minimal or that the health system has become more effective in managing mumps cases to prevent fatalities.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Rubella

February 2024

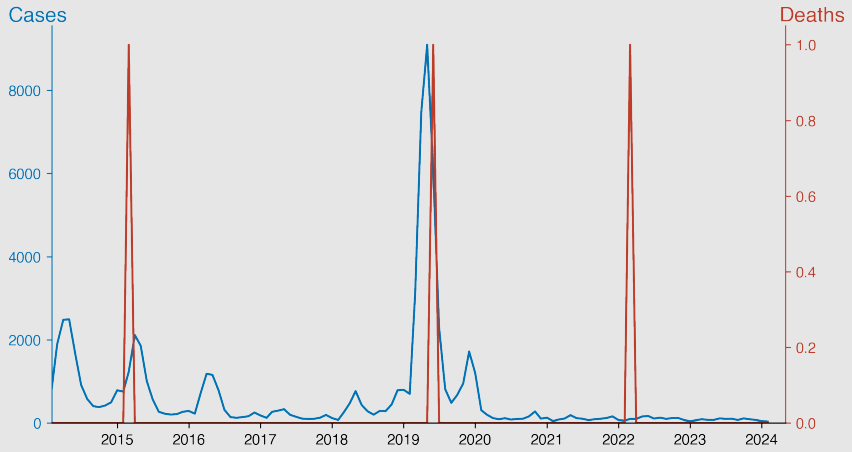
Introduction

Rubella, also known as German measles, is a contagious viral infection with a notable red rash. It is mild for most but poses severe risks to pregnant women, potentially causing congenital defects in the fetus. Transmitted through respiratory droplets, its prevention is effectively managed through the MMR vaccine. Global health efforts prioritize combating rubella due to its potential impact on pregnancy.

Highlights

- There is a noticeable decline in rubella cases on the Chinese mainland from 2014, with numbers peaking again drastically in 2019 but falling once more from 2020 onwards.
- Monthly cases in recent years (2022-2024) have been maintaining at relatively low levels, generally under 200 cases per month.
- Despite the fluctuation in cases, the fatality rate remains extremely low with only 3 deaths reported over the entire period.
- As of February 2024, the situation appears controlled, with only 33 cases and no deaths reported for that month.

Temporal Trend



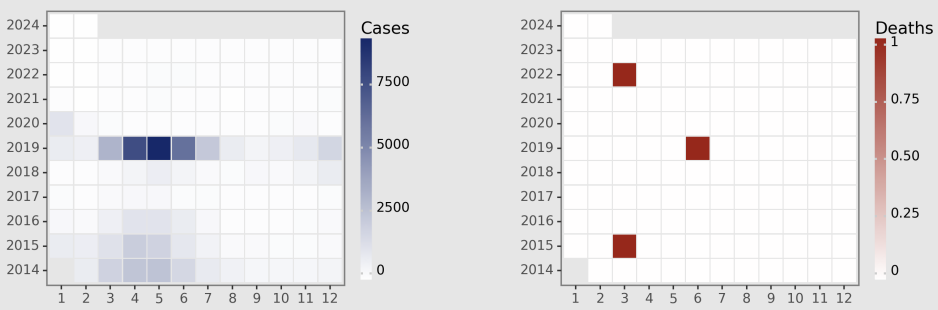
Cases Analysis

Rubella cases in Mainland China fluctuated with a notable peak in mid-2019, specifically from April to June, reaching the highest recorded number of 9,095 cases in May 2019. Overall, there is an evident seasonal pattern with cases increasing in spring and early summer. After 2019, a significant drop in the number of cases is observed, particularly from 2020 onwards, with cases mostly not exceeding a few hundred each month. The low case numbers post-2020 could suggest effective public health interventions, such as vaccination campaigns, or potential underreporting due to overlapping healthcare focus on the COVID-19 pandemic.

Deaths Analysis

Rubella is generally a mild disease, and this is supported by the mortality data, which show only two reported deaths within the studied timeframe, despite multiple thousands of cases. Both deaths occurred in the month of March, one in 2015 and another in 2022, suggesting no clear temporal mortality pattern. The near-zero mortality rate observed may indicate effective case management and a low rate of complications, such as Congenital Rubella Syndrome, which can result from maternal infection during pregnancy. It also underscores the relatively low lethality of the rubella virus among the general population.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

