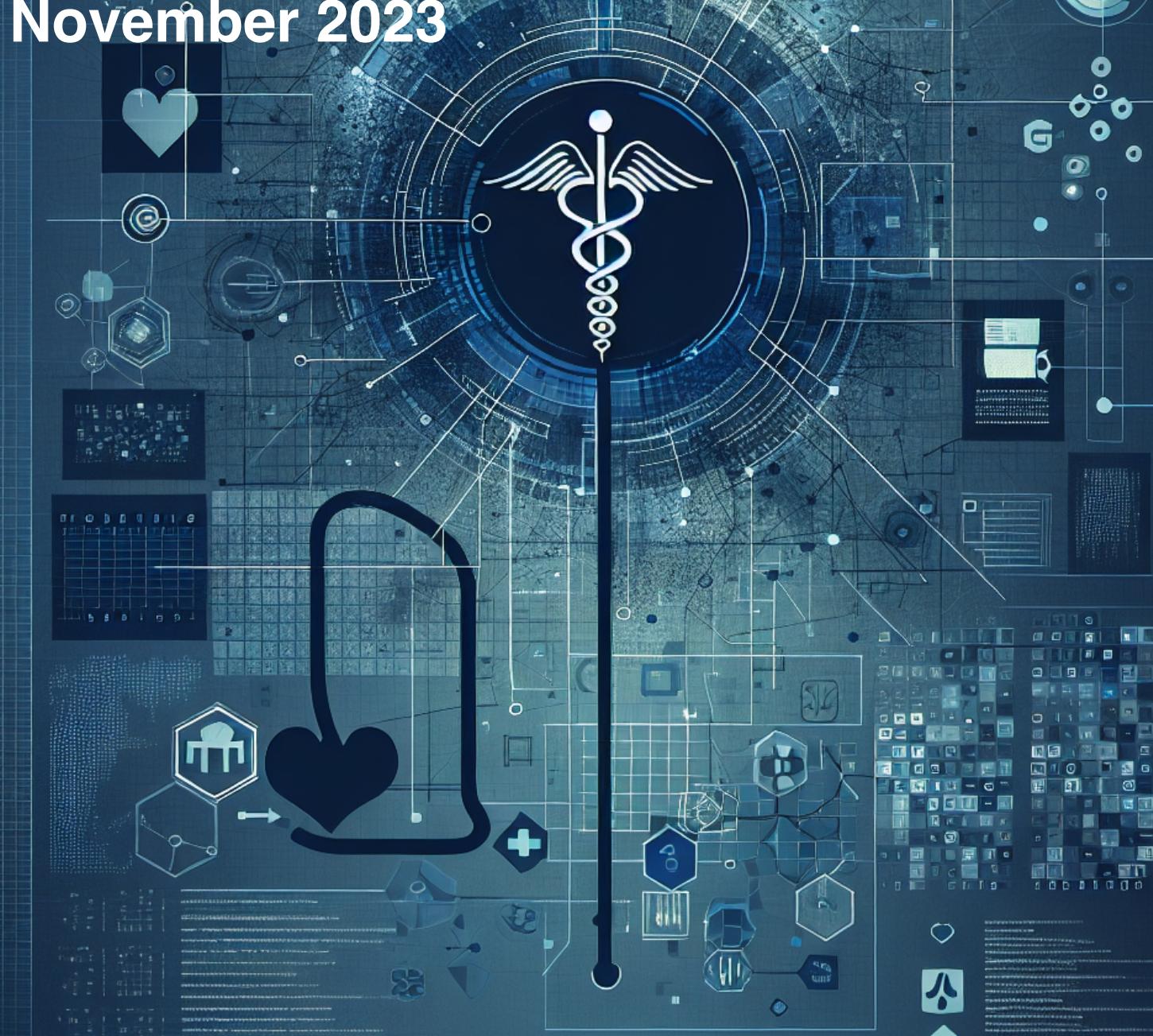


Chinese Notifiable Infectious Diseases Surveillance Project

November 2023



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Power by: Github Action

Design by: Kangguo Li

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Chinese Notifiable Infectious Diseases Surveillance Report
IMPORTANT

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Chinese Notifiable Infectious Diseases Surveillance Project

November 2023

Disease	Cases			Deaths		
	Reported	MoM*	YoY**	Reported	MoM*	YoY**
Plague	1	1.0 (/)	1.0 (/)	0	0.0 (/)	0.0 (/)
Cholera	0	-2.0 (-100.00%)	0.0 (/)	0	0.0 (/)	0.0 (/)
SARS-CoV	0	/ (/)	/ (/)	0	/ (/)	/ (/)
Acquired immune deficiency syndrome	5,664	454.0 (8.71%)	1,365.0 (31.75%)	1,955	89.0 (4.77%)	497.0 (34.09%)
Hepatitis	156,977	/ (/)	/ (/)	327	/ (/)	/ (/)
Hepatitis A	1,056	/ (/)	/ (/)	0	/ (/)	/ (/)
Hepatitis B	132,270	/ (/)	/ (/)	35	/ (/)	/ (/)
Hepatitis C	20,280	/ (/)	/ (/)	292	/ (/)	/ (/)
Hepatitis D	19	/ (/)	/ (/)	0	/ (/)	/ (/)
Hepatitis E	2,751	/ (/)	/ (/)	0	/ (/)	/ (/)
Other hepatitis	601	/ (/)	/ (/)	0	/ (/)	/ (/)
Poliomyelitis	0	0.0 (/)	0.0 (/)	0	0.0 (/)	0.0 (/)
Human infection with H5N1 virus	0	/ (/)	/ (/)	0	/ (/)	/ (/)
Measles	78	-10.0 (-11.36%)	-4.0 (-4.88%)	0	0.0 (/)	0.0 (/)
Epidemic hemorrhagic fever	1,320	/ (/)	/ (/)	3	/ (/)	/ (/)
Rabies	12	-1.0 (-7.69%)	-4.0 (-25.00%)	14	2.0 (16.67%)	6.0 (75.00%)
Japanese encephalitis	12	/ (/)	/ (/)	2	/ (/)	/ (/)
Dengue	1,685	-3,703.0 (-68.73%)	1,511.0 (868.39%)	0	0.0 (/)	0.0 (/)
Anthrax	36	-11.0 (-23.40%)	13.0 (56.52%)	0	0.0 (/)	0.0 (/)
Dysentery	1,963	/ (/)	/ (/)	1	/ (/)	/ (/)
Tuberculosis	57,432	-1,807.0 (-3.05%)	9,080.0 (18.78%)	320	-34.0 (-9.60%)	-13.0 (-3.90%)
Typhoid fever and paratyphoid fever	377	-103.0 (-21.46%)	-42.0 (-10.02%)	0	-1.0 (-100.00%)	0.0 (/)
Meningococcal meningitis	12	/ (/)	/ (/)	0	/ (/)	/ (/)
Pertussis	6,410	1,980.0 (44.70%)	4,250.0 (196.76%)	2	2.0 (/)	2.0 (/)
Diphtheria	0	0.0 (/)	0.0 (/)	0	0.0 (/)	0.0 (/)
Neonatal tetanus	1	-1.0 (-50.00%)	0.0 (0.00%)	0	0.0 (/)	0.0 (/)
Scarlet fever	4,637	2,104.0 (83.06%)	2,741.0 (144.57%)	0	0.0 (/)	0.0 (/)
Brucellosis	4,540	/ (/)	/ (/)	0	/ (/)	/ (/)
Gonorrhea	10,065	-263.0 (-2.55%)	2,435.0 (31.91%)	0	0.0 (/)	0.0 (/)
Syphilis	57,719	738.0 (1.30%)	22,567.0 (64.20%)	1	-2.0 (-66.67%)	-2.0 (-66.67%)
Leptospirosis	25	/ (/)	/ (/)	0	/ (/)	/ (/)
Schistosomiasis	3	1.0 (50.00%)	-5.0 (-62.50%)	0	0.0 (/)	0.0 (/)
Malaria	183	-10.0 (-5.18%)	109.0 (147.30%)	0	-1.0 (-100.00%)	0.0 (/)
Human infection with H7N9 virus	0	/ (/)	/ (/)	0	/ (/)	/ (/)
Monkey pox	80	-47.0 (-37.01%)	/ (/)	0	0.0 (/)	/ (/)
Influenza	1,862,998	1,522,029.0 (446.38%)	1,780,335.0 (2153.73%)	1	0.0 (0.00%)	1.0 (/)
Mumps	7,642	-645.0 (-7.78%)	-1,060.0 (-12.18%)	0	0.0 (/)	0.0 (/)
Rubella	89	-21.0 (-19.09%)	-31.0 (-25.83%)	0	0.0 (/)	0.0 (/)
Acute hemorrhagic conjunctivitis	4,940	-18,171.0 (-78.62%)	3,202.0 (184.23%)	0	0.0 (/)	0.0 (/)
Leprosy	34	10.0 (41.67%)	14.0 (70.00%)	0	0.0 (/)	0.0 (/)
Typhus	170	/ (/)	/ (/)	0	/ (/)	/ (/)
Kala azar	19	0.0 (0.00%)	8.0 (72.73%)	0	-1.0 (-100.00%)	0.0 (/)
Echinococcosis	387	76.0 (24.44%)	290.0 (298.97%)	0	0.0 (/)	0.0 (/)
Filariasis	0	0.0 (/)	0.0 (/)	0	0.0 (/)	0.0 (/)
Infectious diarrhea	73,835	/ (/)	/ (/)	0	/ (/)	/ (/)
Hand foot and mouth disease	92,955	-72,572.0 (-43.84%)	42,322.0 (83.59%)	0	0.0 (/)	0.0 (/)
Total	2,352,301	1,417,130.0 (151.54%)	1,884,328.0 (402.66%)	2,626	125.0 (5.00%)	756.0 (40.43%)

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

Overview In November 2023, the Chinese mainland demonstrated a diverse epidemiological profile characterized by chronic infectious diseases with high incidence, sporadic outbreaks of acute conditions, and concerns over emergent infections. Data from the National Notifiable Disease Reporting System reflects a considerable burden of viral hepatitis, with Hepatitis B (HBV) reporting the highest number of cases (96336 with 40 deaths), followed by Hand, Foot, and Mouth Disease (HFMD) and other forms of hepatitis, signaling ongoing transmission and the need for intensified control measures. The prominence of Hepatitis C (HCV) with 20245 cases and Hepatitis A also delineate the significant impact of viral liver diseases. Notably, Acquired Immune Deficiency Syndrome (AIDS) accounted for a substantial number of all-cause deaths among cumulative reported AIDS patients, reinforcing the imperative for persistent public health interventions in HIV/AIDS management. The mortality reporting demonstrates both chronicity and acute fatal outcomes from infectious diseases. With AIDS-related deaths peaking (214 deaths), the chronic nature and disease management challenges are underscored. Tuberculosis remains a critical cause of morbidity and mortality, with 83205 cases and a significant death toll (214 deaths), highlighting the persistent public health challenge of tackling TB. While the data emphasizes a relatively lower fatality rate for infectious diseases like dengue fever and measles, the high death count from rabies (46 deaths from 34 cases) and epidemic hemorrhagic fever (17 deaths from 1700 cases) require immediate attention for prevention, control, and treatment strategies. **Concerns** The consistently high incidence of communicable diseases such as Hepatitis B and Hand, Foot, and Mouth Disease (HFMD) is troubling. HBV being endemic in China presents a longstanding public health challenge with implications for chronic liver disease and hepatocellular carcinoma. HFMD, predominantly affecting children, reports a staggering 153086 cases, necessitating attention towards effective public health strategies and interventions targeting vulnerable populations. The persistent prevalence of sexually transmitted infections, particularly syphilis (83205 cases, 214 deaths) and gonorrhea, calls for enhanced sexual health education and services. Of public concern is the emergence of vaccine-preventable diseases and zoonoses. Even with the available vaccines, mumps reported a concerning number of 26717 cases. In addition, the recent inclusion of Monkeypox as a Class B infectious disease may heighten public worry despite the absence of reported cases this month, due to the global context of an ongoing outbreak. The sudden spike in infectious diarrhea cases (108329 cases), though excluding other acute enteric diseases, emphasizes the need for continuous sanitary measures and surveillance to protect population health. **Recommendations** Public health policies should aggressively tackle the high incidence diseases through vaccination campaigns, education, and access to treatment. Vaccination interventions should prioritize hepatitis B and influenza, given the high cases reported (96336 and 130442 respectively). Importantly, comprehensive measures that include the promotion of safe-sex practices and harm-reduction strategies must be instituted to curb the worrying trends of sexually transmitted infections, particularly syphilis and gonorrhea. The general public should observe strict personal hygiene practices, including hand hygiene, to prevent diseases like HFMD and infectious diarrhea, which exhibit substantial incidence. Additionally, heightened vigilance is required for emerging infectious diseases such as Monkeypox. Even though no cases were reported, the public should be educated about the symptoms, modes of transmission, and prevention strategies for such diseases to curb potential outbreaks. On rabies, the public is advised to avoid contact with stray animals and to seek immediate post-exposure prophylaxis if bitten. Overall, the government should strengthen surveillance systems and improve reporting mechanisms. Coordination between human and veterinary medicine, the One Health approach, is crucial in the timely response to zoonotic diseases. Finally, as influenza and HFMD show, seasonal variations require public health readiness for prompt response through community engagement, awareness campaigns, and readiness of health services to manage the seasonal rise in cases to prevent complications and halt disease spread.

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, Monkeypox 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 November 2023 in Chinese Mainland

Summary Since November 2023, an increase in respiratory illnesses has been noted in mainland China, primarily affecting children. These incidents are linked to known pathogens. Authorities and health organizations such as the World Health Organization (WHO) are closely monitoring the situation, although no novel pathogens have been identified. Outbreaks of Known Diseases A noticeable uptick in respiratory illnesses among children in northern China has followed the lifting of COVID-19 restrictions and the colder weather in the region. The Chinese National Health Commission reported cases involving influenza, *Mycoplasma pneumoniae*, respiratory syncytial virus (RSV), and SARS-CoV-2, particularly noted for their increased prevalence in children. *Mycoplasma pneumoniae* and RSV have a more pronounced impact on this demographic. Beijing and Liaoning have reported clusters of undiagnosed pneumonia cases in children; however, the WHO, having analyzed data from Chinese health authorities, confirmed these as instances of known respiratory pathogens. The healthcare system has coped with the surge without exceeding hospital capacities. China's State Council has called for enhanced monitoring and resource preparation, especially in critical areas such as borders, schools, and nursing homes. Emergence of Novel Pathogens To date, there have been no indications or reports of emerging novel pathogens responsible for the surge in respiratory diseases in China. The WHO has requested from Chinese officials more detailed data about the outbreaks with a focus on the trends of the known circulating pathogens. Consensus among health experts and the WHO suggests that the current wave of infections is linked exclusively to pathogens previously recognized and understood within the scientific community. Despite this, vigilance is maintained through close observation of the disease trends to swiftly identify any potential new threats. In essence, the rise in respiratory illnesses in China's pediatric population since November 2023 is attributable to familiar infections without evidence of new pathogen emergence.

News information since November 2023 around world

Summary Since November 2023, the world has faced multiple infectious disease events, including enduring struggles with established diseases and the advent of new viral variants. These health challenges have prompted continuous monitoring and response efforts by global health organizations. Outbreaks of Known Diseases Avian Influenza A(H5N1) Virus: This virus has affected several countries around the globe, with significant outbreaks in Southeast Asia and reports of cases also in the United States, the UK, Spain, Ecuador, and Chile. One notable case resulted in a fatality in Cambodia in October 2023. The infection is typically acquired through direct contact with infected birds, posing a minimal risk of human-to-human transmission. Middle East Respiratory Syndrome (MERS-CoV): Although no new cases were reported in October 2023, MERS-CoV remains a health concern, particularly in the Arabian Peninsula. Transmission can occur via airborne particles or through close contact with infected camels. Mpox (Clade I): Mainly seen in Central Africa, mpox continues to be a concern due to transmission through proximity to infected individuals or animals. COVID-19: The pandemic persists, marked by the emergence of new variants. Current vaccines are effective against these new strains. Public health authorities such as the CDC stress the importance of vaccination, especially for individuals at higher risk. Respiratory Syncytial Virus (RSV): Particularly highlighted in the CDC's seasonal outlook, RSV remains a notable threat, especially for children and the elderly. Global Measles: The CDC is actively addressing measles outbreaks occurring around the world. Respiratory Illness in Northern China: An increased incidence of respiratory illnesses among children in northern China has been documented, correlating with lifting COVID-19 restrictions and colder weather. The illnesses have been associated with familiar pathogens, including influenza viruses, Mycoplasma pneumoniae, RSV, and SARS-CoV-2. Emergence of Novel Pathogens The period in review has not identified any completely new pathogens; however, attention has been given to novel variants of existing viruses, such as those of COVID-19. Continued vigilance is directed towards tracking and managing known infectious diseases and their evolving strains. In conclusion, the global health community remains diligent in observing these events, ready to alter response strategies to effectively control and mitigate the spread of infectious diseases. (Sources include information from WHO, GOV.UK, CDC, ECDC)

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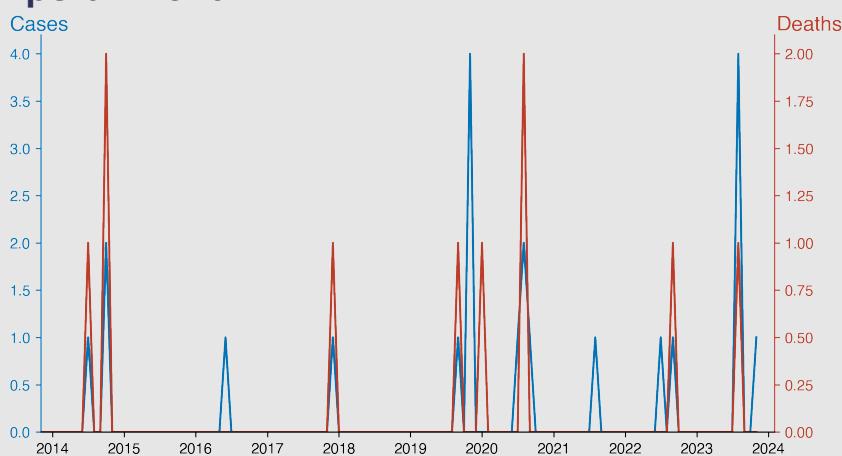
Plague

November 2023

Introduction

Plague is a severe and often deadly bacterial infection caused by *Yersinia pestis*. It's zoonotic, primarily affecting rodents and is spread to humans through bites of infected fleas. Historically, it has caused devastating pandemics such as the Black Death in the Middle Ages. There are three forms of plague - bubonic, septicemic, and pneumonic, each varying in symptoms, routes of exposure, and severity. Modern antibiotics are effective treatments, but a delay in treatment can lead to severe illness or death. It is less common today but remains a concern in certain regions.

Temporal Trend



Cases Analysis

Between January 2010 and November 2023, sporadic cases of plague in the Chinese mainland were recorded, with a total of 22 instances. The occurrence of cases was irregular and infrequent throughout the years. Most years reported zero to one case, with occasional minor outbreaks, such as in November 2019 with 4 cases, and August 2023 with 4 cases, which represented the highest number of cases in any given month throughout the period analyzed. No discernible seasonal pattern is evident, and the overall incidence remains low.