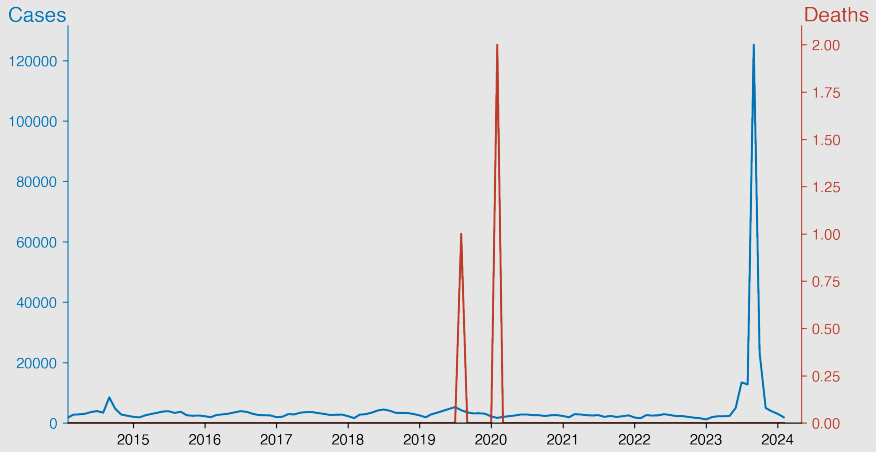
Acute hemorrhagic conjunctivitis

February 2024

Introduction

Acute hemorrhagic conjunctivitis (AHC) is a rapidly progressing and highly contagious viral infection of the conjunctiva, the membrane lining the eye and eyelids. Typically caused by enterovirus 70 and coxsackievirus A24, the disease is characterized by sudden onset of pain, redness, swelling, tearing, and hemorrhage under the conjunctiva. Patients may also experience blurred vision and light sensitivity. Outbreaks often occur in crowded urban areas and can spread quickly, especially in tropical and subtropical climates. Despite its alarming presentation, the infection is usually self-limiting, resolving within one to two weeks without causing long-term ocular damage.

Temporal Trend



Highlights

- Cases of Acute hemorrhagic conjunctivitis in China show seasonal peaks, usually in warmer months. However, a significant outbreak occurred in September 2023 with 125,264 cases.
- While case trends typically rise from February to September, 2023 witnessed an atypical September spike, suggesting outlier transmission or changes in reporting.
- The disease had mostly non-fatal outcomes except for isolated cases in 2019 and 2020.
- A decline followed the 2023 peak, suggesting outbreak control with a decrease to 1,856 cases by February 2024.

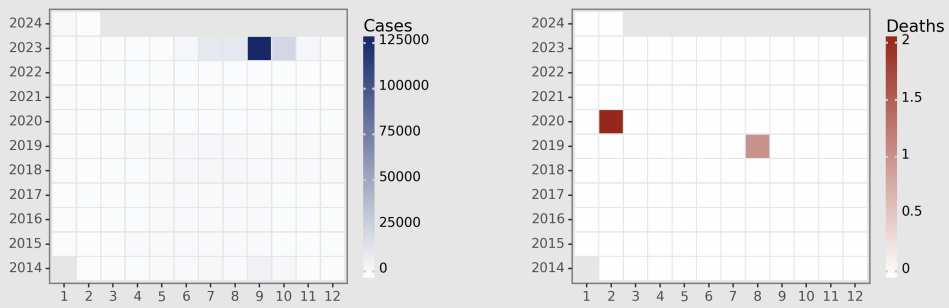
Cases Analysis

Acute hemorrhagic conjunctivitis (AHC) cases from February 2014 to February 2024 show a clear seasonal pattern with peaks typically in summer months, indicating potential climatic and environmental influences. The data reveals a dramatic spike in cases beginning in June 2023, reaching an unprecedented peak in September of the same year with 125,264 cases before declining. This surge could indicate an outbreak possibly due to a novel strain, changes in vector dynamics, or a lapse in public health measures. Prior to this, cases remained under 5,000 per month, displaying relatively consistent endemo-epidemic patterns across years.

Deaths Analysis

Over the same ten-year period, a significant contrast in the number of deaths compared to the case incidence was noticed, with only 3 deaths in total reported, irrespective of the increasing trend of incidences. The first death recorded was in August 2019, followed by two deaths in February 2020. Subsequently, the mortality rate remained at zero despite the unprecedented spike in cases observed in 2023. The analysis indicates the high survivability of Acute hemorrhagic conjunctivitis with effective medical intervention, despite the increasing prevalence in Chinese mainland.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