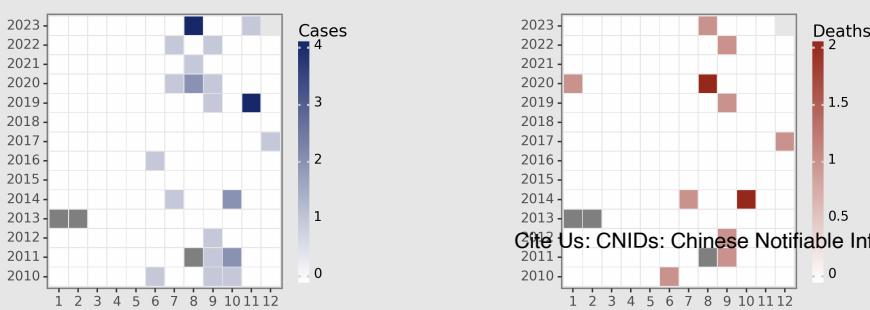
Highlights

- Plague in mainland China shows sporadic occurrences with infrequent cases reported annually. A slight uptick in cases was observed in 2019 and 2020 but numbers remain generally low.
- Since 2010, a total of 20 cases and 11 deaths have been recorded, indicating a relatively high case-fatality ratio. Notably, cases can be fatal if not treated promptly.
- The most recent data from November 2023 reports 1 case with no associated deaths, suggesting an isolated incident or early detection and treatment.
- Periodic clusters appear without a clear seasonal pattern, emphasizing the need for continued surveillance and readiness to respond to potential outbreaks.

Deaths Analysis

The reported data indicate a total of 13 deaths from plague in the Chinese mainland during the same period. Mortality associated with reported cases occurred inconsistently, with several instances of single mortalities following a reported case, suggesting a high case-fatality rate during certain outbreaks. Two months, October 2014 and August 2020, saw all reported cases result in death. The data does not show a clear correlation between the number of cases and resultant deaths, indicative of small sample sizes or varied virulence and access to treatment.

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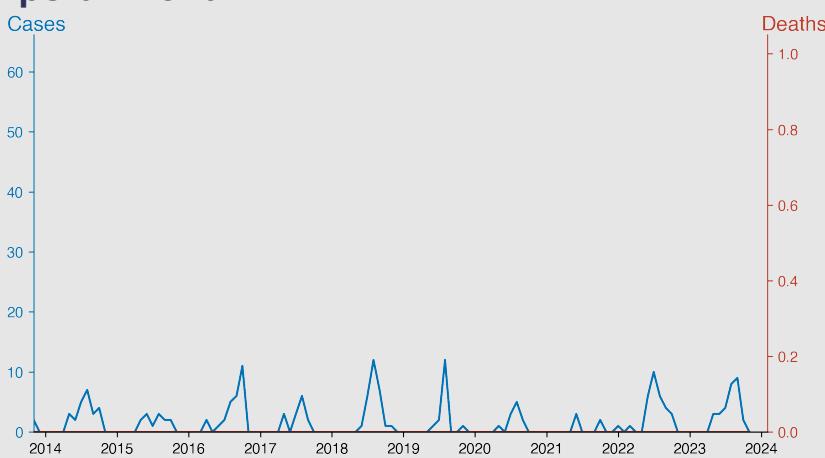
Cholera

November 2023

Introduction

Cholera is a infectious disease caused by the bacillus *Vibrio cholerae*. It's primarily spread by the ingestion of food or water contaminated with feces from an infected person. The main symptoms are profuse diarrhea and vomiting, leading to severe dehydration. Without treatment, mortality rates can be high. Even though cholera is preventable through access to safe drinking water and sanitation, it remains a global threat, mainly affecting low-income regions like parts of Africa, Southeast Asia, and Haiti where water and sanitation infrastructure is poor.

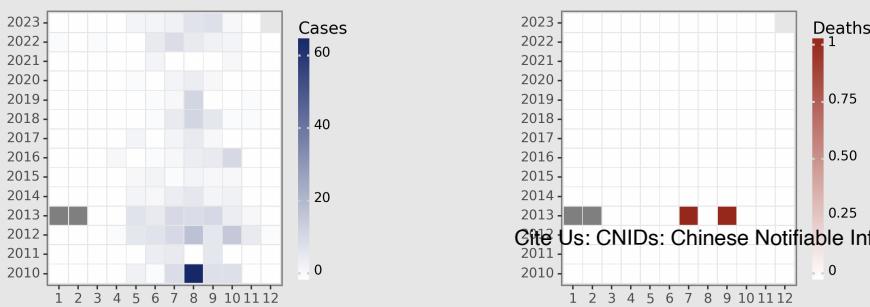
Temporal Trend



Cases Analysis

The data reflects a sporadic distribution of cholera cases in mainland China from 2010 to 2023, with zero cases reported in numerous months across the years. Notably, the summer months of July and August consistently show an increase in cases, peaking in 2010 August with 63 cases. The fluctuations suggest possible seasonal influences or episodic outbreaks. However, the overall trend shows low incidence, with cases rarely exceeding single-digit numbers per month, and no significant long-term increase in cases. Crucially, there are no reports from 2013 January and February, which constitutes a gap in the dataset.

Distribution



Highlights

- Seasonal pattern observed with a higher number of cases typically occurring from June to October, suggesting a possible link to seasonal factors like temperature and water-related activities.
- No cholera-related deaths reported since July and September of 2013, indicating improvements in either reporting, disease management, or both.
- Despite occasional spikes, there is a general trend of low case counts over the years, with zero cases reported in the most recent month (November 2023).
- Ongoing surveillance and preventive measures appear to be effective, as suggested by the low incidence and absence of mortality in recent years.

Deaths Analysis

Throughout the assessed period, cholera has shown low mortality in mainland China, with only two reported deaths in 2013. The death cases occurred in the months of July and September, which align with the seasonal pattern of higher reported cases in summer. The extremely low fatality rate, especially considering the number of cases, could indicate effective disease management and treatment protocols. Since 2013, no deaths have been reported, suggesting either an absence of severe cases or continued improvements in public health interventions and medical care for cholera patients.

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SARS-CoV

November 2023

Introduction

Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) is a strain of virus responsible for a severe form of pneumonia. First identified in 2003 in China, it quickly spread globally, leading to an epidemic. The disease it causes, known as SARS, is characterized by high fever, headache, and respiratory issues, before progressing to potentially fatal pneumonia. Crucially, SARS-CoV is part of the broader coronavirus family, which includes viruses that cause illnesses ranging from the common cold to more severe diseases such as MERS and COVID-19.

Temporal Trend



Cases Analysis

From January 2010 to November 2023, Chinese mainland reported zero cases of SARS-CoV. This consistent lack of cases over the entire period aligns with global SARS data post-2003, indicating effective containment and cessation of the SARS epidemic. There's no evidence of recurring or newly initiated transmission during these years, suggesting successful elimination of the virus in the human population or its zoonotic reservoirs.

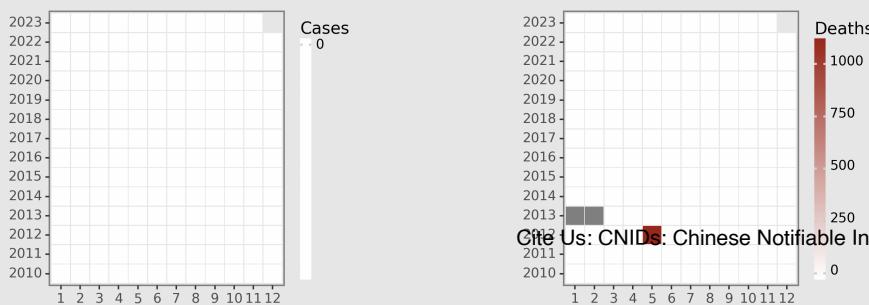
Highlights

- Zero reported cases of SARS-CoV in China from January 2010 through November 2023, indicating no disease transmission.
- An anomaly shows 1093 deaths in May 2012 without corresponding cases; likely a data error needing correction.
- Over a decade of no cases suggests effective long-term containment measures against SARS-CoV in China.
- The epidemiological situation up to November 2023 implies SARS-CoV is not a current health concern in mainland China.

Deaths Analysis

Analyzing data from the same period, there were zero reported deaths associated with SARS-CoV in Chinese mainland. An anomaly is present in May 2012 where 1093 deaths are recorded—a likely data error as there were no accompanying cases. The absence of SARS-related mortality for over a decade corroborates the global cessation of the SARS epidemic due to vigorous international public health interventions.
Note: Should the data for May 2012 reflect a factual occurrence in another context (e.g., another disease or event), this would warrant separate investigation as it does not pertain to SARS-CoV.

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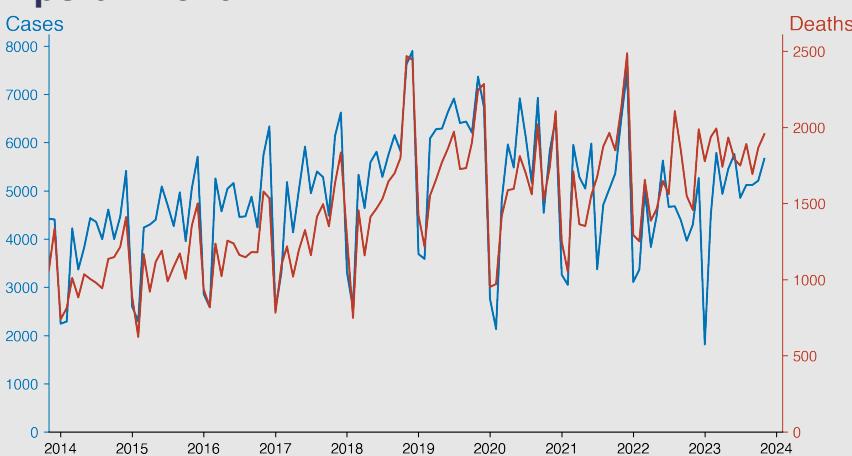
Acquired immune deficiency syndrome

November 2023

Introduction

Acquired immune deficiency syndrome (AIDS) is a chronic, potentially life-threatening condition caused by the human immunodeficiency virus (HIV). It interferes with the body's ability to fight infections and diseases. HIV attacks and destroys CD4 cells, which are essential for a healthy immune function. The disease is primarily transmitted through sexual intercourse, sharing needles, or from mother to child during birth. The advanced stage of the HIV infection is known as AIDS. Despite significant medical advancements, AIDS remains a global health crisis without a definitive cure but can be managed with proper treatment.

Temporal Trend



Cases Analysis

Over the 2010-2023 period, acquired immune deficiency syndrome (AIDS) cases in mainland China show marked fluctuations yet an overall upward trend. A modest start with 1,663 cases in January 2010 climbs to peaks (e.g., 7,897 in December 2018). Periodic decreases, such as in January of various years, hint at possible reporting delays or seasonal influences. The most recent months show continued concern with cases consistently above 5,000, hitting 5,664 in November 2023.

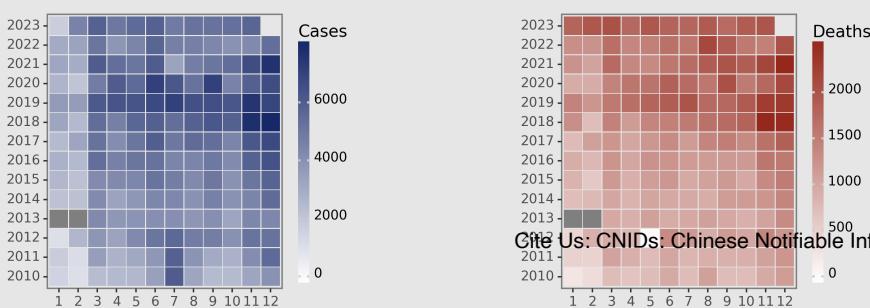
Highlights

- Gradual increase in AIDS cases and deaths from 2010 to 2023, highlighting ongoing transmission and disease burden in the Chinese mainland.
- Notable peaks in reports during year-end, particularly in November and December, suggesting seasonal or reporting trends.
- December 2018 recorded the highest figures, with 7897 cases and 2444 deaths, indicating a surge in the epidemic's impact.
- Latest data from November 2023 shows 5664 cases and 1955 deaths, maintaining an elevated but consistent level of disease prevalence.

Deaths Analysis

Throughout the same timeframe, AIDS-related deaths have also increased, paralleling the rise in cases. Initial death counts, like 301 in January 2010, ascend over time, reaching 2,484 in December 2019 as the highest report. Interestingly, mortality spikes are often, but not always, aligned with the highest case reports; for example, cases peak in December 2018, but deaths peak later in 2019. Most recent data uphold this trend, with November 2023 reporting 1,955 deaths. Notably, from 2010 to 2023, February shows contrasting lower cases but not correspondingly lower deaths, potentially indicative of reporting variances or seasonal effects.

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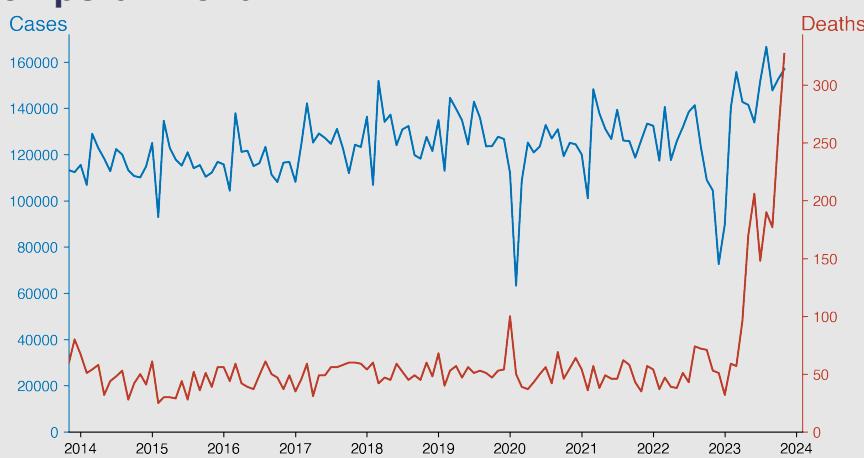
Hepatitis

November 2023

Introduction

Hepatitis is a medical condition characterized by inflammation of the liver, generally caused by viral infections. The five main hepatitis viruses are A, B, C, D, and E, differing in modes of transmission, severity, geographical distribution, and prevention methods. Hepatitis can also result from alcohol, toxins, or some medications. Chronic types like Hepatitis B or C can lead to severe health issues like liver cirrhosis or cancer. Vaccination and proper hygiene can prevent some forms of hepatitis.

Temporal Trend



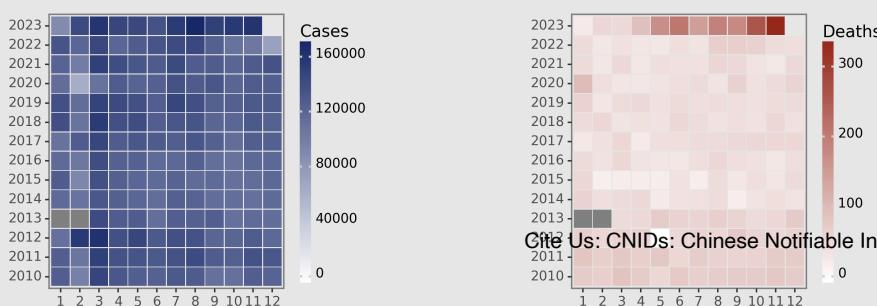
Cases Analysis

From 2010 to 2023, monthly hepatitis cases in China's mainland showed fluctuations with peaks often in March (avg. ~140,000 cases), indicating possible seasonal patterns. The lowest number of cases (~72,630) was reported in December 2022, suggesting a decline or reporting anomaly. However, cases rose to a high of 166,606 by August 2023, implying a significant increase or improved case detection. Overall, the data denotes variability with a potential increase in cases over the analyzed period.

Deaths Analysis

Hepatitis-related deaths revealed an irregular pattern with an average of <100 deaths/month until a discernible escalation starting April 2023. Prior spikes in deaths (January 2020) were relatively modest. The data shows a drastic rise in fatalities in May 2023 (170 deaths), with the highest of 327 deaths in November 2023. This surge could indicate a change in virulence, reporting practices, healthcare strain, or co-factors such as co-infections or access to care. The precise cause of the mortality increase necessitates further epidemiological investigation.

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Hepatitis A

November 2023

Introduction

Hepatitis A is a highly contagious liver infection caused by the Hepatitis A virus. It often spreads through ingestion of contaminated food and water or close contact with an infected person. Symptoms, appearing 2-6 weeks after exposure, include fatigue, nausea, abdominal pain, and jaundice. While rarely resulting in death, it can cause severe symptoms and liver damage.

Vaccination is the most effective method of prevention, along with maintaining good hygiene and safe food practices. Unlike other types of viral hepatitis, Hepatitis A does not cause chronic liver disease.

Temporal Trend



Cases Analysis

From January 2010 to November 2023, reported Hepatitis A cases in the Chinese mainland show a downward trend, decreasing from yearly highs around 3000 cases to less than 1100 cases towards the end of the period. There's a notable spike of 2235 cases in May 2012. Seasonal variations are apparent, with higher case counts seen generally in middle-year months. While data for January and February 2013 are missing, overall, a consistent decline in case numbers is evident over the years.

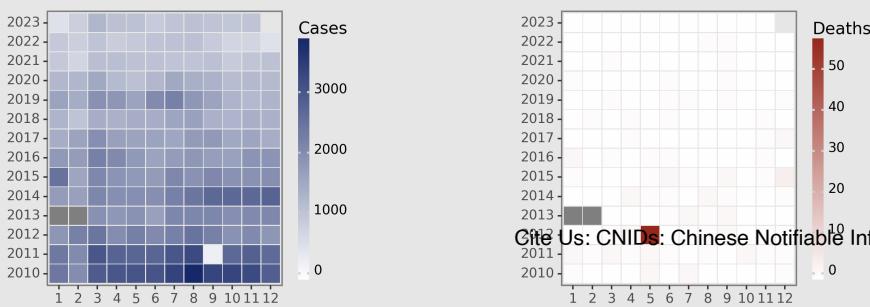
Highlights

- Declining trend in Hepatitis A cases over 13 years, with cases reducing from 2379 in January 2010 to 1056 in November 2023, indicating effective control measures.
- Low mortality rate associated with the disease, often zero, except for an anomalous spike of 56 deaths in May 2012.
- Seasonal peaks in earlier years have become less pronounced in recent data, suggesting changes in transmission dynamics or improved vaccination.
- Some data gaps, notably in early 2013, which could affect trend accuracy.

Deaths Analysis

The number of deaths associated with Hepatitis A over the same period was low, with monthly figures mostly at one or fewer. An exceptional spike of 56 deaths in May 2012 is an outlier in the dataset. There's no clear seasonal pattern to the fatalities, and deaths do not appear to correlate strongly with case numbers. The data shows that for most months, the reported death toll was zero, suggesting that mortality due to Hepatitis A in the Chinese mainland during this period was rare.

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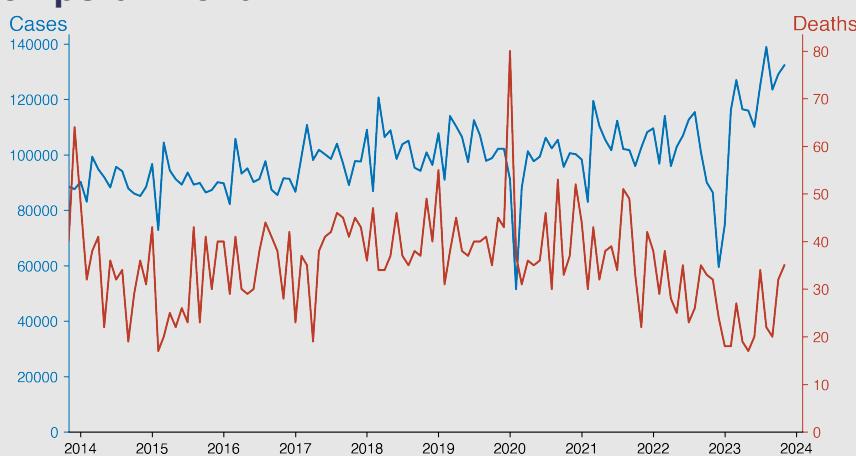
Hepatitis B

November 2023

Introduction

Hepatitis B is a potentially life-threatening viral infection that attacks the liver, leading to both acute and chronic disease. It is most commonly spread through exposure to infectious blood, semen or other body fluids, often through unprotected sexual contact, mother-to-child transmission during childbirth, and sharing needles during drug use. Chronic Hepatitis B can lead to severe health issues, including cirrhosis or liver cancer. Preventive measures include vaccination and safe practices concerning blood, body fluids, and sexual contact.

Temporal Trend



Cases Analysis

The data indicates a recurrent pattern in the reported cases of Hepatitis B in Chinese mainland, with a notable periodic increase typically observed around March each year. Despite fluctuations, there is an upward trend with the highest recorded cases in August 2023 at 138,875. An exception to the pattern is the evident decline in cases in February 2020, possibly attributable to the COVID-19 pandemic restrictions. Over time, while oscillations persist, there seems to be an increasing annual baseline, suggesting a need for heightened preventive measures.

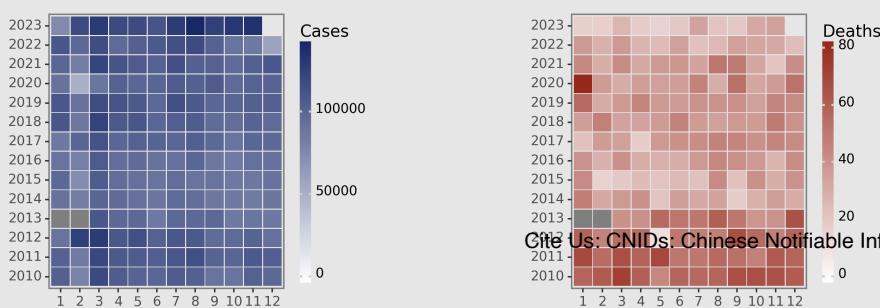
Highlights

- An upward trend in Hepatitis B cases from 2010 to 2023, peaking at 132,270 cases in November 2023.
- Death counts have remained low and stable, with notable lows in January and February 2023 at 18 deaths each, suggesting effective management.
- Seasonal patterns are indicated, with case surges typically in March and reduced incidence towards year's end, particularly in December 2022 with only 59,498 cases.
- The contrast between rising cases and stable mortality rates implies successful healthcare interventions over the period analyzed.

Deaths Analysis

Deaths from Hepatitis B in Chinese mainland show considerable variability month-to-month, but without a clear increasing or decreasing trend over the years. The highest number of deaths within the observed period occurred in January 2020, with 80 deaths, which is an outlier when considering the relatively stable mortality rate observed across the dataset. The overall death counts hover around a median value, indicating consistent case fatality rates. However, a significant dip in mortalities is recorded from May 2012 onward, which might reflect improvements in treatment efficacy or reporting accuracy.

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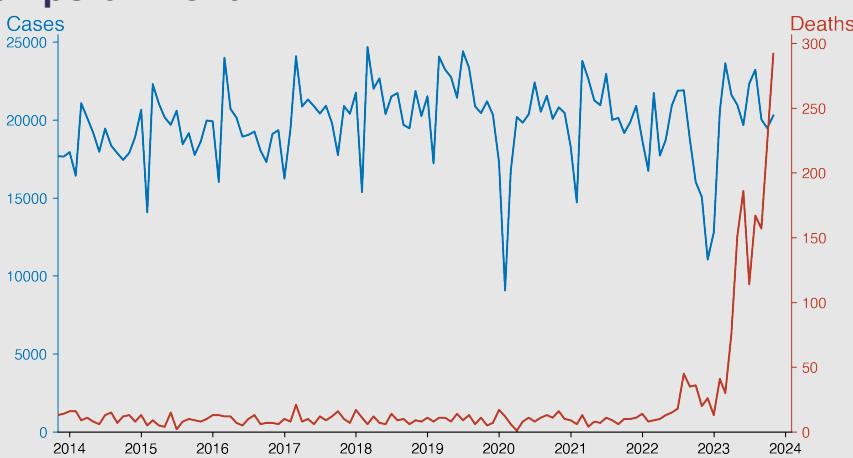
Hepatitis C

November 2023

Introduction

Hepatitis C is a viral infection primarily affecting the liver. The Hepatitis C Virus (HCV), which is primarily bloodborne, causes it. This condition can range from a mild illness lasting only a few weeks (acute), to a serious, lifelong illness (chronic) that can lead to liver damage, cirrhosis, liver cancer, or even liver failure. Most people with chronic Hepatitis C are asymptomatic. However, chronic infection can be curable with antiviral medicines. It is a major global health problem, with millions of people infected worldwide.

Temporal Trend



Cases Analysis

Over the years 2010-2023, Hepatitis C cases in Chinese mainland displayed variability, with a general trend of increase. Initial numbers hovered around 13,000-15,000 cases per month in 2010, rising significantly to a peak of 24,666 in March 2018. A sharp drop to 9,068 cases occurred in February 2020, potentially indicating reporting differences during the COVID-19 pandemic onset. Recent data suggests a resurgence in cases with numbers consistently above 20,000 since January 2021, barring a few months.

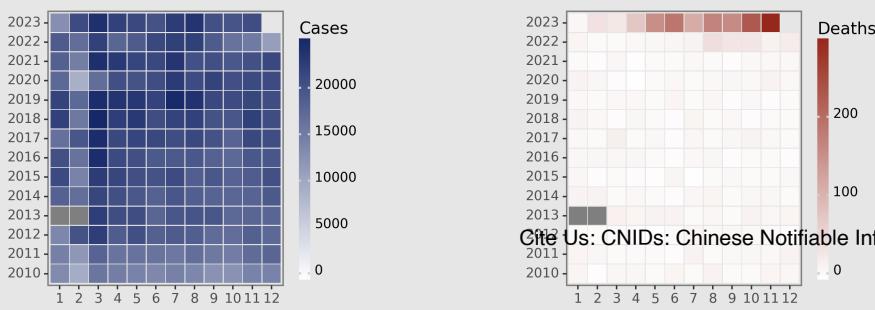
Highlights

- A sharp increase in Hepatitis C fatalities has been noted from 2022 to 2023, with deaths rising from 26 in December 2022 to 292 in November 2023, despite cases remaining relatively stable.
- The peak of cases was in March 2018 (24,666 cases), while the highest mortality was in November 2023 (292 deaths), pointing to a recent spike in lethality.
- From August 2022, a significant uptick in death rates suggests potential changes in disease behavior or health system issues.
- The trend does not show a steady decline in Hepatitis C incidence, highlighting ongoing public health challenges.

Deaths Analysis

Hepatitis C mortality in Chinese mainland remained relatively low from 2010 to early 2022, with monthly deaths rarely exceeding 20. However, a stark increase began in August 2022 with deaths skyrocketing to 45, and a continuing upward trend reaching 292 in November 2023. This recent surge in fatalities, despite a relatively stable case count, may indicate changes in viral virulence, access to care, changes in case management, or population vulnerability possibly exacerbated by concurrent health crises such as COVID-19.

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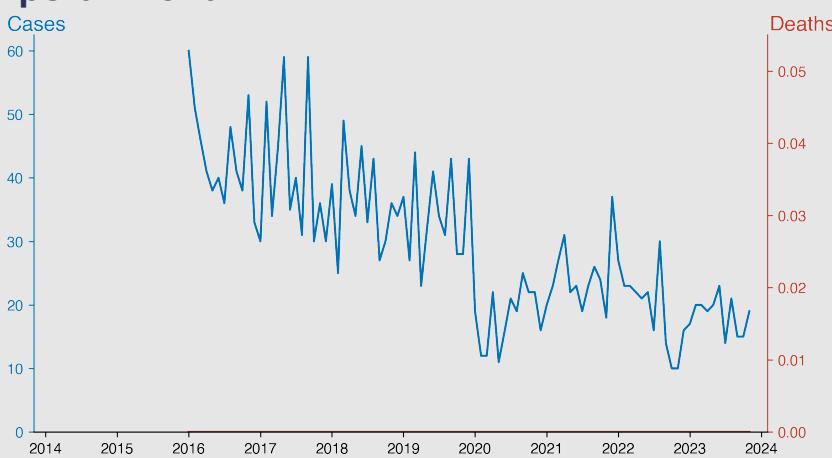
Hepatitis D

November 2023

Introduction

Hepatitis D, also known as Delta Hepatitis, is a severe liver disease caused by the Hepatitis D virus (HDV). It only develops in individuals already infected with Hepatitis B as it needs the Hepatitis B surface antigen to survive. It can be contracted through direct contact with infected blood, unprotected sex, or from an infected mother to her baby during childbirth. HDV can lead to conditions like cirrhosis, liver failure, and liver cancer. It's the least common but the most severe type of viral hepatitis.

Temporal Trend



Cases Analysis

The data indicates a decreasing trend in Hepatitis D cases from 2016 to 2023 in the Chinese mainland, with an initial range of 33-60 cases per month to 10-23 cases in the most recent year. The highest number of monthly cases was observed in May 2017, with 59 cases, while the lowest was in October and November 2022, with 10 cases each. A notable dip occurs from 2020 onwards, potentially indicating improved public health interventions, increased awareness, or underreporting due to competing health challenges like the COVID-19 pandemic.

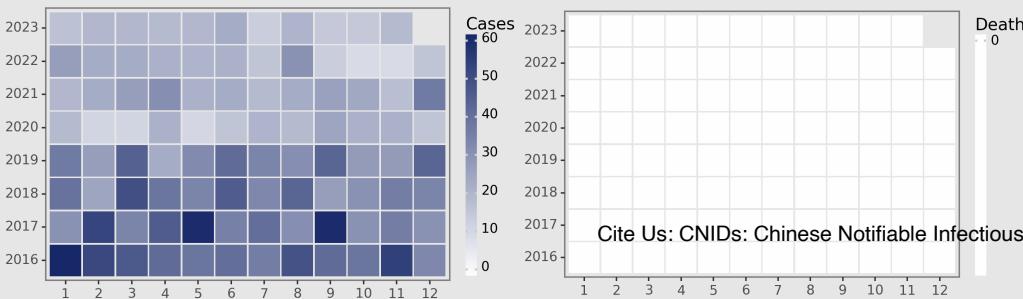
Highlights

- A steady decline in Hepatitis D cases in Mainland China from around 60 cases per month in 2016 to 10-20 cases per month by 2022-2023.
- No reported deaths from Hepatitis D during the observed period, indicating effective management or lower disease severity.
- The incidence rate appears to have stabilized since 2020, with minimal fluctuations but no significant outbreaks noted.
- Ongoing monitoring and prevention efforts remain essential to control and further reduce incidences of the disease.

Deaths Analysis

Throughout the reported period from 2016 to 2023, there have been zero deaths attributed to Hepatitis D in the Chinese mainland, suggesting that while the disease incidence has fluctuated, the fatality rate has remained at zero or that the fatality cases have not been captured in the reported data. This consistent lack of mortality could be attributed to effective clinical management of cases and comprehensive surveillance systems, although the absence of death data warrants cautious interpretation.

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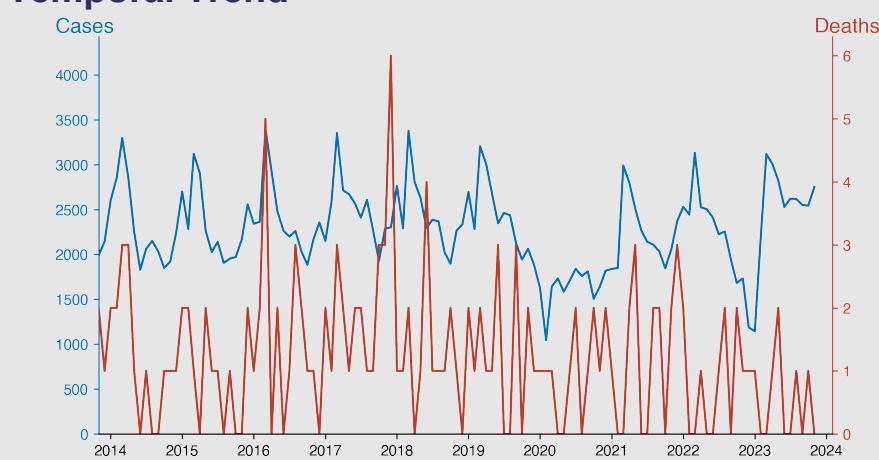
Hepatitis E

November 2023

Introduction

Hepatitis E is a liver disease caused by the Hepatitis E virus (HEV), primarily spread through contaminated water or food. The infection is usually short-term and resolves within 4-6 weeks, but can be severe in certain populations, especially pregnant women. Globally, there are approximately 20 million HEV infections each year, leading to an estimated 3.3 million symptomatic cases of hepatitis E. Although vaccines have been developed, they are not widely available, making prevention measures crucial.

Temporal Trend



Cases Analysis

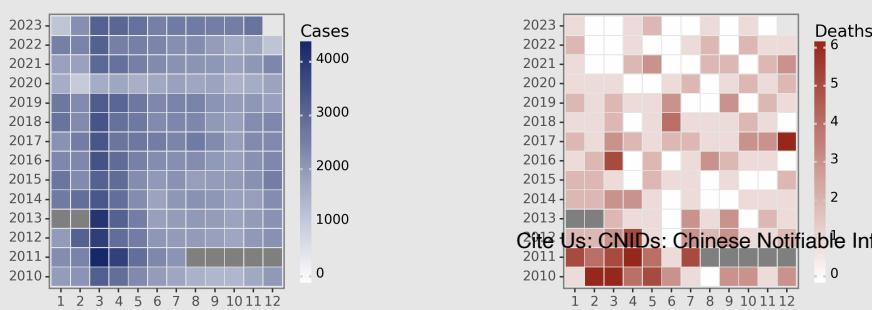
The data trend for Hepatitis E cases in China from 2010 to 2023 shows fluctuating patterns with notable peaks generally in March, which may suggest seasonal variability. The highest number of recorded cases occurred in March 2011 with 4,262 cases, while December had the lowest case count at 1,187. The apparent decline in cases at the beginning of 2020 correlates with the onset of the COVID-19 pandemic, potentially indicating impacts from public health interventions such as lockdowns or reporting changes.

Word count: 106 words

Highlights

- A gradual decrease in Hepatitis E cases from a peak in March 2011 (4262 cases) to November 2023 (2751 cases), indicating improvement in disease management over the years.
- A generally low mortality rate throughout the years, often maintaining at or near zero deaths per month, showcasing effective clinical intervention or low disease virulence.
- Persistent cyclical fluctuations in case numbers with peaks typically observed in the spring months (March, April), suggesting seasonal patterns in transmission.
- An abrupt reduction in cases during early 2020, which may correlate with public health measures for COVID-19, hinting at the impact of broad health interventions on other infectious diseases.

Distribution



Deaths Analysis

The death toll associated with Hepatitis E from 2010 through 2023 has remained low relative to the number of cases, suggesting a low case-fatality rate. The highest number of deaths in a single month was six, occurring in February 2010, March 2010, and December 2017. A total of eight years (including 2011 August to December due to missing data) witnessed months with zero mortality. Throughout the observed period, there are no clear trends indicating an increase or decrease in fatalities, implying a consistently low disease lethality or uniform management efficacy.

Word count: 103 words

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Other hepatitis

November 2023

Introduction

Other hepatitis refers to liver inflammations not caused by the common types A, B, and C hepatitis viruses. These could be due to autoimmune conditions, excessive alcohol intake, toxins, or other viruses such as Epstein-Barr or cytomegalovirus, hence they're often termed as "non-A, non-B, non-C hepatitis". They can lead to conditions like Hepatitis D (a superinfection with Hepatitis B), Hepatitis E (common in areas with poor sanitation) or autoimmune hepatitis (where the body's immune system attacks the liver). Symptoms and severity may vary, including jaundice, fatigue, abdominal pain, and more serious like liver cirrhosis or failure.

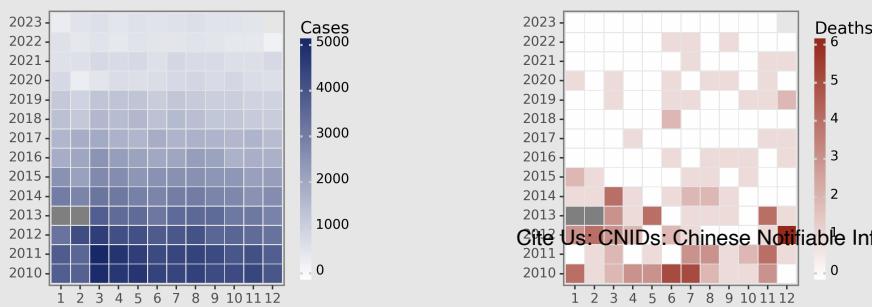
Temporal Trend



Cases Analysis

The data for 'Other hepatitis' in Mainland China from 2010 to 2023 reveal a significant decreasing trend in reported cases. The initial months of 2010 saw a higher number of cases, averaging around 4,000 monthly, with a peak in March 2011 at 5,010 cases. However, by 2023, the monthly cases have significantly dwindled, with the numbers consistently falling below 1,000 since January 2020. This decrease could be attributed to improved vaccination coverage, awareness, and better hepatitis control measures. Peculiarly, February 2020 marked the lowest reported cases (404), which may correlate with the COVID-19 pandemic onset, possibly due to

Distribution



Highlights

- Steady decline in 'Other hepatitis' cases and deaths observed in Chinese mainland, with thousands of cases monthly in 2010 reduced to hundreds by November 2023.
- The trend shows a consistent downward trajectory, with nearly no deaths recorded in most months since 2022.
- A sharp decline in cases during February 2020 is seen, likely influenced by the COVID-19 pandemic's early impacts.
- By November 2023, the low case count and zero deaths suggest effective management and improved medical interventions for 'Other hepatitis'.

Deaths Analysis

The death toll associated with 'Other hepatitis' between 2010 and 2023 shows an overall low fatality rate, with many months recording zero deaths. The highest number of deaths in a single month was six in December 2012. There's no clear seasonal or yearly trend in fatalities, and the data show occasional spikes. The last reported death was in September 2022, with majority of the months in 2023 recording no deaths. The low and declining mortality could be due to more effective clinical management and treatment options for hepatitis, along with the aforementioned public health interventions.

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Poliomyelitis

November 2023

Introduction

Poliomyelitis, also known as polio, is a highly infectious viral disease that primarily affects young children. The virus is transmitted from person to person, primarily through the fecal-oral route or, less frequently, by contaminated water or food. While most infections are asymptomatic, affected individuals can experience debilitating symptoms such as paralysis. Despite being eradicated in many parts of the world, polio continues to be a public health concern in several countries. Vaccination is the most effective defense against this disease.

Temporal Trend



Cases Analysis

Chinese mainland has presented a remarkably low incidence of poliomyelitis from January 2010 to November 2023, with the notable exception of a brief outbreak in 2011. In August 2011, an abrupt increase to 4 cases was reported, followed by an escalation to 6 cases in September and a peak of 8 cases in October, before a decline to 2 cases in December. No cases were then reported from January 2012 onwards, signifying effective control measures and sustained disease surveillance, likely through successful immunization programs.