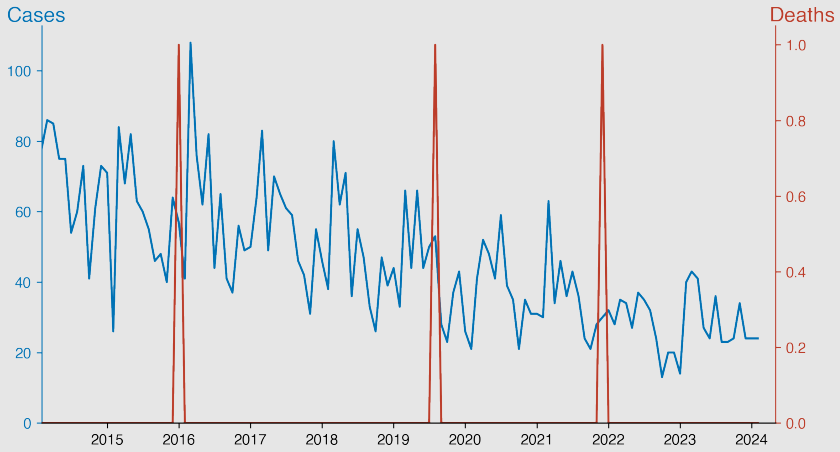
Leprosy

February 2024

Introduction

Leprosy, also known as Hansen's disease, is a chronic infectious disease caused by the bacterium Mycobacterium leprae. It primarily affects the skin, nerves, and mucous membranes and is characterized by skin lesions and progressive neurological damage. Leprosy is curable with a course of multidrug therapy, is not highly infectious, and transmission likely involves close and frequent contacts with untreated cases. Despite being one of the oldest diseases known to humanity, leprosy remains a concern in some countries, necessitating continued public health efforts for early diagnosis and treatment to prevent disabilities and transmission.

Temporal Trend



Highlights

- There has been a declining trend in the number of new leprosy cases reported monthly in the Chinese mainland from 2014 to 2024, indicating success of control measures.
- Despite the occasional spike, the average monthly case count drops from 70 in 2014 to 24 in 2024, suggesting effective progress in disease reduction.
- Leprosy-related deaths are extremely infrequent, with only three instances reported over the ten-year period (2016, 2019, 2021), suggesting that the disease is generally well-managed.
- As of February 2024, there were 24 newly reported cases, consistent with the reduced case rates observed in recent years, and no leprosy-related deaths.

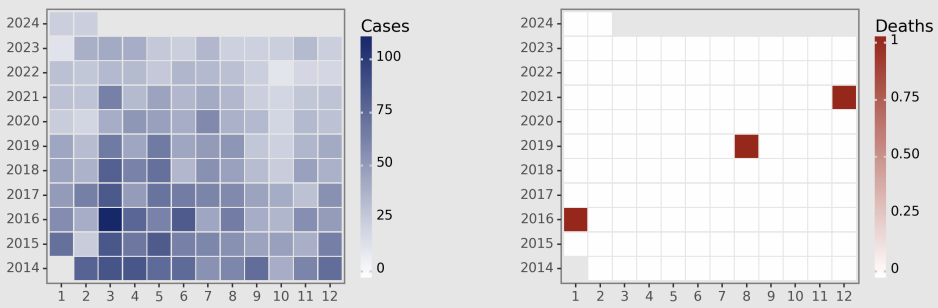
Cases Analysis

Over the 10-year period from 2014 to 2024, there is evidence of an overall downward trend in the number of reported cases of leprosy in mainland China. The highest number of cases was reported in March 2016, with 108 cases. Afterward, the reported cases decreased progressively, with a few exceptions. By 2024, the average monthly case count reduced to the mid-20s, indicating a substantial drop over the decade. The cyclical pattern suggests epidemic peaks during the early months of the year, followed by lower case numbers towards the year-end.

Deaths Analysis

The leprosy death toll in Chinese mainland over the reported period is notably low, with only two registered deaths despite several years of case reports. The first recorded death occurred in January 2016, followed by another isolated incident in December 2021. Given the prolonged periods without fatalities and consistent case reporting, this indicates effective clinical management and treatment of leprosy cases. The rare incidence of deaths underscores the relative success in mortality reduction related to leprosy in the region.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

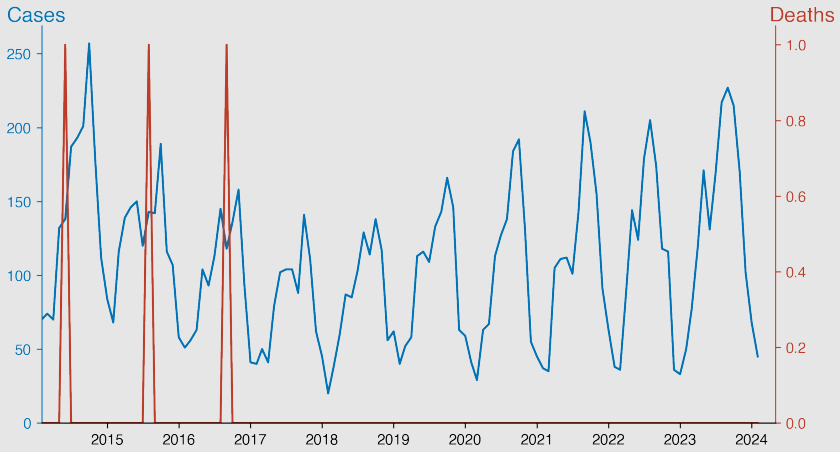
Typhus

February 2024

Introduction

Typhus is a group of infectious diseases caused by Rickettsia bacteria, transmitted by lice, fleas, mites, or chiggers. The most common forms are epidemic typhus, spread by body lice and carrying a high mortality rate if untreated, and endemic (murine) typhus, transmitted by fleas from rodents. Symptoms often include fever, headache, rash, and muscle pain. Typhus can be severe but is treatable with antibiotics. Preventative measures focus on sanitation, reducing contact with vectors, and treating infestations. Vaccines are not widely available, making vector control crucial in managing typhus outbreaks.