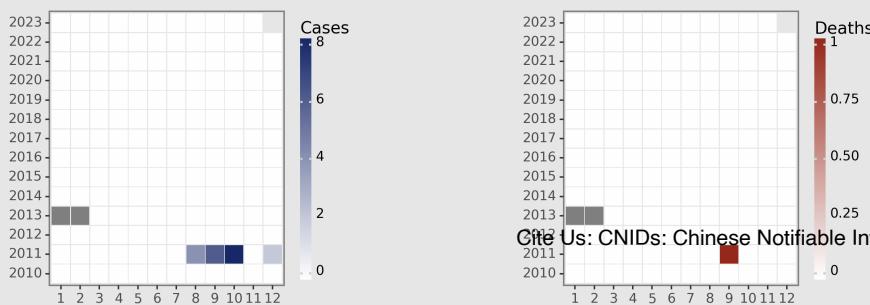
Highlights

- Chinese mainland has reported zero poliomyelitis cases and deaths from January 2023 to November 2023, showcasing effective disease control.
- A brief outbreak in the latter half of 2011 with 20 cases and 1 death was promptly managed, returning to zero cases subsequently.
- The sustained absence of cases since 2012 highlights the successful elimination efforts and strong vaccination coverage.
- Persistent zero-case reporting underscores the efficiency of the surveillance system and public health interventions in place.

Deaths Analysis

Throughout the observed period from January 2010 to November 2023, Poliomyelitis-related mortality in Chinese mainland was nearly nonexistent, with a singular death reported in September 2011. The isolated mortality incident correlates with the spike in polio cases during the latter half of 2011. From this single event, we can deduce a case fatality rate of 10% during the outbreak. Since then, the absence of mortality data suggests that the outbreak was contained, and preventive health strategies have been effectively maintained to prevent further cases and deaths.

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Human infection with H5N1 virus

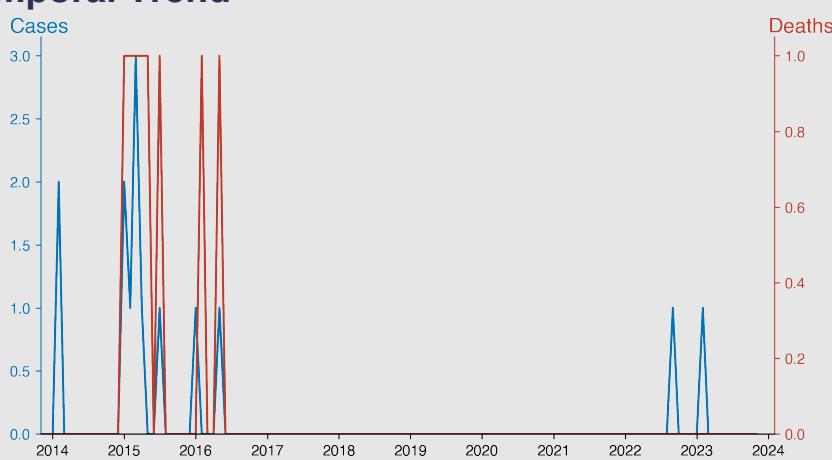
November 2023

Introduction

H5N1 is a highly pathogenic avian influenza virus that primarily affects birds, including poultry. This virus first crossed the species barrier to infect humans in Hong Kong in 1997, resulting in six deaths. Since then, sporadic human infections have resulted in severe disease with a high mortality rate.

Transmission primarily occurs through direct or close contact with infected poultry or contaminated environments. It has not effectively adapted for sustained human-to-human transmission, but the potential for this change raises pandemic concerns. Therefore, surveillance, early detection and response are crucial.

Temporal Trend



Cases Analysis

From 2010 through 2023, Chinese mainland recorded sporadic cases of human H5N1 infections, totaling 12 cases over the 14-year period. A noticeable cluster appeared in 2015 with 7 cases, followed by isolated cases in four subsequent years. The data points to infrequent transmission events, implying limited human-to-human spread or sporadic avian-to-human transmission, possibly due to improved control measures or low virulence in these particular H5N1 strains.

(Word count: 62 words)

Highlights

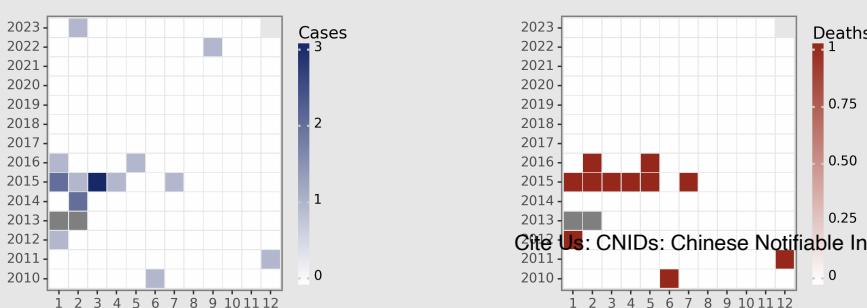
- H5N1 human infections in the Chinese mainland were rare between January 2010 and November 2023, with a total of 15 reported cases and 10 deaths.
- The highest number of cases in a single year was recorded in 2015 with 8 cases and 6 fatalities, indicating a temporary surge.
- Notably, case-fatality rate (CFR) was consistently high when cases were detected, with death occurring in approximately 67% of cases.
- Despite sporadic cases in 2022 and February 2023, there have been no further cases detected as of November 2023, suggesting effective containment and/or sporadic transmission.

Deaths Analysis

Reported mortalities from H5N1 infections tally at 9 over the observed timeframe, yielding a high case-fatality rate typical of H5N1 infections. The deaths mirror the pattern of reported cases, with 2015 marking the highest fatality occurrence (3 deaths). Interestingly, in 2016 and 2023, deaths were reported without corresponding case notifications, suggesting potential underreporting or delayed diagnosis of cases.

(Word count: 63 words)

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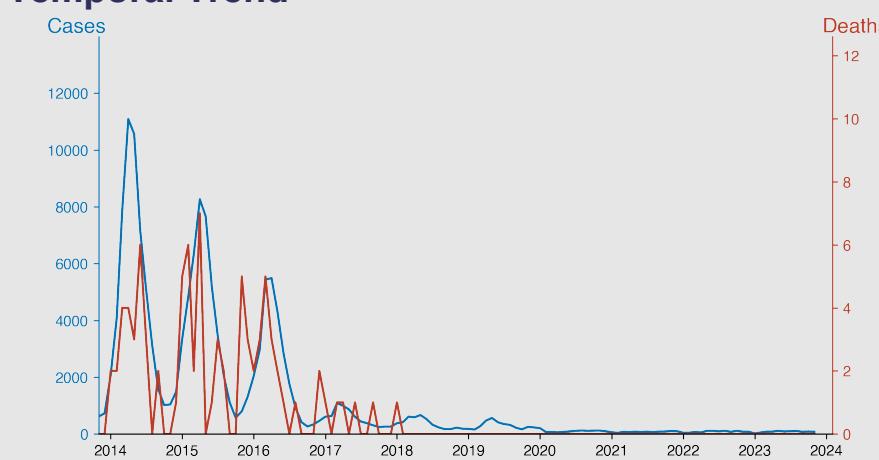
Measles

November 2023

Introduction

Measles is a highly contagious viral disease mainly affecting children. It's transmitted via droplets from the nose, mouth or throat of infected individuals. Symptoms include high fever, rashes, cough, runny nose, and red, watery eyes. Complications can lead to severe health issues like pneumonia, encephalitis, and even death. Prevalence has decreased significantly through vaccination, but outbreaks still occur, especially in areas with low vaccination coverage. Early detection and quarantine are crucial in controlling its spread.

Temporal Trend



Cases Analysis

Measles cases in the Chinese mainland peaked in May 2010 with 13,318 reported cases. This peak was followed by a sharp decline, stabilizing at hundreds rather than thousands per month in subsequent years. After 2010, cases remained relatively low. Notable spikes occurred in early 2014 and 2015, yet the incidence rates never reached the levels seen in 2010. Starting from 2020, a pronounced decrease is observed, coinciding with the COVID-19 pandemic, with cases consistently below 200 per month, suggesting the potential impact of pandemic control measures on measles transmission.

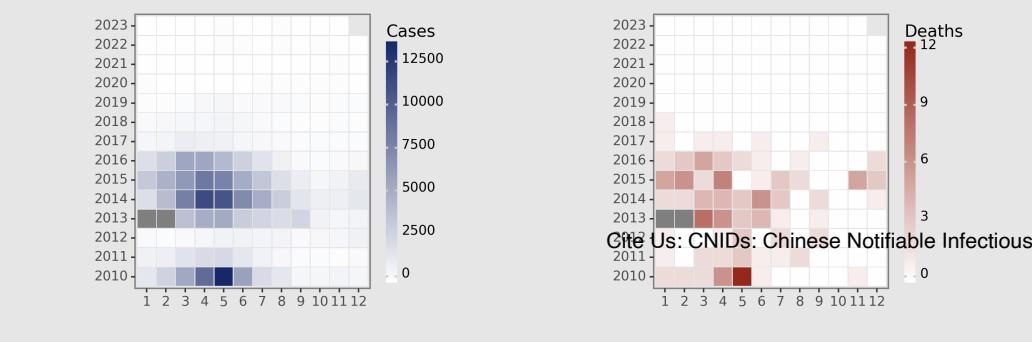
Highlights

- A significant decline in measles cases is observed over the years, from peaks of over 10,000 cases per month in 2014 to consistently under 200 cases per month in 2023.
- The death toll has dropped remarkably, with no recorded deaths since the beginning of 2020, reflecting improvements in prevention, diagnosis, and treatment.
- Seasonal variations in cases have become less pronounced in the recent years, indicating a possible disruption of the traditional measles transmission patterns.
- The current disease situation as of November 2023 is stable, with a low number of 78 cases and zero deaths, signaling effective control measures and sustained low transmission of measles.

Deaths Analysis

Measles-related mortality demonstrated a declining trend over the years. The highest number recorded within a single month was 12 deaths in May 2010. Generally, the number of deaths per month was low and often zero from 2011 onwards. The peak in cases around 2014 and 2015 did not correspond with a significant increase in mortality, indicating improved case management or reporting accuracy. Since 2020, no measles-related deaths have been reported, aligning with the global drive for measles elimination and the influence of heightened health interventions due to the COVID-19 pandemic.

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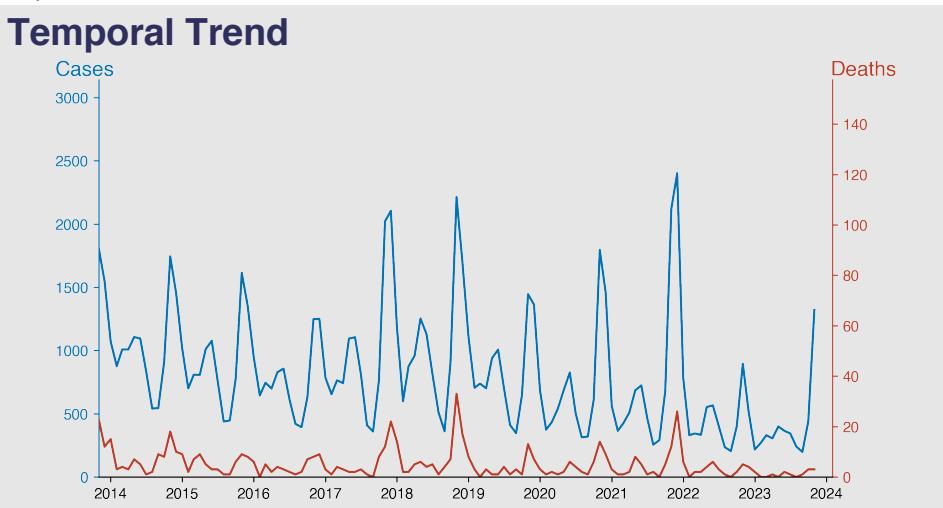
Epidemic hemorrhagic fever

November 2023

Introduction

Epidemic hemorrhagic fever, also known as hemorrhagic fever with renal syndrome (HFRS), is an acute viral disease predominantly caused by Hantaviruses. Predominantly found in Asia and Europe, it transmits mainly through rodents. Infected individuals typically exhibit symptoms such as fever, bleeding tendencies, and kidney damage. The severity ranges from mild to severe, potentially leading to life-threatening conditions. Early diagnosis is crucial in managing the disease, with supportive therapy being the cornerstone of patient management. The enhancement of rodent control measures is vital in prevention.

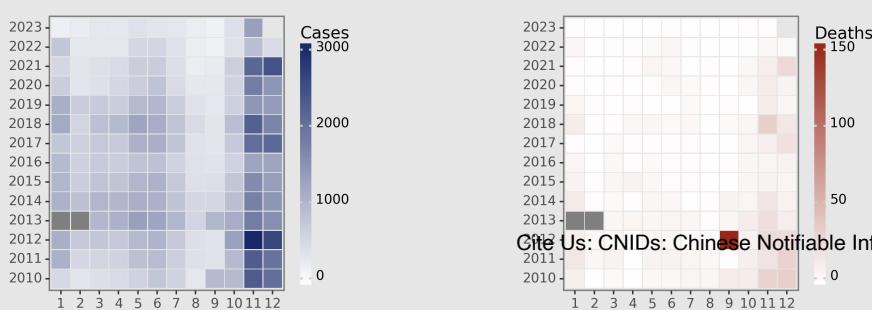
Temporal Trend



Cases Analysis

Epidemic hemorrhagic fever in Chinese mainland demonstrates a clear seasonal pattern with cases rising in the warmer months (May to November) and falling in colder months, peaking notably in November across multiple years. An outlier is observed in September 2012 with a case count disproportionately lower compared to adjacent months and previous years. Overall, there is a general upward trend in cases from 2010, with peaks occurring later in the year and the highest counts consistently in November, suggesting a possible increase in vector population or activity during this period.

Distribution



Highlights

- November 2023 reports 1320 cases of Epidemic hemorrhagic fever with 3 deaths, suggesting controlled transmission and a low fatality rate for that period.
- Case numbers typically surge from late spring to autumn, particularly in November, reflecting possible seasonal patterns in vector activity or human exposure.
- Notably, there's been a reduction in both cases and deaths for November compared to previous years, hinting at enhanced disease control measures.
- The trend since the 2012 peak (3000 cases and 150 deaths in September) reveals a consistent decrease, indicative of effective public health strategies in battling EHF.

Deaths Analysis

The number of deaths follows a somewhat similar pattern to cases, with peaks typically occurring in the latter half of the year, particularly in November and December, which may indicate delayed mortality following peak transmission. An exceptionally high mortality was recorded in September 2012, which deviates from other data points significantly and may warrant a specific investigation to understand the cause of this spike. Aside from this anomaly, the case fatality rate appears relatively low and stable. The years 2010 to 2021 show fluctuations, whereas 2022 and onwards exhibit a slight decrease in deaths, possibly indicating improvements in treatment or

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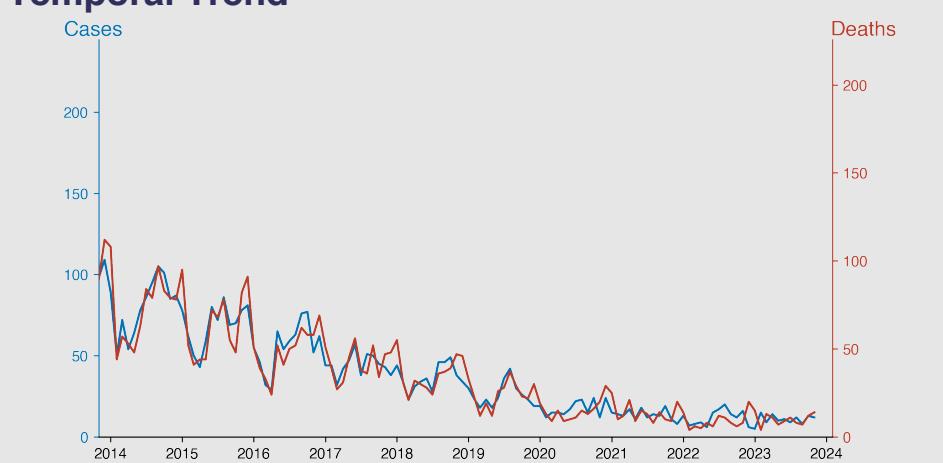
Rabies

November 2023

Introduction

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

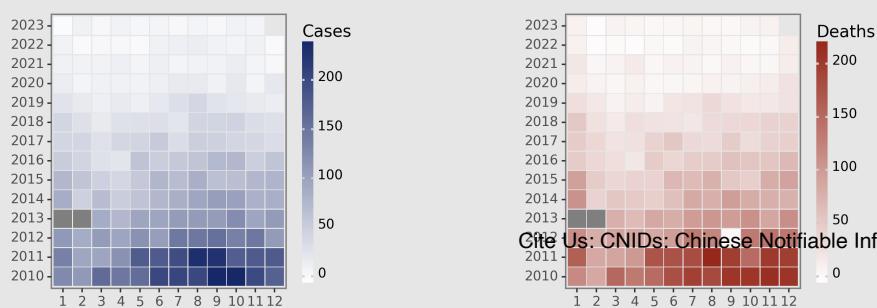
Temporal Trend



Cases Analysis

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

Distribution



Highlights

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

Deaths Analysis

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

Notably, the data for September 2012 show a surprising

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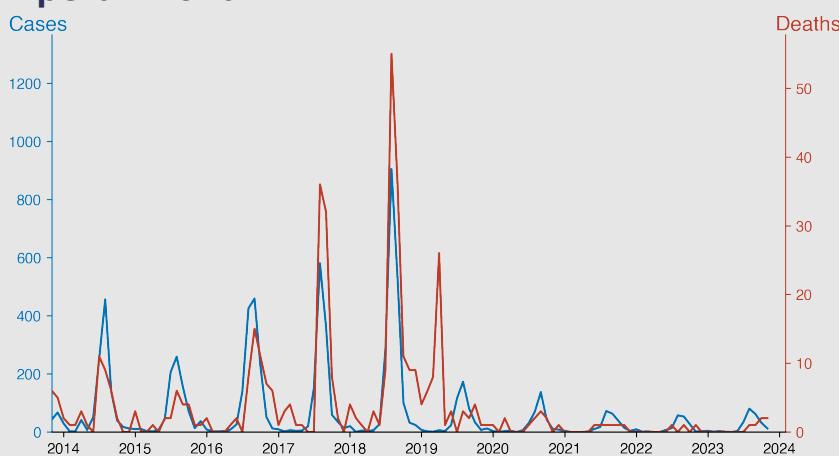
Japanese encephalitis

November 2023

Introduction

Japanese encephalitis (JE) is a serious infection caused by the Japanese encephalitis virus. The virus, found mainly in Asia, is transmitted by mosquitoes, especially in rural rice-growing regions. Most people infected by the virus exhibit mild symptoms or none at all. However, a small percentage may develop severe clinical illness, leading to inflammation of the brain (encephalitis). In severe cases, JE can cause high fever, headache, neck stiffness, disorientation, coma, seizures, spastic paralysis, and eventual death. Vaccination is the most effective prevention strategy for JE.

Temporal Trend



Highlights

- Seasonal trend with peaks in summer months, particularly in July and August, consistently demonstrating higher case counts and deaths across the recorded years.
- Overall decline in cases and deaths from Japanese encephalitis since the peak year of 2010, indicating improved public health measures or reporting accuracy.
- Notable spikes in mortality disproportionate to case counts in some years, such as February and April 2019, suggest potential outbreaks or increased virulence.
- The current situation as of November 2023 shows a low number of cases (12) and deaths (2), continuing the general downward trend in the incidence of Japanese encephalitis on the Chinese mainland.

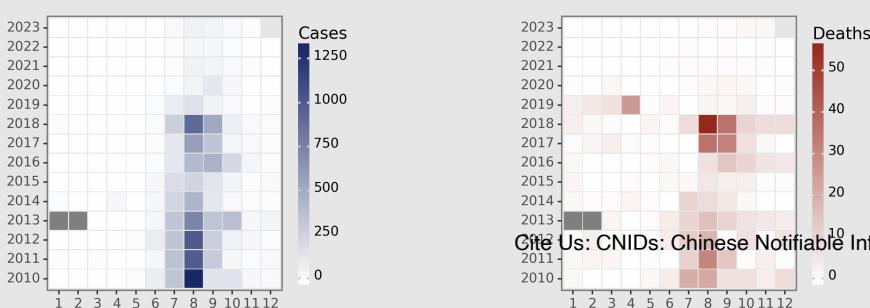
Cases Analysis

Japanese encephalitis cases in Chinese mainland exhibit a clear seasonal pattern, peaking annually between July and September. The data indicates sporadic cases in early months, with a substantial rise in the summer, indicative of vector activity, likely due to mosquitoes. High variability is shown year-on-year with notable surges, such as 1,301 cases in August 2010 and 986 cases in August 2012. Cases declined in 2021-2023, with only 80 cases at the 2023 peak. The temporal distribution and regular peaks suggest climatic and ecological factors significantly influence transmission dynamics.

Deaths Analysis

Deaths due to Japanese encephalitis demonstrate seasonal correlations paralleling case numbers, with a marked spike in mortality also observed during peak transmission months. Mortality counts fluctuate, with particularly severe outcomes in August of certain years, such as 55 deaths in August 2018. While the absolute death numbers appear to correlate with case incidence, the case-fatality ratio varies, indicating potential improvements in clinical care, public health interventions, or reporting practices. Recent years, especially from 2021 onwards, exhibit reduced mortality, echoing the decline in cases and possibly reflecting the impact of mitigation.

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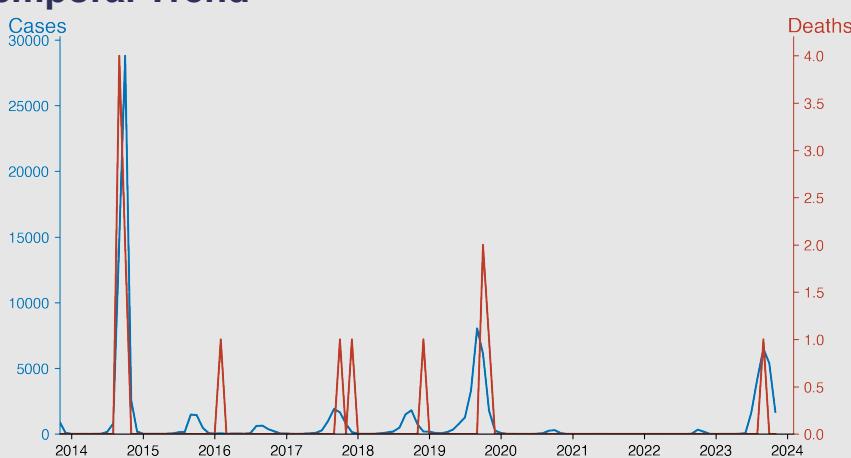
Dengue

November 2023

Introduction

Dengue is a mosquito-borne viral infection causing a severe flu-like illness. Often found in tropical and sub-tropical climates worldwide, it is transmitted by the Aedes mosquitoes, mainly Aedes aegypti. Symptoms, appearing 4-7 days after the mosquito bite, can range from mild fever to incapacitating high fever, severe headache, and pain behind the eyes. Serious cases can develop into dengue hemorrhagic fever resulting in bleeding, blood plasma leakage, or even dengue shock syndrome leading to dangerously low blood pressure. There is no specific treatment but early detection and access to proper medical care can lower fatality rates.

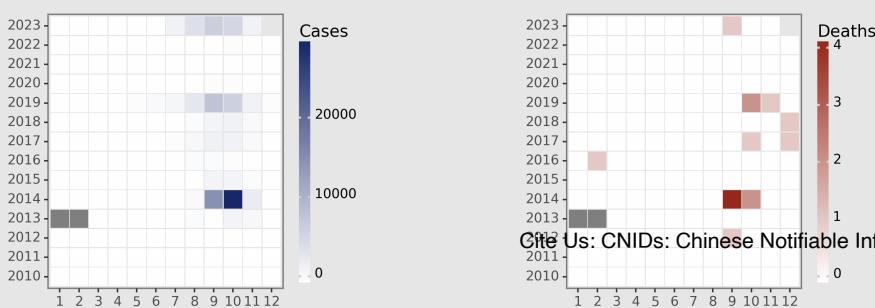
Temporal Trend



Cases Analysis

Dengue case trends on the Chinese mainland from 2010 to 2023 follow a consistent seasonal pattern, with a marked increase during the warmer months, particularly from July to October, which corresponds to peak mosquito activity. An anomaly in this pattern is the decrease of cases from 2018 to 2021, then an increase again in 2022 and 2023. The peak was observed in 2023 September (6494 cases), surpassing the 2014 September high (14759 cases). A notable escalation is evident starting from 2013, with a drastic increase in 2014; however, this heightened incidence does not persist consistently in the following years.

Distribution



Highlights

- There has been a notable surge in dengue cases during the warmer months, particularly from July to October, with peak transmission in September 2023.
- Despite the high number of cases, the mortality rate has stayed remarkably low; only one death was reported amidst the thousands of cases in September 2023.
- The current trend in 2023 shows a decrease in cases in November compared to the peak in September, suggesting a seasonal decline as the weather cools.
- Overall, the situation in November 2023 indicates an active but decreasing transmission of dengue, with no significant impact on mortality rates at present.

Deaths Analysis

Despite fluctuations and occasional outbreaks of dengue cases, the death toll associated with dengue on the Chinese mainland remains low, with only a few deaths reported annually and many years displaying zero mortality. The most significant number of deaths within a month over the observed period is four in 2014 September. Over 13 years, mortality is relatively infrequent compared to incidence peaks, which may suggest effective clinical management strategies or a predominance of less severe dengue strains during the outbreaks. The overall lethality remains low, as shown by the data spanning from 2010 to 2023.

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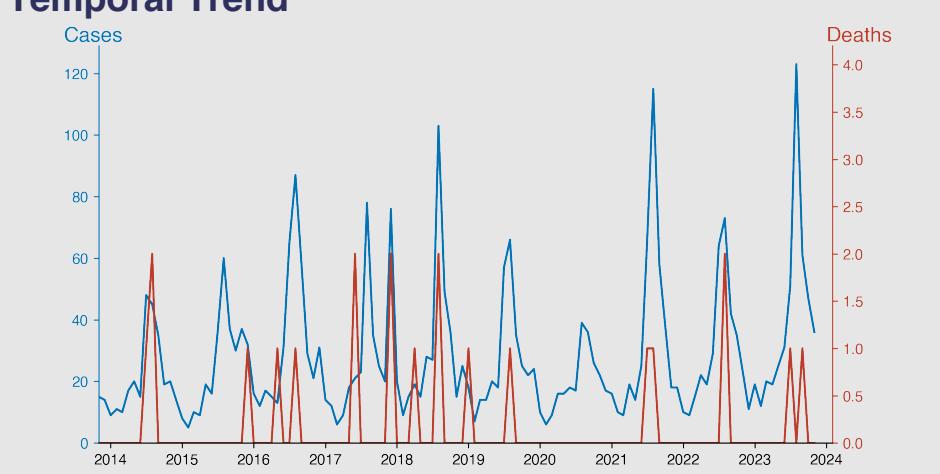
Anthrax

November 2023

Introduction

Anthrax is a severe, potentially fatal disease caused by the bacterium *Bacillus anthracis*. It primarily affects livestock but can also infect humans through spores from contaminated animal products or biological warfare. Three types are cutaneous, inhalation, and gastrointestinal, each correlating with how the bacteria enter the body. Symptoms vary by type, but they commonly include skin sores, stomach pains, and severe breathing problems. Treatment includes antibiotics, which prove most effective when administered promptly after exposure. Anthrax is preventable through vaccination and improved handling of animal products.

Temporal Trend



Cases Analysis

The data indicate a clear seasonal pattern of anthrax cases in the Chinese mainland, with a peak typically occurring from July to September each year. The highest number of reported cases in a single month is 123 cases in August 2023. Although cases occur year-round, their intensity increases during the summer and early autumn. Over the observed period, there was a visible upward trend, with the number of cases slowly increasing year on year, particularly notable in the peak months.

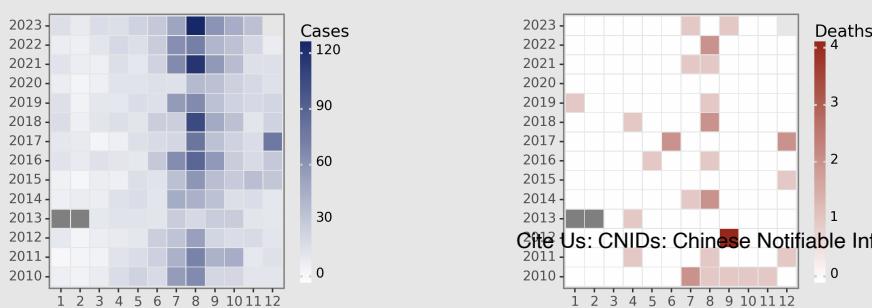
Highlights

- Seasonal anthrax peaks observed from July to September, pointing to environmental and agricultural influences on transmission.
- August 2023 marked the highest incident count at 123 cases yet no deaths, indicating improved disease management.
- Deaths are sporadic despite consistent case numbers yearly, suggesting effective medical interventions for anthrax.
- Fluctuating annual cases with intermittent surges denote endemic anthrax presence, highlighting the need for continued surveillance and public health initiatives.

Deaths Analysis

Despite fluctuations in case numbers, anthrax-associated deaths are relatively rare. The deadliest year appears to be 2012, with four deaths in September. Deaths are sporadic and do not seem to follow a strong seasonal trend, although July 2010, 2017, and 2022 also recorded multiple fatalities. The overall fatality rate appears low given the total number of cases, with a few notable aberrations such as September 2012. This suggests that while anthrax has a presence in the Chinese mainland, it is generally being managed effectively in terms of mortality.

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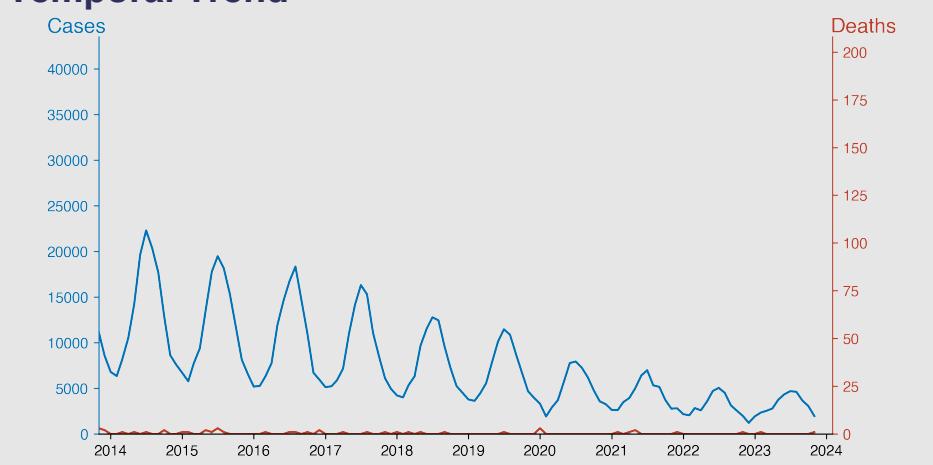
Dysentery

November 2023

Introduction

Dysentery is an infectious disease characterized by inflammation of the intestines, primarily the colon. It is usually caused by shigella bacteria or amoebae. The primary symptom is severe diarrhea, often blood-streaked or mucus-filled, accompanied by abdominal pain, fever, and dehydration. It is transmitted through contaminated food and water or person-to-person contact where hygiene is poor. While dysentery can affect people of all ages, it is particularly severe in children. Treatment typically includes fluids and electrolyte replacement, and in severe cases, antibiotics.

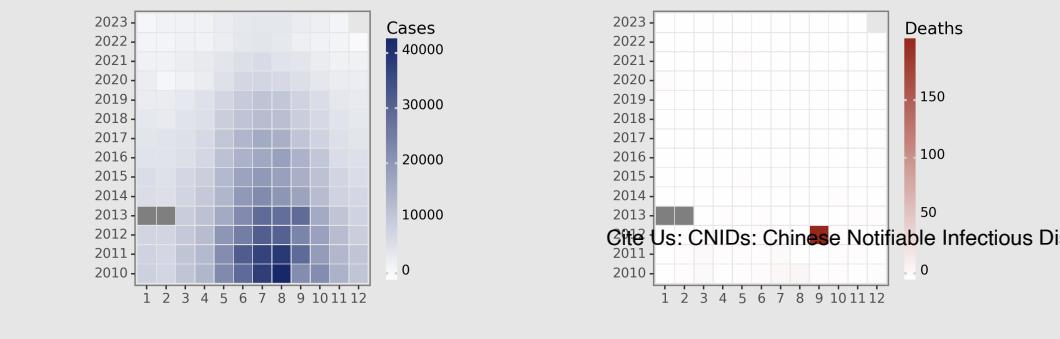
Temporal Trend



Cases Analysis

The case reports of dysentery on the Chinese mainland from 2010 to 2023 exhibit a seasonal pattern, peaking between June and August each year, which suggests a potential relationship with climatic factors favorable for transmission during warmer months. Initially, there is an annual increase in cases, reaching the highest count in August 2010 at 41,507 cases. From 2010 through 2023, there is a gradual decline in the number of cases, dropping to just 1,963 in November 2023. The overall trend indicates a successful reduction in dysentery incidence over the 14-year period.

Distribution



Highlights

- A significant decline in dysentery cases from a peak of 41,507 in August 2010 to 1,963 cases in November 2023, indicating effective control measures.
- Seasonal peaks observed during summer months, suggesting climatic factors may influence transmission rates.
- Anomalously high death toll in September 2012 with 198 deaths, contrasting with generally low mortality associated with dysentery in other periods.
- Recent data show a maintained low transmission with occasional fatalities, maintaining dysentery as a controlled but persistent health concern on the Chinese mainland.

Deaths Analysis

Dysentery-related deaths are considerably low compared to the case numbers, with most months reporting zero to three deaths. A notable spike occurred in September 2012 with 198 deaths, an outlier when compared to the overall data. Apart from this exception, the fatalities remained low throughout the years. The mortality data, coupled with the trend in cases, suggest effective clinical management and possible improvements in sanitation and public health measures. The consistently low number of deaths over the years also indicates a low case-fatality ratio for dysentery in the population.

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Tuberculosis

November 2023

Introduction

Tuberculosis (TB) is an infectious disease caused by the bacterium *Mycobacterium tuberculosis*. Usually affecting the lungs, it can also damage other parts of the body. It is transmitted through the air when an infected individual coughs or sneezes. Although preventive measures and treatment exist, TB remains a major global health issue. Symptoms include a persistent cough, fever, night sweats, weight loss, and fatigue. Multidrug-resistant TB is a worldwide concern, highlighting the importance of early diagnosis and suitable treatment.

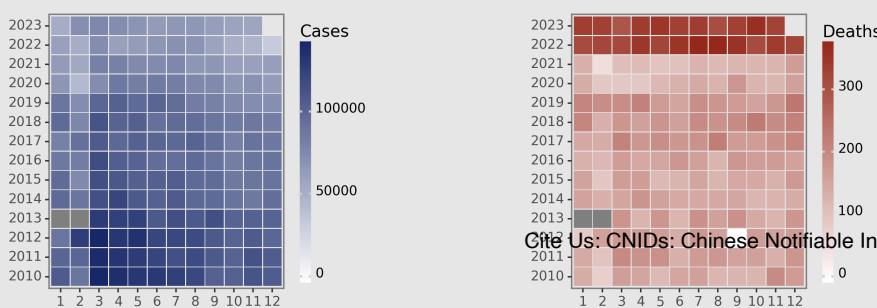
Temporal Trend



Cases Analysis

:
From 2010 to 2023, Tuberculosis (TB) cases in mainland China showed an overall declining trend with some fluctuations. An initial peak occurred in March 2010 with 138,574 cases, followed by subsequent peaks in March for most years, indicative of potential seasonal trends. Cases progressively decreased over time, particularly notable from 2020, likely influenced by public health measures during the COVID-19 pandemic, reaching the lowest reported figure of 33,951 cases in December 2022. However, there's been a minor uptick in cases since then, as observed in the first half of 2023.

Distribution



Highlights

- A sustained decrease in TB cases in mainland China from January 2010 (105,877 cases) to November 2023 (57,432 cases) indicates a continued decline in incidence.
- Despite fluctuations, TB-related deaths began to rise sharply from January 2022, with mortality rates reaching higher levels than any time since 2010.
- The increased mortality rate post-2021 suggests potential issues such as increased virulence, reporting changes, or challenges in treatment and healthcare access.
- A significant drop in cases and deaths in February 2020 hints at possible healthcare system strains during the COVID-19 pandemic onset.

Deaths Analysis

:
The number of deaths associated with TB in China fluctuated over the years with a general increase, especially toward the latter years. It started with 141 deaths in January 2010, and despite some variability, death counts rose sharply from 2022, peaking in July with 367 deaths. This worrying trend continues into 2023, with an average monthly death count around 327 cases. The mortality data indicate that while incidence has decreased, the lethality of TB may be on the rise or detection and reporting of mortality have become more accurate over time.

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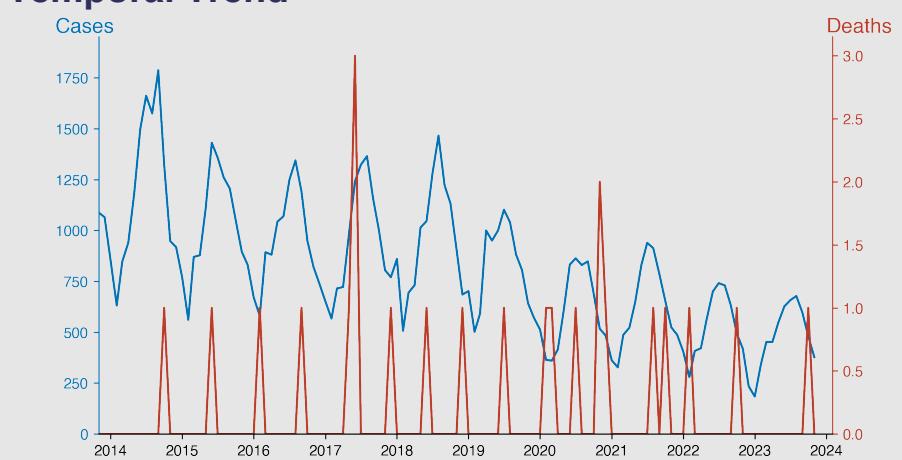
Typhoid fever and paratyphoid fever

November 2023

Introduction

Typhoid fever and paratyphoid fever are life-threatening illnesses caused by *Salmonella* species. Typhoid fever, caused by *Salmonella typhi*, and paratyphoid fever, caused by *Salmonella paratyphi*, are marked by symptoms such as cramps, diarrhea, fever, or headache. The diseases are transmitted via the fecal-oral route, usually through contaminated water or food. Globally, typhoid fever affects about 21 million people annually, predominantly in low and middle-income countries. Paratyphoid fever is less common but poses similar challenges in prevention and control due to its similar transmission route and similar range of symptoms.