Temporal Trend



Highlights

- Typhus cases in China show a seasonal trend, increasing from spring (April/May) and peaking towards late summer and early autumn (August to October) each year.
- The annual peak cases fluctuated over the years, with the highest registered in September 2023 with 227 cases.
- Total number of reported deaths due to Typhus has been extremely low, with only three recorded fatalities over a span of ten years from 2014 to 2024.
- The most recent data from February 2024 suggests a low Typhus case rate, consistent with cyclical patterns observed in previous years.

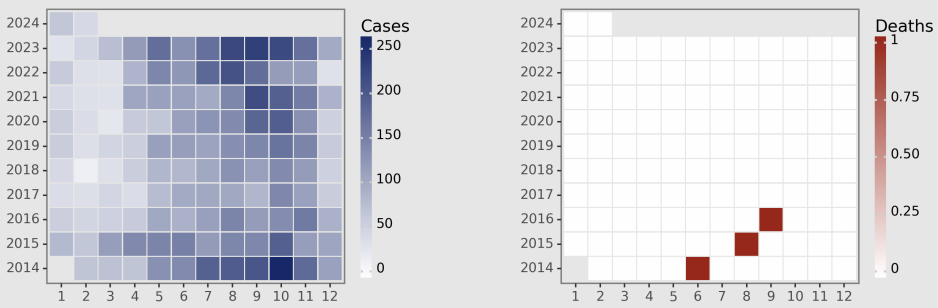
Cases Analysis

An examination of typhus incidence on the Chinese mainland reveals seasonal fluctuations and an overall stable pattern of cases from 2014 to 2024. Initial data from 2014 starts with a lower number of 70 cases in February, peaking during the summer months (June-August) and then gradually decreasing towards winter. This seasonal trend is consistent each year, with a notable peak of 227 cases in September 2023. The data do not indicate any significant long-term increase or decrease in the annual number of cases. Occasional fluctuations, such as dips in February 2018 (20 cases) and spikes like August 2023 (217 cases), appear to be within expected variance.

Deaths Analysis

Typhus in the Chinese mainland appears to have a low mortality rate, with only three reported deaths over the examined period—one each in June 2014, August 2015, and September 2016. The sporadic nature of deaths, in contrast to the number of cases, suggests that Typhus, while capable of causing severe illness, has been largely non-fatal, possibly due to effective clinical management. This trend also indicates that the pathogenicity of the circulating strains might be relatively low, or that access to healthcare is sufficient to prevent most fatalities.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

Kala azar

February 2024

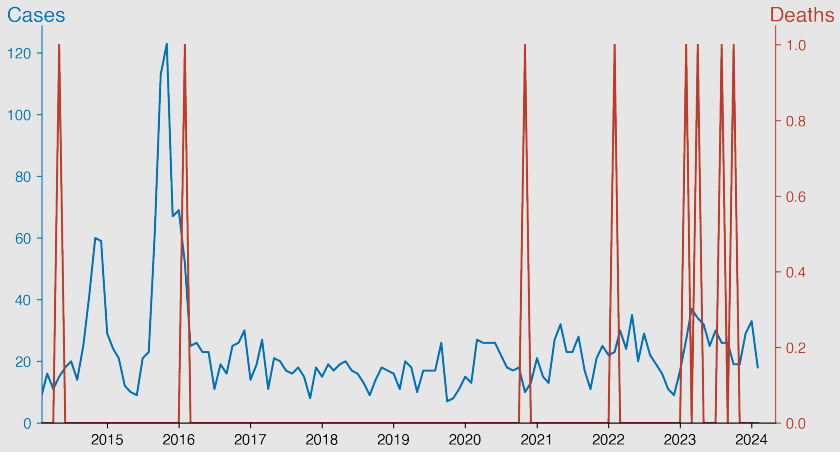
Introduction

Kala-azar, also known as visceral leishmaniasis, is a parasitic disease caused by the Leishmania donovani complex transmitted by the bite of infected female phlebotomine sandflies. It primarily affects the visceral organs, especially the spleen, liver, and bone marrow. Symptoms include fever, weight loss, anemia, and swelling of the liver and spleen. If left untreated, it can be fatal due to complications such as secondary infections. This disease is endemic in tropical and subtropical regions, with cases reported in parts of Asia, East Africa, South America, and the Mediterranean basin. Control measures include vector management, early diagnosis, and treatment.

Highlights

- Over the past decade (2014-2024), Kala azar cases in the Chinese mainland show no distinct pattern or significant trend, fluctuating throughout the years. Notably, each year shows a slight increase in cases from September to November.
- The disease's mortality rate is low, with six recorded deaths in comparison to its incidence.
- The highest case numbers were observed in 2015, particularly October and November. Since then, case numbers significantly decreased.
- Recent data (February 2024) shows a drop in cases (18) with no reported deaths, indicating the disease is currently under relative control.