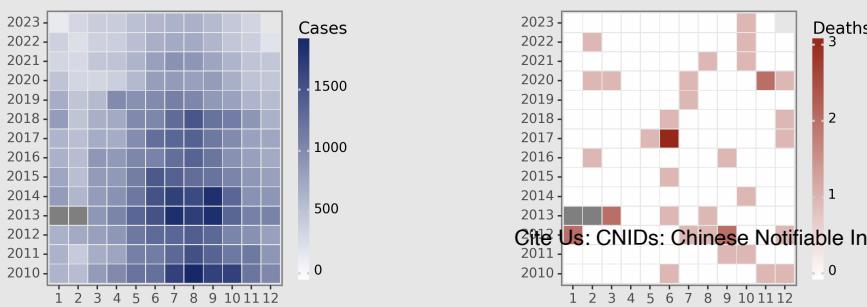
Temporal Trend



Cases Analysis

From 2010 to 2023, the trend in cases of Typhoid and paratyphoid fever in the Chinese mainland presents a clear seasonality, with peaks generally occurring in the summer months from June to August. Over the years, there has been a gradual decrease in the number of reported cases, particularly noticeable after 2020. The highest number of cases within a single month was observed in July 2013 with 1,799 cases, and a remarkable decline was seen over a decade later, with 657 cases reported in July 2023.

Distribution



Highlights

- Notable decline in Typhoid and paratyphoid fevers from 2010's peak (1867 cases) to November 2023 (377 cases), indicating successful control measures over the years.
- Deaths remain consistently low, with occasional instances, such as a single death in October 2023, showing no rising mortality trend.
- Cases increase seasonally from May to August each year, hinting at potential seasonal transmission factors.
- A significant reduction in cases since 2020 may relate to heightened sanitation and health practices during the COVID-19 era.

Deaths Analysis

Throughout the same period, the number of deaths remained relatively low considering the total number of cases, with occasional months reporting 1 to 3 deaths. The mortality shows no clear seasonal pattern and remains sporadic with a total of 27 deaths reported from 2010 to 2023. Notably, there was an improvement in reported outcomes post-2020, coinciding with the reduction in case numbers, likely due to improved public health measures, with only two months reporting a single death each since then.

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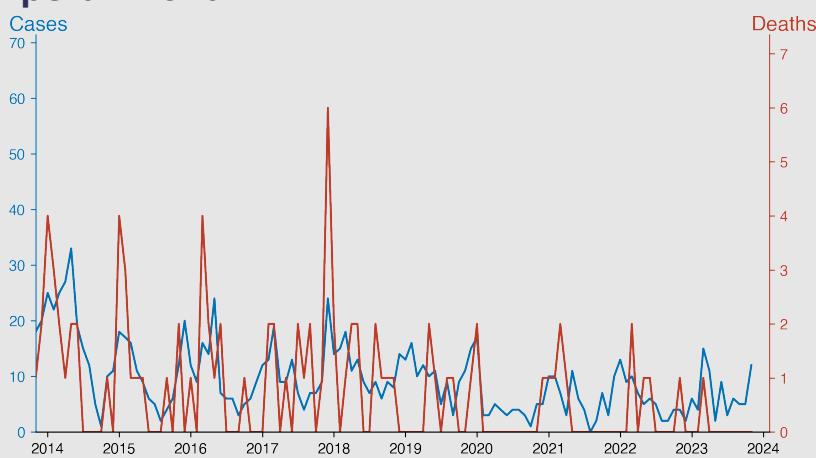
Meningococcal meningitis

November 2023

Introduction

Meningococcal meningitis, predominantly caused by *Neisseria meningitidis* bacteria, is a severe and potentially fatal infection of the meninges, the protective membranes covering the brain and spinal cord. This highly contagious disease is transmitted through respiratory droplets or close contact with an infected person. It's characterized by high fever, stiff neck, sensitivity to light, and confusion. Mass outbreaks are common in the 'meningitis belt' of Sub-Saharan Africa. Vaccination and rapid treatment substantially reduce the morbidity and mortality rates. It is a health emergency and requires immediate medical attention.

Temporal Trend



Cases Analysis

From 2010 to 2023, reported meningococcal meningitis cases in mainland China showed notable seasonality, peaking predominantly in early spring (e.g., March) and declining throughout the summer months. The highest number of monthly cases (68) was reported in March 2010. A general downward trend is observed over the years, with the counts decreasing from an average of around 25 per month in 2010 to single digits in later years, suggesting improved disease control or underreporting.

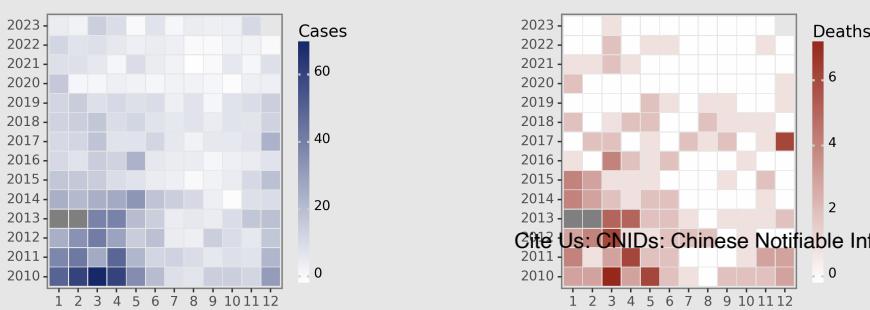
Highlights

- Marked decline in meningococcal meningitis cases in China from 2010 to 2023, with a significant drop in cases and deaths, especially between 2020 and 2023.
- Seasonal patterns indicate higher incidence in early months of each year, with a trend of lowest case numbers during late summer and autumn.
- The absence of death reports in November 2023 and minimal cases reflects the effectiveness of public health control measures.
- Overall, the data suggests improved management, possibly due to vaccination efforts and heightened disease surveillance.

Deaths Analysis

Death data mirrors the declining trend in cases but shows considerable variability in case-fatality rates. The highest count (7 deaths) was reported in March 2010. Fortunately, there is a substantial decrease in fatalities over the observed period, and from 2021 onward, the number of monthly deaths has often been zero. This reduction could indicate advancements in rapid diagnosis, effective treatment, vaccination, and public health interventions.

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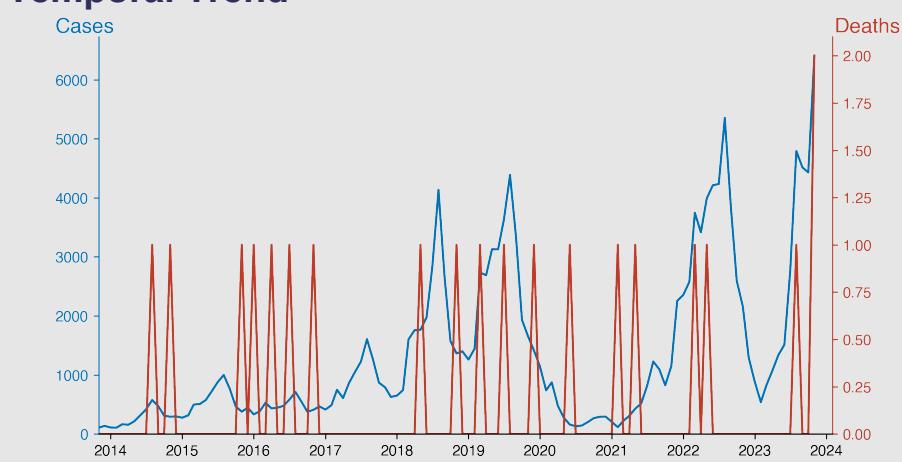
Pertussis

November 2023

Introduction

Pertussis, commonly known as whooping cough, is a highly contagious bacterial infection caused by *Bordetella pertussis*. It affects the respiratory tract and is characterized by severe coughing attacks that can last for several weeks or even months. The disease is particularly dangerous in infants and young children. Vaccines can provide protection against pertussis, but their effectiveness decreases over time. Despite global vaccination programs, pertussis remains a significant public health concern worldwide.

Temporal Trend



Cases Analysis

From 2010 to 2023, reported Pertussis cases in Chinese mainland have shown a rising trend, increasing significantly from 88 cases in January 2010 to 6410 in November 2023. There is an observable seasonality with cases peaking in the later months of each year, especially from July to November. The most dramatic increases are noted from 2017 onwards, with a striking surge in 2022 and 2023, indicating a worsening outbreak or improved surveillance and reporting mechanisms.

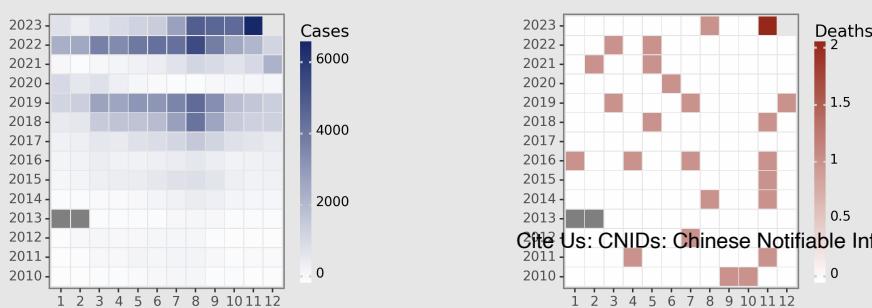
Highlights

- Pertussis cases in the Chinese mainland have shown a significant increasing trend over the years, with occasional fluctuations.
- By November 2023, there has been a considerable escalation in the number of cases, with 6410 instances reported, which is the highest monthly count in the observed data.
- Deaths associated with Pertussis remain relatively low despite the rise in cases, although there is a slight increase to 2 deaths as of November 2023.
- The peak of Pertussis cases tends to occur in the later months of the year, particularly from August to November, suggesting a seasonal pattern.

Deaths Analysis

Throughout the 2010-2023 period, reported deaths from Pertussis have been rare in the Chinese mainland data. Despite the low mortality, a slight uptick in reported deaths is observed in later years, aligning with the increased case counts. The mortality data may suggest that while Pertussis cases are becoming more common or better reported, the fatality rate remains low. However, each reported death warrants attention for potential improvements in clinical management and prevention strategies.

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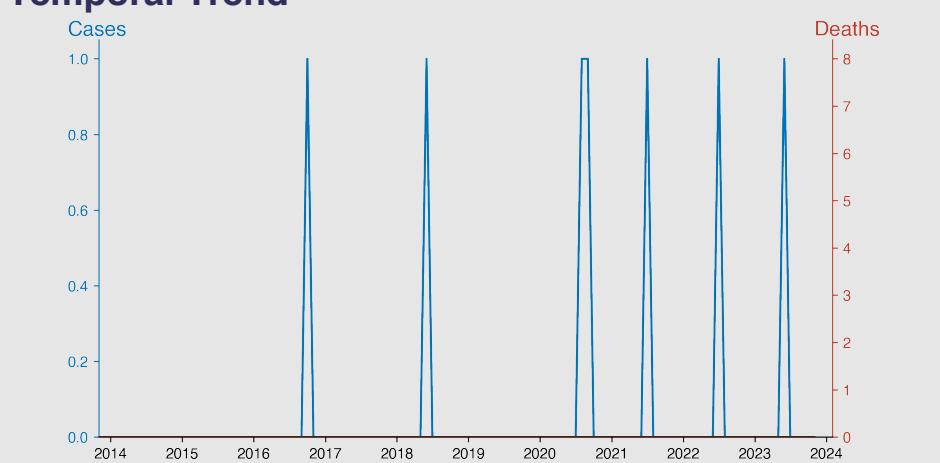
Diphtheria

November 2023

Introduction

Diphtheria is a severe bacterial infection affecting the respiratory tract or skin. Caused by *Corynebacterium diphtheriae*, it is transmitted through person-to-person contact or contaminated objects. Symptoms range from mild sore throat, fever, and enlarged lymph nodes to serious complications like myocarditis and neuritis. The diphtheria toxin produced by the bacteria may cause damage to the heart, kidneys, and nervous system. This potentially fatal infection has been largely controlled in developed regions through widespread immunization, but remains a threat in underdeveloped areas.

Temporal Trend



Cases Analysis

From January 2010 to November 2023, the Chinese mainland reported minimal cases of diphtheria, marking a remarkably low incidence of the disease, likely attributed to effective vaccination programs. Only five cases were identified over nearly 14 years - one each in October 2011, October 2016, June 2018, August and September 2020, and July 2021, followed by a singular case in June 2023. These sporadic occurrences suggest either rare vaccine failures, decreased vaccine coverage, or potential gaps in herd immunity, each case potentially representing an isolated event or limited outbreak.

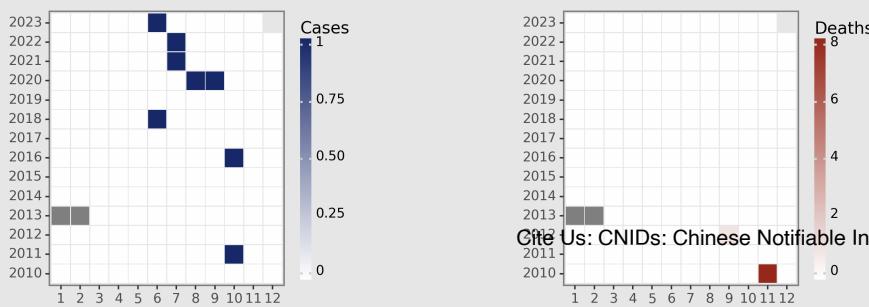
Highlights

- Diphtheria is well-contained in mainland China, with almost no cases or deaths from January 2010 to November 2023.
- Isolated occurrences in November 2010 (0 cases, 8 deaths), October 2011, September 2012, October 2016, June 2018, August & September 2020, July 2021, and July 2022 had no subsequent outbreaks.
- November 2010 shows deaths without cases, suggesting possible retrospective fatality reporting or data discrepancies.
- Effective vaccination and public health strategies likely contribute to the low incidence, but continuous monitoring is essential to prevent resurgence.

Deaths Analysis

Despite the low incidence of diphtheria cases in the Chinese mainland between January 2010 and November 2023, there were reported deaths, totaling 9. Eight deaths were reported in November 2010, without corresponding cases, raising questions about data completeness or error. Another death occurred in September 2012, similarly without a recorded case. The absence of recent deaths implies improved clinical management and possibly stronger disease surveillance, contributing to timely interventions and reduced mortality in recent years.

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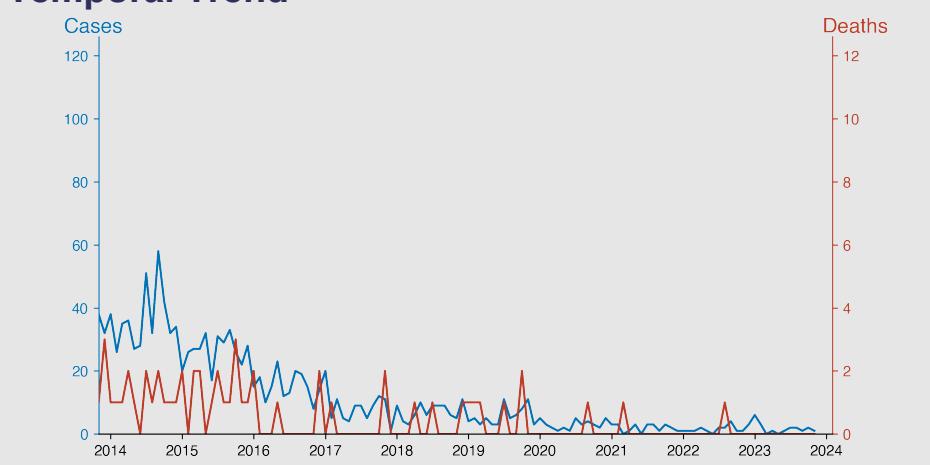
Neonatal tetanus

November 2023

Introduction

Neonatal tetanus is a severe bacterial infection primarily affecting infants in under-resourced countries. The causative agent, Clostridium tetani, enters through the umbilical stump during unhygienic childbirth practices. Symptoms, appearing within the first two weeks of life, include muscle stiffness and spasms. Without quick intervention, it can cause breathing difficulties and mortality rates are high. Despite being preventable through simple hygiene practices and maternal vaccination, neonatal tetanus remains a significant global health challenge.

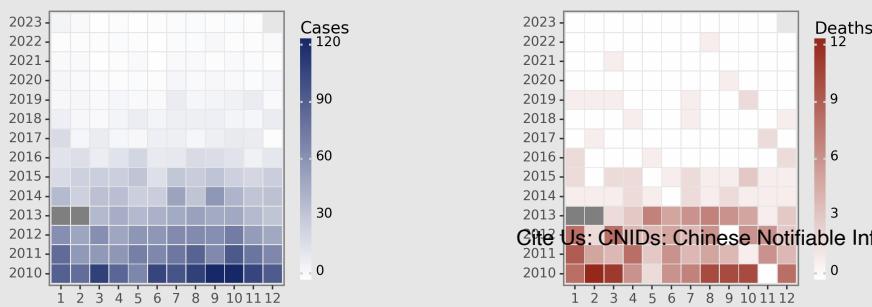
Temporal Trend



Cases Analysis

From 2010 to 2023, neonatal tetanus cases in Chinese mainland displayed a significant decreasing trend. Starting at 89 cases in January 2010, the numbers fluctuated initially but showed a gradual decline over the years. Particularly from 2016 onwards, there was a marked reduction, with cases often falling to single digits. This could indicate improved vaccination coverage, better access to antenatal care, and increased birth deliveries under hygienic conditions, reflecting the success of targeted public health interventions and educational campaigns.

Distribution



Highlights

- Significant decline in neonatal tetanus cases and deaths from 2010 to 2023, indicating successful disease control efforts.
- From a high of 120 cases in September and October of 2010, cases have dropped to consistently low single digits after 2022.
- The death toll has also seen a marked decrease, with no deaths reported in several months throughout the observed years, particularly after 2020.
- The data up to November 2023 show very low disease activity, with only 1 case and no deaths, suggesting neonatal tetanus is being effectively managed in the Chinese mainland.

Deaths Analysis

The number of neonatal tetanus deaths also followed a downward trend paralleling the decrease in cases on the Chinese mainland from 2010 to 2023. Initially, deaths ranged from 2 to 12 per month, but from 2016 onwards, mortality typically remained at zero or occasionally rose to a maximum of 2 deaths. This drop in fatalities could be attributed to enhanced healthcare systems, rapid treatment, and immunization programs. Continued vigilance is necessary to maintain gains and achieve elimination status as per WHO standards.

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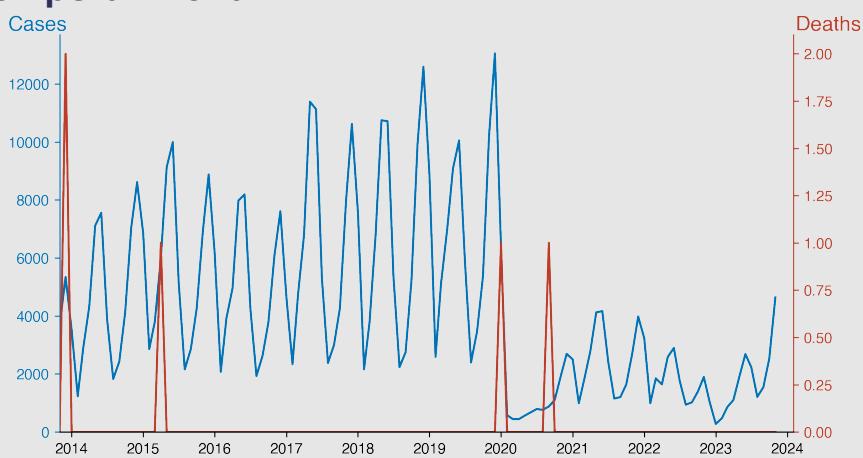
Scarlet fever

November 2023

Introduction

Scarlet fever, also known as scarlatina, is a bacterial illness that primarily affects children. It is caused by Group A Streptococcus bacteria, the same bacteria responsible for strep throat. Symptoms typically include a sore throat, fever, and a distinctive red rash that feels like sandpaper. Previously a severe and deadly disease, scarlet fever is now less threatening thanks to antibiotics which reduce severity and spread, though it can still pose serious complications if untreated. Vaccines are currently under development to combat this illness.