Temporal Trend



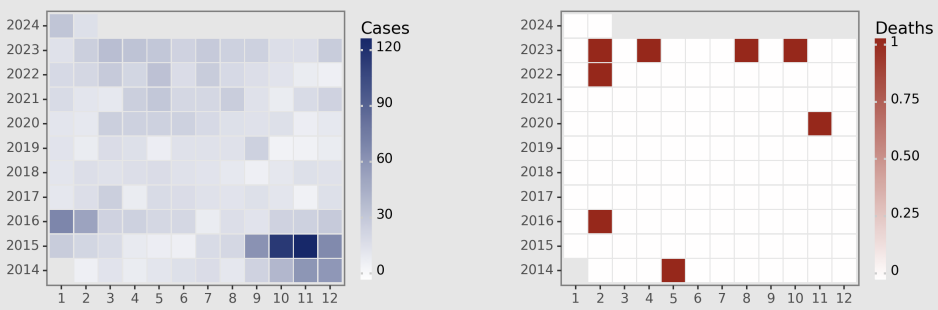
Cases Analysis

Kala azar cases on the Chinese mainland display a cyclical pattern peaking annually towards the end of the year, notably in October-November 2015 with over 100 cases. A gradual decline in annual peak case numbers is observed post-2015. Early months each year consistently report fewer cases. Noticeably, in February 2023 and April 2023, there's an abrupt increase in cases to mid-30s, deviating from the overall decreasing trend observed since 2015. This increase merits further surveillance and investigation to ascertain risk factors and control measures.

Deaths Analysis

Kala azar had a low mortality rate on the Chinese mainland from 2014 to 2024, with only five reported deaths over the ten-year period. Interestingly, each death occurred in different years (2014, 2016, 2020, 2022, 2023), depicting that while cases might fluctuate, fatalities remain sparse, implying either relatively effective treatment protocols or case management strategies minimizing deaths or that the strands circulating boasted lower lethality.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

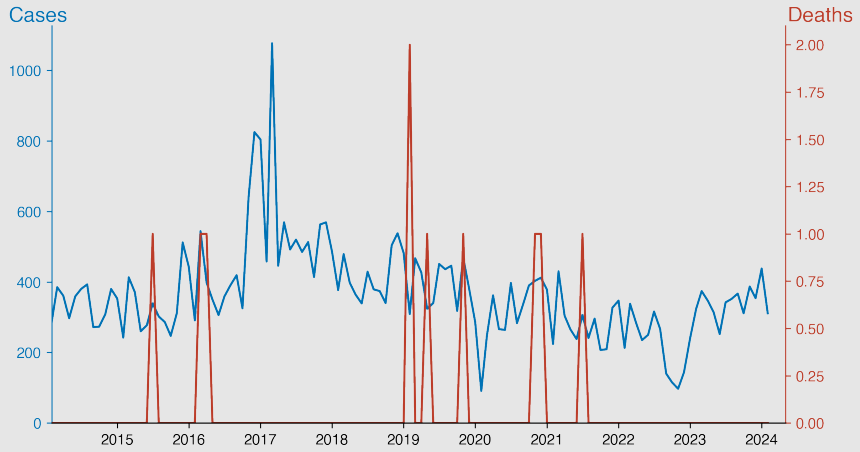
Echinococcosis

February 2024

Introduction

Echinococcosis, also known as hydatid disease, is a zoonotic infection caused by tapeworms of the genus Echinococcus. Humans become accidental hosts through ingestion of eggs found in the feces of infected definitive hosts, typically dogs and other canines. Larvae then develop into cysts in organs such as the liver and lungs. The two main types of the disease are cystic echinococcosis (CE) caused by Echinococcus granulosus and alveolar echinococcosis (AE) caused by Echinococcus multilocularis. It is a global public health concern, especially in pastoral communities and areas where hygiene practices are inadequate.

Temporal Trend



Highlights

- Echinococcosis cases in mainland China peaked significantly in March 2017 at 1,077 cases, exhibiting a fluctuating trend over the 10-year span.
- A notable reduction in case numbers began in 2020, with the monthly figures consistently lower thereafter compared to previous years.
- Fatalities remained exceptionally low despite case count variations, with only 6 deaths recorded between 2014-2024.
- Seasonal trends suggest higher cases in warmer months from March to July; however, this pattern has diminished in recent years.