Temporal Trend



Cases Analysis

Scarlet fever cases in the Chinese mainland from January 2010 to November 2023 exhibit a notable seasonality, with peaks typically during June and December, coinciding with school term times when group transmission is more likely. A sharp increase is observed from 2010 to 2011, with a peak in June 2011 at 9,773 cases. Subsequent years continue to demonstrate high infection rates, with a record high in December 2019 at 13,053 cases. The substantial drop in cases in early 2020 may partly reflect public health interventions during the COVID-19 pandemic.

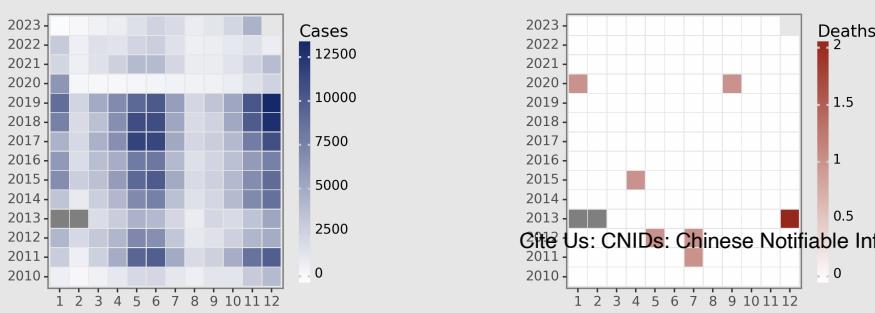
Highlights

- After a sharp decline in reported cases in 2020, possibly due to COVID-19 interventions, Scarlet fever cases in mainland China show a rising trend from 2021 to November 2023.
- Despite increases in case numbers, the overall mortality appears to remain consistently low, with no deaths reported since the start of 2021.
- The peak incidence periods consistently occur around May to July each year, noting a high of 4,637 cases in November 2023, suggesting a seasonal pattern in Scarlet fever occurrences.
- The current disease situation as of November 2023 indicates a need for close monitoring, especially considering the increase in cases post-pandemic restrictions, to prevent potential outbreaks.

Deaths Analysis

Scarlet fever resulted in few deaths despite high case counts, suggesting effective clinical management and possible low virulence of the circulating strains. The first reported death occurred in July 2011 and was followed by isolated fatalities in May and July 2012, with a small spike of two deaths in December 2013. A notable feature is the low fatality rate even in years with high incidence. The years 2014 to 2023 reported very few deaths relative to the number of cases, indicating sustained clinical effectiveness in treatment and management of the disease.

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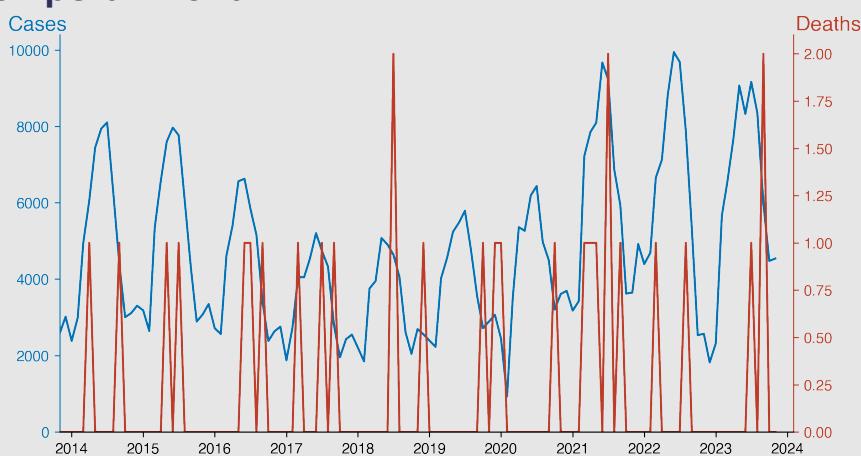
Brucellosis

November 2023

Introduction

Brucellosis is a bacterial infection transmitted from animals to humans, typically via contaminated dairy products or direct contact with infected animals. It's caused by various Brucella species and is often characterized by intermittent fevers, sweating, fatigue, and pain in muscles/joints. Brucellosis can cause long-term complications like arthritis or inflammation in the heart if left untreated. It's prevalent in regions with less regulated animal husbandry practices. Anti-brucellosis measures include pasteurizing milk and using protective equipment when handling animals.

Temporal Trend



Cases Analysis

The trend in Brucellosis cases from 2010 to 2023 in Chinese mainland shows an increasing pattern, peaking typically between May and August, suggesting seasonal transmission. Despite fluctuations, there's a general rise in annual case counts, with the highest numbers in 2022. A slight reduction in 2023 might indicate emerging control measures or natural variability. The cyclical nature implies environmental or occupational factors influencing transmission dynamics.

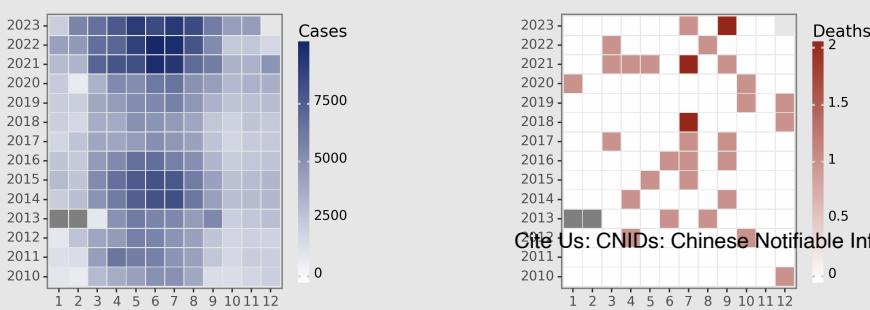
Highlights

- Since 2010, there is a clear seasonal trend with cases peaking between May and July each year, indicating possible seasonal factors influencing transmission.
- There has been an overall upward trend in the number of reported cases of Brucellosis, reaching a peak in June 2022 with 9,943 cases.
- Despite the increasing number of cases over the years, the mortality rate has remained low, with zero to two deaths reported most months.
- As of November 2023, the number of cases reported is 4,540, with no deaths, suggesting continued vigilance is required but the disease has low lethality.

Deaths Analysis

Mortality due to Brucellosis from 2010 to 2023 is incredibly low despite increasing case numbers, underscoring the non-lethal nature of the disease or effectiveness of treatment. Deaths are scarce and sporadically distributed across the years, mostly concentrated in the latter half of the year, suggesting potential seasonal effects on disease severity or late diagnosis in more severe cases. These metrics highlight the importance of public health strategies focusing on prevention and timely intervention.

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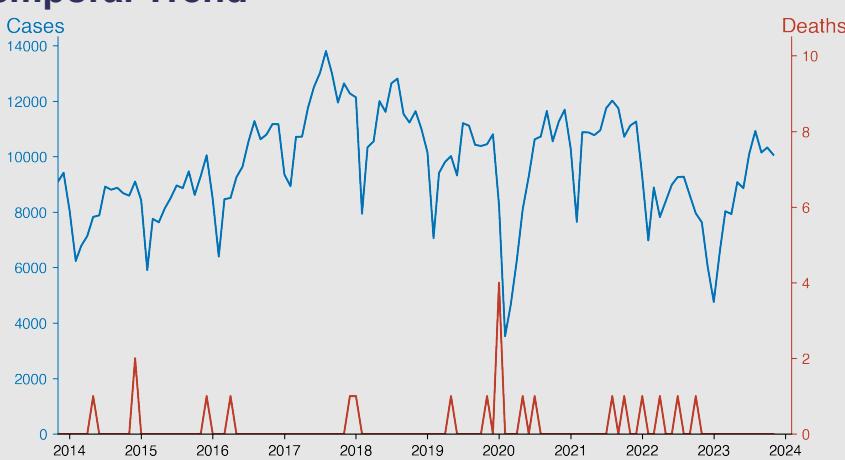
Gonorrhea

November 2023

Introduction

Gonorrhea is a sexually transmitted bacterial infection caused by *Neisseria gonorrhoeae*. Typically contracted through unprotected sexual contact, it primarily affects the mucous membranes of the urethra, cervix, rectum, and throat. Symptoms include burning sensations during urination, discharge, or bleeding between periods in women, though many cases remain asymptomatic. If untreated, gonorrhea can lead to serious complications such as infertility or disseminated gonococcal infection. Regular screening and usage of protection during sex are key prevention measures.

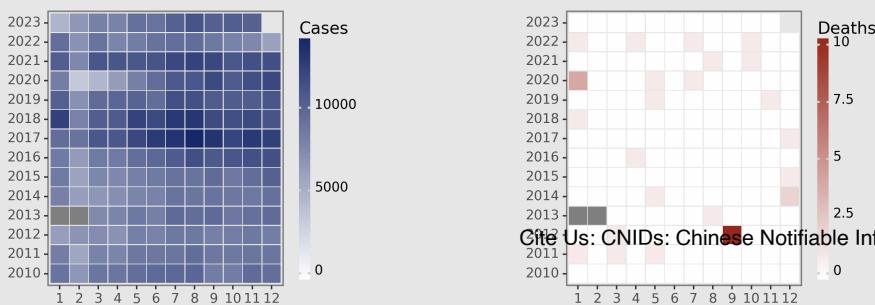
Temporal Trend



Cases Analysis

The data for Gonorrhea in China's mainland from 2010 to 2023 shows fluctuations with a general upward trend in cases over the years. The lowest number of cases recorded was in February 2020 (3524 cases), a period coinciding with the initial outbreak of COVID-19 and the imposition of strict lockdown measures. Typically, monthly cases oscillated between 6000 to 13000, with the highest peak in August 2017 (13803 cases). Seasonal variations are observable, with cases often reducing in February, possibly due to the Chinese New Year holidays impacting reporting and sexual activity patterns.

Distribution



Highlights

- Upward trend in gonorrhea cases from 2010 to 2023, with a gradual increase in incidence despite slight fluctuations.
- Seasonal variation observed, showing lower case numbers early in the year with peaks typically in mid-to-late year.
- Deaths remain extremely low considering the rise in cases, suggesting effective management of disease severity.
- Notable decline in cases starting in 2022, possibly indicating the impact of public health measures or changes in population behavior.

Deaths Analysis

Gonorrhea-related deaths in mainland China are extremely rare throughout the observed period, with only sporadic fatalities recorded despite the substantial number of cases. There was an unusual increase to 10 deaths in September 2012, whereas all other months reported 0 to 4 deaths. This might imply either underreporting, effective treatment strategies, or potentially a reporting anomaly. A mortality count above zero is inconsistent and seems unrelated to the case count, indicating that fatalities may not be directly proportional to the number of cases reported each month.

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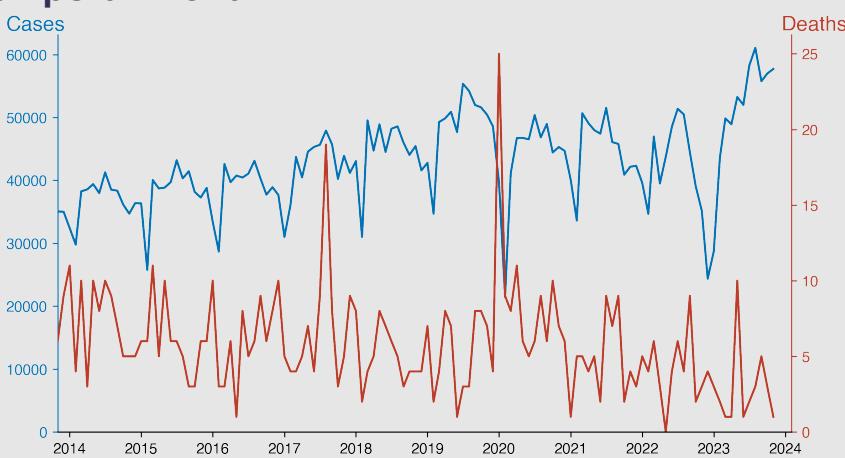
Syphilis

November 2023

Introduction

Syphilis is a sexually transmitted bacterial infection caused by the bacterium *Treponema pallidum*. It progresses through four distinct stages: primary, secondary, latent, and tertiary. Symptoms vary at each stage, making it often hard to diagnose. Early stages present sores or rashes, whereas late stages can affect major organs, leading to severe complications, even death. It's largely spread through sexual contact, including vaginal, anal and oral sex, but can also be transmitted from mother to child during pregnancy. Preventive measures include using condoms and regular testing. Early detection allows effective treatment using antibiotics.

Temporal Trend



Cases Analysis

From 2010 to 2023, reported syphilis cases in Chinese mainland showed an overall increasing trend. Initial cases rose from around 25,577 in January 2010 to peak figures above 60,000 by August 2023, indicating a growing public health concern. Seasonal fluctuations are apparent, with cases generally increasing in warmer months, possibly due to increased sexual activity. A sharp decline in reported cases in February 2020 coincides with the outbreak of the COVID-19 pandemic, suggesting potential impacts on sexual health services or reporting.

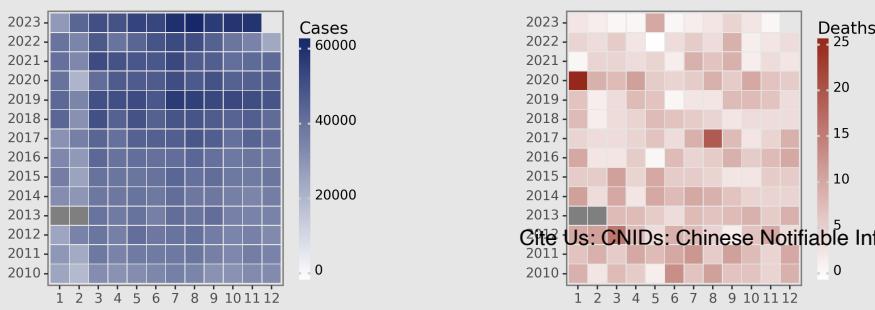
Highlights

- There is a marked increase in syphilis cases in China from 25,577 in January 2010 to 57,719 in November 2023, despite relatively low mortality throughout the period.
- The recorded deaths remained low with single-digit figures most of the time, with occasional spikes (e.g., 19 deaths in August 2017, 25 deaths in January 2020).
- A significant decrease to 21,448 cases in February 2020 likely reflects the impacts of the COVID-19 pandemic on healthcare reporting systems.
- The disease trend does not exhibit clear seasonality, indicating transmission may be influenced by non-seasonal factors.

Deaths Analysis

The death toll from syphilis in Chinese mainland remains low across the period, with monthly deaths rarely exceeding 10 and often below 5. The most significant spike of 25 deaths was recorded in January 2020, which is an outlier compared to the overall data. The low mortality rate suggests effective treatment options are available; however, the consistent occurrence of deaths highlights ongoing challenges in managing syphilis, emphasizing the need for continuous public health interventions and access to care.

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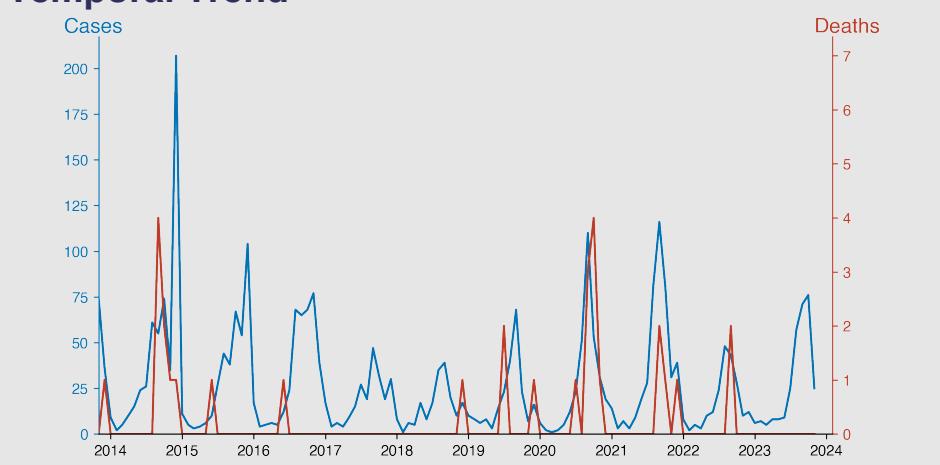
Leptospirosis

November 2023

Introduction

Leptospirosis is a bacterial disease that affects both humans and animals. It is caused by corkscrew-shaped bacteria called leptospira. The condition can be caught through direct contact with urine from infected animals or by water, soil, or food contaminated with their urine. Symptoms vary from very mild and non-specific to severe disease with kidney or liver failure, lung hemorrhage, or meningitis. It's most common in tropical climates but can occur anywhere. The infection can be confirmed using laboratory tests. Treatment typically includes antibiotics.

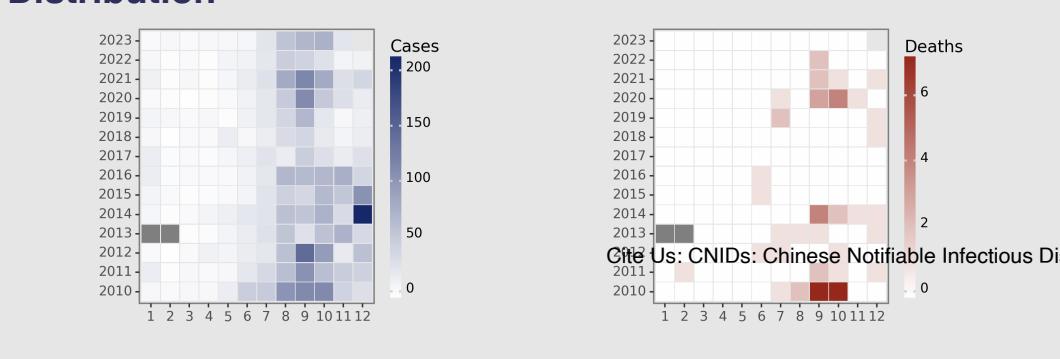
Temporal Trend



Cases Analysis

Leptospirosis cases in Chinese mainland from 2010 to 2023 demonstrate a distinct seasonality, with the majority of cases occurring from June to October, indicating a possible correlation with the warm and wet summer months conducive to the spread of the disease. The peak of cases generally happens in September, suggesting environmental factors may contribute to enhanced transmission during this period. The consistent presence of cases each year indicates stable endemicity, yet with some fluctuations in annual caseloads that might be attributed to varying environmental conditions or public health interventions.

Distribution



Highlights

- Seasonality is pronounced in leptospirosis cases, peaking from June to October, potentially due to climatic conditions favoring bacterial proliferation.
- Over the years, case numbers have shown variability, with significant increases in certain years like 2010 and 2012. Recent trends indicate a decrease post-2021.
- Mortality rates have stayed consistently low, with deaths mostly occurring in peak months. This suggests effective case management and public health measures.
- As of November 2023, there's stability with 25 reported cases and no deaths, reflecting controlled disease transmission and intervention success.

Deaths Analysis

Mortality associated with Leptospirosis over the years shows an overall low fatality rate, with some years experiencing slightly higher death counts (e.g., 2010 September and October). Deaths are sporadically distributed, with no clear pattern or trend observed. The highest number of deaths in a single month was seven, which occurred twice, in September and October of 2010. The data does not indicate any significant mortality spikes that would suggest major outbreaks, hinting at either timely diagnosis and treatment or a predominance of less severe leptospiral strains.