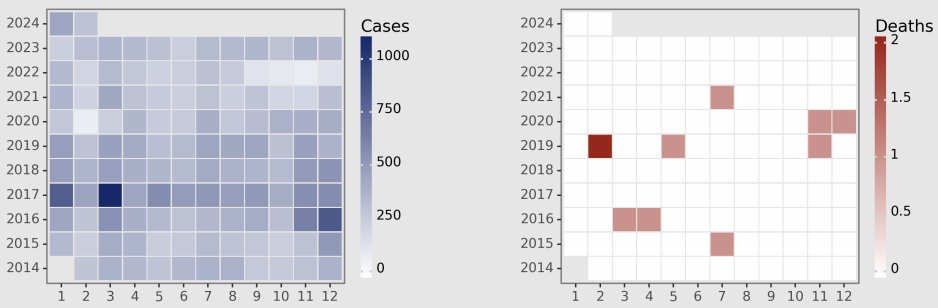
Cases Analysis

Echinococcosis cases in the Chinese mainland saw several fluctuations over the studied timeframe. The number of reported cases annually has been somewhat inconsistent, yet displaying an overall upward trend till 2017 with a peak of 1077 cases reported in March 2017. This was followed by a general decrease after 2017, which might be attributed to increased awareness, prevention measures or better treatment availability. The lowest number of cases recorded was 91 in February 2020, potentially indicating successful control measures.

Deaths Analysis

Deaths due to Echinococcosis were rare between 2014 and 2024, with a total of six recorded deaths. The first death was reported in July 2015, with subsequent fatalities occurring irregularly in single units. No pattern in terms of seasonality or increase over time is discernible for the reported deaths. The relatively low mortality count suggests either a low fatality rate for the condition, potentially effective clinical management, or underreporting. Notably, February 2019 saw the highest mortality (2 deaths), an anomaly within the dataset.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

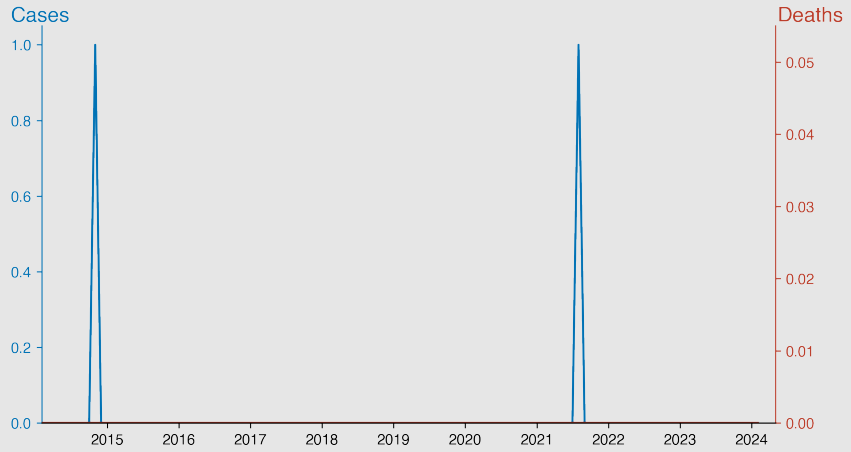
Filariasis

February 2024

Introduction

Filariasis is an infectious tropical disease caused by filarial worms, which are transmitted to humans through the bites of infected mosquitoes. The worms primarily infect the lymphatic system, leading to lymphedema and sometimes elephantiasis—extensive swelling of the limbs and genitals. The disease is categorized into two main types: Lymphatic Filariasis, caused by worms like Wuchereria bancrofti, Brugia malayi, and Brugia timori, and Onchocerciasis, or River Blindness, caused by Onchocerca volvulus. Chronic infection can lead to severe disability and social stigma, significantly impacting the quality of life and economic productivity in affected communities.

Temporal Trend



Highlights

1. Filariasis remains a low-incidence disease in mainland China over the decade, with no report of fatalities.
2. Only two cases were reported during the entire period - one in November 2014 and the other in August 2021, suggesting a sporadic occurrence.
3. Since August 2021, there have been no new cases, indicating a downwards trend or possibly effective disease control measures.
4. As of February 2024, the situation remains stable with no new cases of Filariasis for the past 2.5 years.

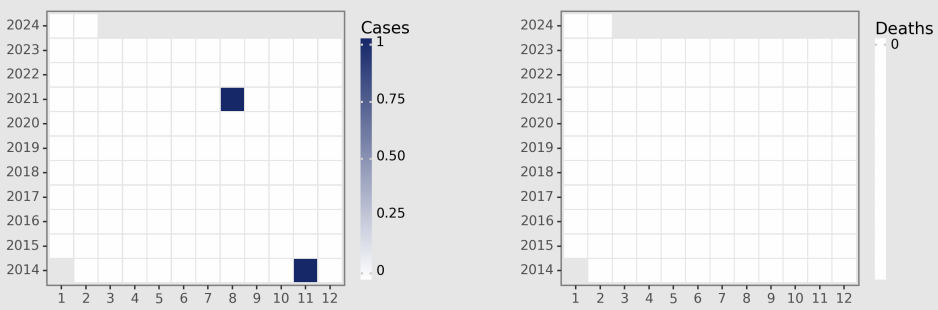
Cases Analysis

From the given data, it is evident that the incidence of Filariasis in Chinese mainland from February 2014 to February 2024 is exceedingly low, with only two reported cases and zero reported cases in all other months. Both cases occurred in separate, distinct years: one in November 2014 and another in August 2021. The nearly seven-year gap between these two cases suggests a sporadic appearance without any sign of an outbreak or sustained transmission within the observed period. This infrequency indicates effective control measures or potential underreporting.Word count: 100 words

Deaths Analysis

Remarkably, throughout the same ten-year period, no deaths were reported due to Filariasis in mainland China, despite the two identified cases. The disease is primarily associated with chronic symptoms like lymphedema and elephantiasis rather than direct mortality, but its absence also suggests effective disease management and possibly successful treatment of the reported instances in the region.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

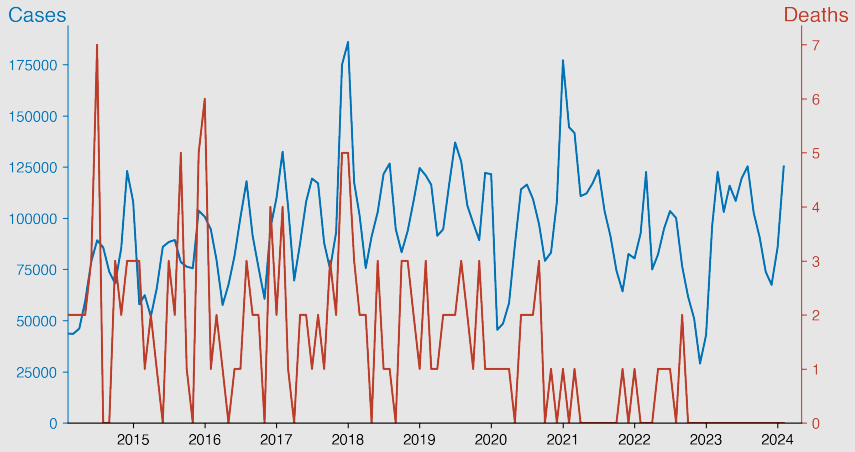
Infectious diarrhea

February 2024

Introduction

Infectious diarrhea is a condition characterized by frequent and loose bowel movements caused by pathogens such as bacteria, viruses, or parasites. Commonly transmitted through contaminated food or water, it remains a significant health issue globally, especially in regions with poor sanitation. Symptoms can range from mild to severe and often include abdominal pain, fever, and dehydration. Prevention strategies include proper hygiene, safe food practices, water sanitation, and vaccinations for preventable diseases. Treatment largely depends on the etiology and may involve rehydration therapies, antibiotics, or antiparasitic medications for certain infections.

Temporal Trend



Highlights

- Infectious diarrhea cases in Chinese mainland have been exhibiting a fluctuating trend with periodic peaks and troughs over the past decade.
- There is a consistent pattern of increase in the number of cases during the warmer months (May to August) each year, indicating a possible seasonality in disease transmission.
- The death toll has remained relatively low regardless of the cases' surge, underscoring effective management and treatment strategies.
- As of February 2024, the situation appears stable with no reported deaths and a case count of 125,289, consistent with the annual epidemic curve.

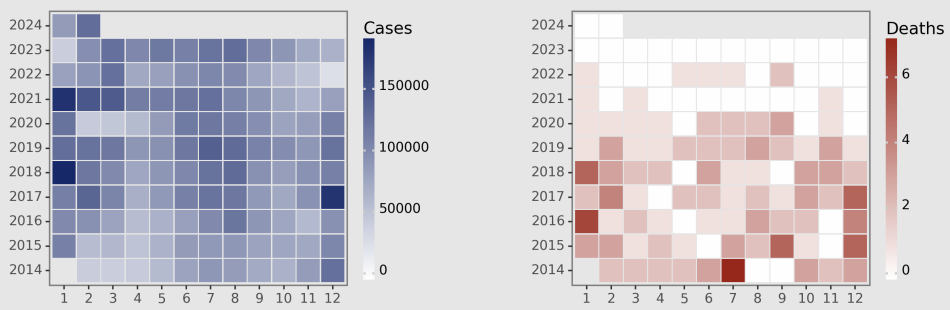
Cases Analysis

Infectious diarrhea cases in mainland China from February 2014 to February 2024 exhibit seasonal variation with peaks typically during summer months (June to August) and winter (November to January), suggested by data peaks like 123,019 in December 2014 and 186,071 in January 2018. The highest case number is observed in January 2024 with 125,289 cases. Noteworthy is the sharp decline in cases during early 2020, potentially attributable to public health interventions during the COVID-19 pandemic. Since then, cases slightly rebound but maintain lower numbers compared to pre-pandemic years, indicating possible lasting effects of hygiene and sanitation measures.

Deaths Analysis

The fatality associated with infectious diarrhea from 2014 to 2024 remained extremely low despite fluctuating case numbers, with a total monthly death count never exceeding seven. The majority of months reported one or zero deaths, suggesting a relatively low mortality rate for infectious diarrhea or effective clinical interventions. A shift to zero deaths starting from July 2020 onwards is characteristic, possibly due to advancements in healthcare, increased immunity within the population, or changes in reporting. The data may also imply a successful public health response in managing severe cases.

Distribution



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Chinese Notifiable Infectious Diseases Surveillance Report

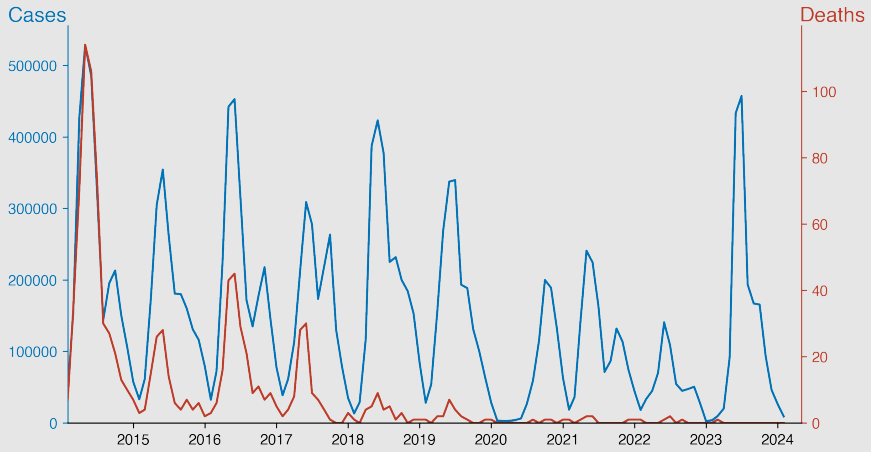
Hand foot and mouth disease

February 2024

Introduction

Hand, Foot, and Mouth Disease (HFMD) is a common viral illness that primarily affects infants and children. Caused by enteroviruses, such as Coxsackievirus A16 and Enterovirus 71, the disease is characterized by sores in the mouth and a rash on the hands and feet. Transmission occurs through direct contact with an infected person's nose and throat secretions, saliva, fluid from blisters, or stool. HFMD is usually mild and self-limiting, with symptoms including fever, reduced appetite, sore throat, and feeling unwell, followed by blister-like lesions. There is no specific treatment, and prevention relies on good hygiene practices.

Temporal Trend



Highlights

- There is a clear seasonal trend, with cases peaking from April to July each year. The highest peak previously seen was in May 2014 with 528,777 cases.
- From 2014 to 2020, there was an overall gradual decrease in both cases and deaths. The number of cases significantly dropped in 2020, likely due to measures implemented amid the COVID-19 pandemic.
- However, a sharp increase in cases was observed in June and July 2023, reaching levels comparable to the highs of 2014.
- As of February 2024, the disease situation appears to be under control, with only 9,093 cases and no reported deaths.

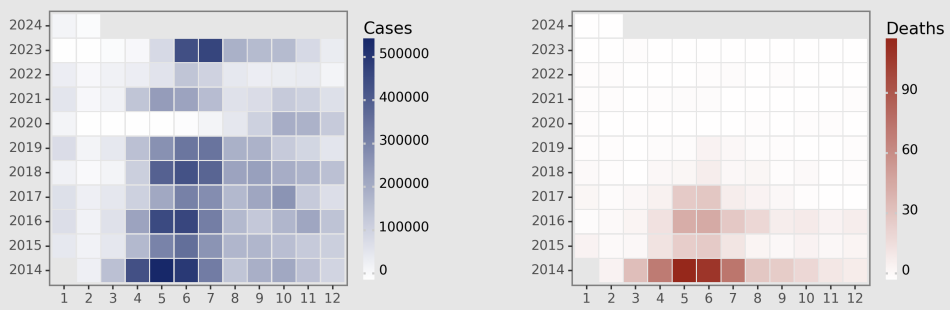
Cases Analysis

Examining the data for Hand foot and mouth disease (HFMD) in Chinese mainland from February 2014 to February 2024, there is some seasonality with peaks usually occurring between April to July each year, indicating a probable increase of cases in warmer months. The highest number of cases was reported in June 2023 with 433,084 incidents. After peaking in mid-2014, 2015, 2016, and 2018, there appeared to be a downward trend from the year 2019. However, in 2023, the pattern suddenly returned to high levels almost comparable to previous peak periods.

Deaths Analysis

The mortality associated with HFMD in Chinese mainland from 2014 to 2024 followed a downward trajectory, showing high fatalities in the early years with a peak of 114 deaths in May 2014. The death counts decreased considerably by 2024, with no deaths reported from March 2023 onward. Initially, the fatality rate was higher during the peak months of transmission but later years demonstrate successful mitigation of severe outcomes, potentially attributed to improved medical care, public health interventions, and possible heightened immunity within the population.

Distribution



CNIDs

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

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