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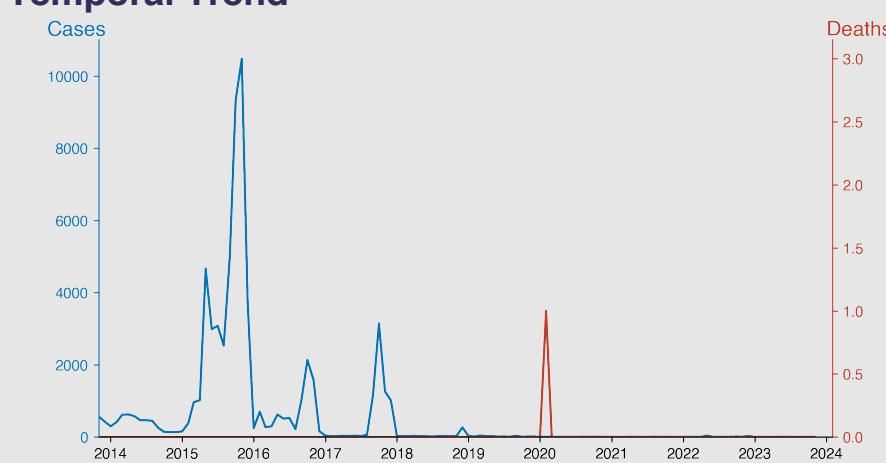
Schistosomiasis

November 2023

Introduction

Schistosomiasis is a parasitic disease caused by Schistosoma flatworms. The disease, prevalent mainly in tropical and subtropical regions, is transmitted through freshwater infested with the parasite. Humans contract the disease when their skin contacts infested water, allowing the worms to penetrate their bodies. Symptoms include abdominal pain, diarrhea, bloody stool or urine, and possible organ damage in chronic cases. According to the World Health Organization, schistosomiasis affects nearly 240 million people worldwide. Effective treatment is available through antiparasitic drugs.

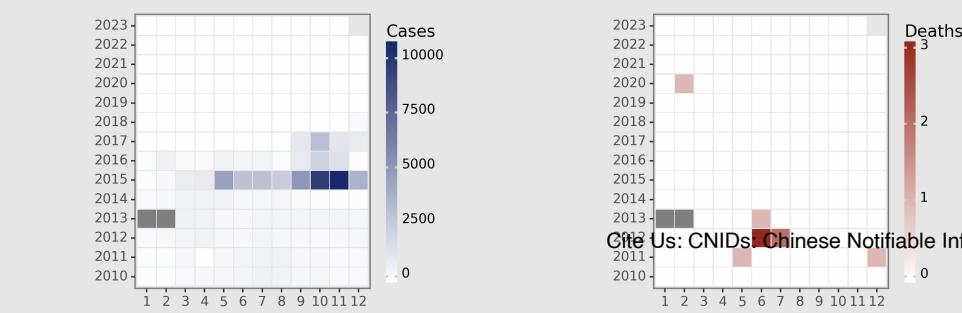
Temporal Trend



Cases Analysis

Schistosomiasis cases in mainland China, as reported, show a fluctuating trend with significant peaks and troughs from 2010 to 2023. Initially, cases increased, peaking between 2010 and 2015, with an unprecedented spike in May 2015 (4664 cases). Beyond 2015, a sharp decline is observed. Another notable peak occurs in October 2016 (2135 cases), followed by a drastic drop to single or low double-digits from 2017 onwards. The data suggest a successful intervention or change in reporting after 2015. However, there are sporadic resurgences, such as those seen in September 2017 (1166 cases) and October 2017 (3144 cases). Since 2018, cases have largely remained

Distribution



Highlights

- A significant peak in reported Schistosomiasis cases occurred in 2015, with November recording the highest at 10,481 cases. There were no associated deaths during this peak.
- After 2015, there is a notable decline in cases, with minimal fluctuations, and the years 2020 through 2023 exhibit consistently low case numbers, suggesting successful control measures.
- The mortality associated with Schistosomiasis has remained extremely low throughout the observed period, and there are several years with zero recorded deaths.
- As of November 2023, Schistosomiasis cases have reduced to very low levels (3 cases), indicating effective ongoing control or elimination efforts within mainland China.

Deaths Analysis

Schistosomiasis-associated mortality rates in mainland China are minimally presented in the data from 2010 to 2023. Throughout the 13-year span, there were only 5 reported deaths despite fluctuating case numbers. The first reported deaths happened in May and December 2011, then a small cluster in mid-2012, with three in June and two in July. Following that, single deaths were recorded in June 2013 and February 2020. The low death incidence may reflect effective treatment and control measures. Despite significant case numbers, particularly in the earlier years, the sustained low mortality rates suggest that while transmission may occur, it has minimal pr

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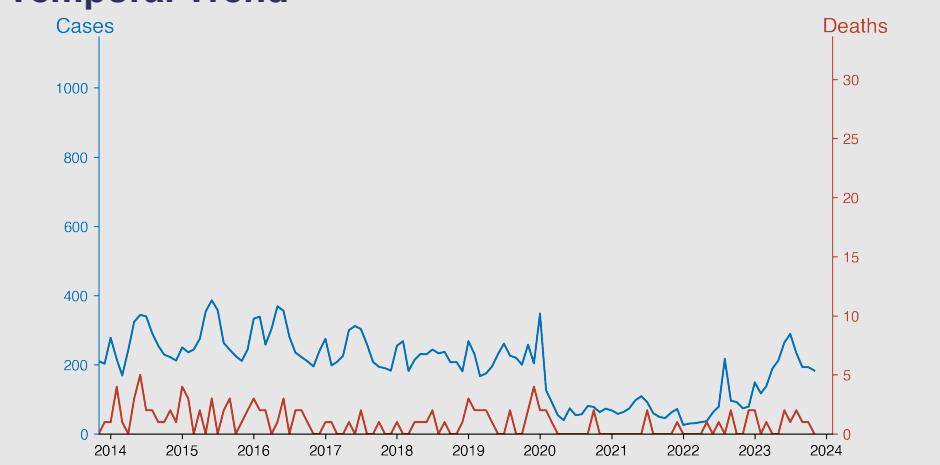
Malaria

November 2023

Introduction

Malaria is a life-threatening disease caused by parasites transmitted to people through the bites of infected female Anopheles mosquitoes. It's prevalent in tropical and subtropical regions, including parts of sub-Saharan Africa, Asia, and the Americas. The disease presents flu-like symptoms that include high fever, headache, and chills. Severe cases can cause anemia, seizure, coma, or even death. Early diagnosis and prompt treatment help control its spread and manage severe cases. Preventive measures include use of insecticide-treated nets and antimalarial drugs.

Temporal Trend



Cases Analysis

Malaria cases in the Chinese mainland show a significant decline over the years, with a peak in 2010 with 1,094 cases in August. A gradual decrease is notable, with occasional spikes, such as 882 cases in June 2013. As of 2020, cases plummet, potentially due to public health interventions or data collection affected by the COVID-19 pandemic. A minor resurgence is observed in 2022, with 217 cases in August, followed by a moderate increase in cases reported in 2023, reaching 289 cases in July.

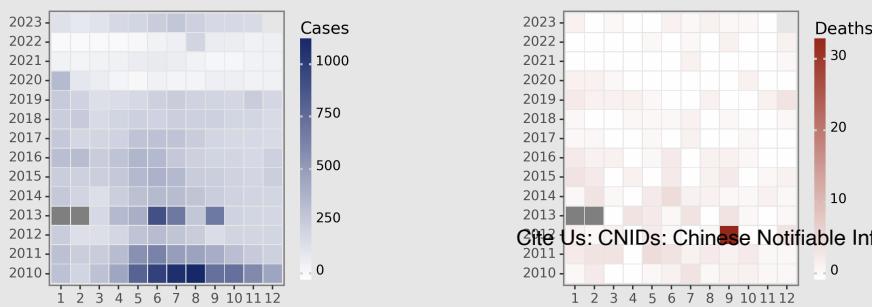
Highlights

- A significant decline in malaria cases from 1,094 in August 2010 to 183 in November 2023, reflecting successful containment efforts.
- Seasonal trends persist, with cases peaking during warmer months (May-September), suggesting ongoing transmission risk.
- Mortality rates are low, with infrequent spikes, indicating effective case management and treatment protocols.
- Post-2020, a dramatic case reduction is observed, potentially due to enhanced health measures in response to the COVID-19 pandemic.

Deaths Analysis

Malaria-related deaths remained relatively low from 2010 to 2023, with the highest number of deaths recorded in September 2012 at 32. Post-2012, the fatalities were sporadic, mostly one or two deaths per month, with occasional zeros. Starting in 2020, deaths drop significantly, with many months reporting no fatalities. The data indicates an effective reduction in mortality, possibly due to improved medical care, preventative measures, and public awareness, despite the slight rise in cases in recent months.

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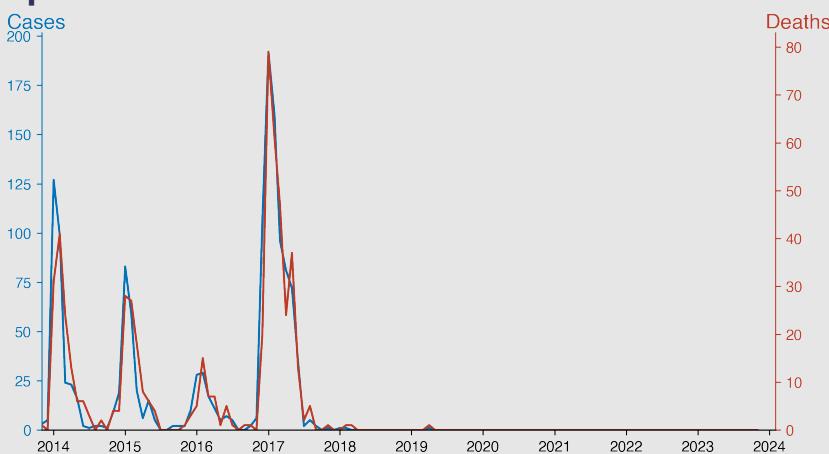
Human infection with H7N9 virus

November 2023

Introduction

H7N9 is a subtype of influenza virus that has been detected in birds in the past. This particular strain had not been seen in humans until it was identified in China in March 2013. Human infection with H7N9 virus can cause severe respiratory illness, including pneumonia, acute respiratory distress syndrome (ARDS), organ failure, and even death. Transmission predominantly occurs through direct contact with infected poultry or through exposure in live poultry markets. Human to human transmission is rare but possible. No vaccine is available currently.

Temporal Trend



Cases Analysis

The H7N9 avian influenza outbreak in the Chinese mainland shows significant variability across months and years, peaking notably in 2014 and 2017. January and February of these years were of particular concern, with respective case counts reaching 127 and 99 in 2014, and surging to 192 and 160 in 2017. A pattern of winter-spring seasonality is evident, with cases dwindling to zero post-2017, possibly indicating successful containment measures or changes in viral circulation and surveillance efforts.

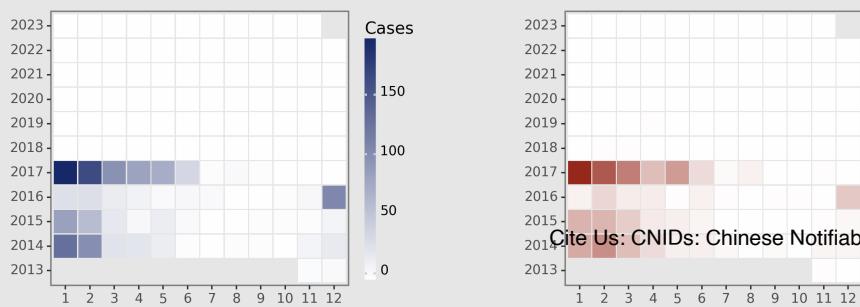
Highlights

- The H7N9 virus outbreak in Chinese mainland peaked in January 2017, with 192 cases and 79 deaths.
- A sharp decline in cases and deaths was observed after 2017, with no cases or deaths reported since July 2021.
- As of November 2023, the data indicate over two years without new H7N9 infections, suggesting effective control measures.
- The prolonged absence of cases highlights the potential success of prevention strategies and ongoing disease surveillance initiatives.

Deaths Analysis

Death tolls paralleled case counts, with the highest mortality observed in 2014 and 2017, reflective of peak case periods. February 2014 reported 41 deaths, the highest for that year, whereas January and February of 2017 observed 79 and 61 deaths, respectively. A clear decline in fatalities is seen from mid-2017 onward, reaching zero and persisting through 2023. Potential explanations include improved medical interventions, public health initiatives, and reduced virus virulence or host susceptibility.

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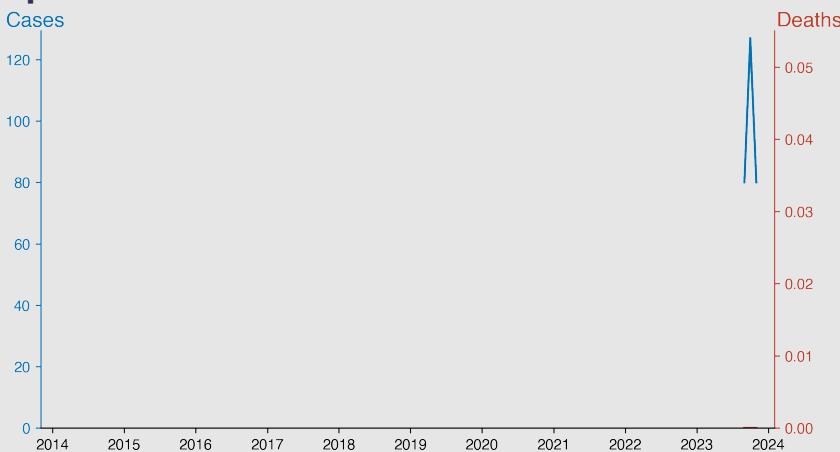
Monkeypox

November 2023

Introduction

Monkeypox is a rare, contagious disease caused by the monkeypox virus. It primarily occurs in Central and West Africa, and is similar to but milder than smallpox. The disease can spread to humans from infected animals like rodents and monkeys but also spreads through human-to-human transmission. Symptoms include fever, headache, muscle aches, backache, swollen lymph nodes, chills and severe exhaustion, followed by a rash. While the mortality rate is low, the virus can cause severe illness in people with weak immune systems. Currently, there is no specific treatment for the disease.

Temporal Trend

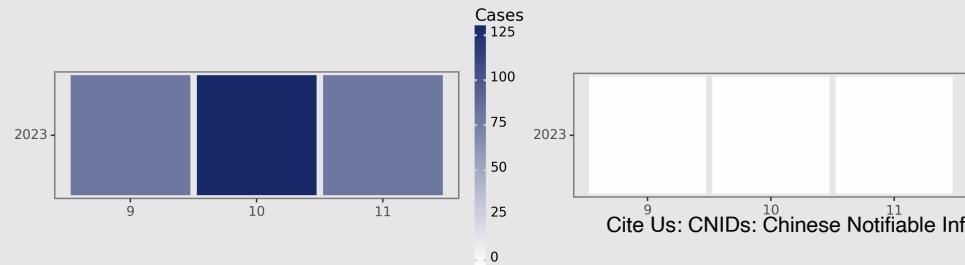


Cases Analysis

From September to November 2023, Chinese mainland reported a total of 287 monkeypox cases. There was an increase of 58.75% in October with 127 cases, compared to 80 cases in September. Following this peak, cases returned to the September baseline with another 80 cases in November. This pattern suggests a possible outbreak peak in October, with successful containment measures or natural disease progression leading to a reduction in new cases by November.

(Word count: 61)

Distribution



Deaths Analysis

Despite the fluctuation in monkeypox cases from September to November 2023, the death toll remained constant at zero. This indicates that the public health response was effective in treating cases and preventing fatalities. The absence of deaths could also suggest a strain with lower mortality, early detection, and efficient healthcare support for the affected individuals.

(Word count: 54)

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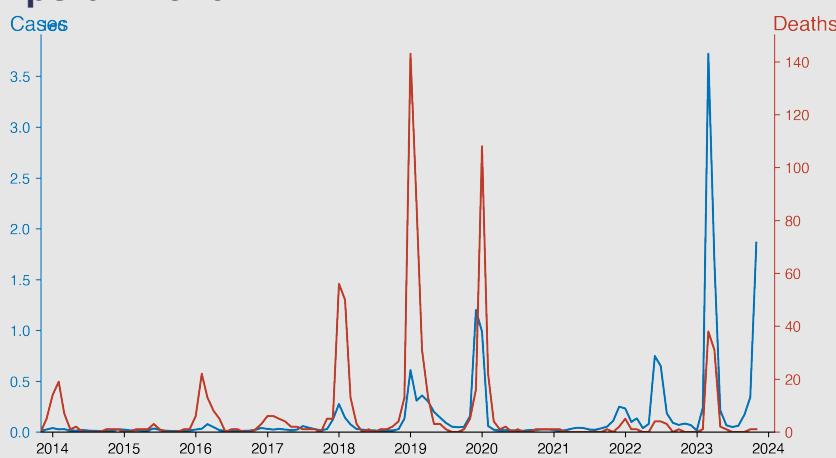
Influenza

November 2023

Introduction

Influenza, commonly known as the flu, is a highly contagious viral infection that primarily targets the respiratory system. It's caused by three types of influenza viruses: Type A, B, and C. Influenza is rampant globally, with outbreaks usually occurring in the winter months. Symptoms include fever, cough, malaise, sore throat, and muscle aches. In extreme cases, it can cause severe dehydration, pneumonia, or death. The virus spreads rapidly through the air via droplets from coughing or sneezing and direct contact with infected surfaces. Annual vaccinations are the primary preventative measure.

Temporal Trend



Cases Analysis

The influenza cases in Chinese mainland from 2010 to 2023 displayed seasonal trends with peaks typically in December and January, reflecting the colder months. Starting from relative stability in the early years, there was a significant surge in reported cases starting in 2018, marking an elevated transmission period. Notably, a massive spike was observed in December 2019 and March 2023, indicating potential outbreaks. Data gaps are present for early 2013, making trend analysis incomplete for that year.

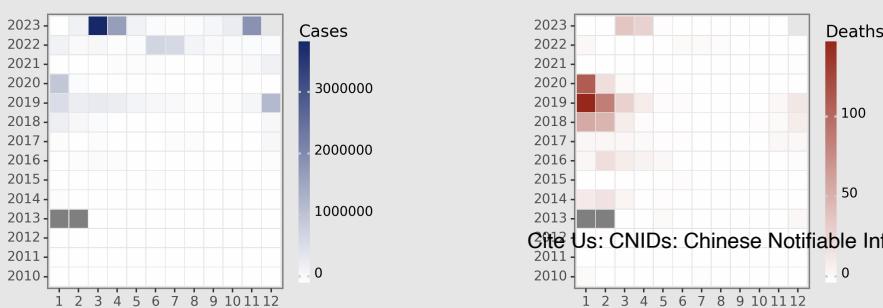
Highlights

- March 2023 recorded an unprecedented spike with 3,721,370 cases, the highest in the dataset, followed by a significant reduction in April to 1,677,011 cases.
- Despite the massive surge in cases, the fatality numbers stayed relatively low, with 38 deaths in March and 31 in April, indicating a low case-fatality ratio.
- Another substantial increase occurred in November 2023, reaching 1,862,998 cases, yet with only a single death reported, suggesting high transmission but lower virulence or improved case management.

Deaths Analysis

Despite the escalated number of influenza cases over the years, the death rate remained relatively low, suggesting either a non-lethal strain predominance or effective healthcare response. The fatality counts peaked sharply in January 2019 and again in January 2020, which could correlate with the intensity of flu seasons or concurrent health events. Following 2020, there was a notable decline in deaths even when case numbers were high, possibly due to advances in medical treatment or heightened public health intervention.

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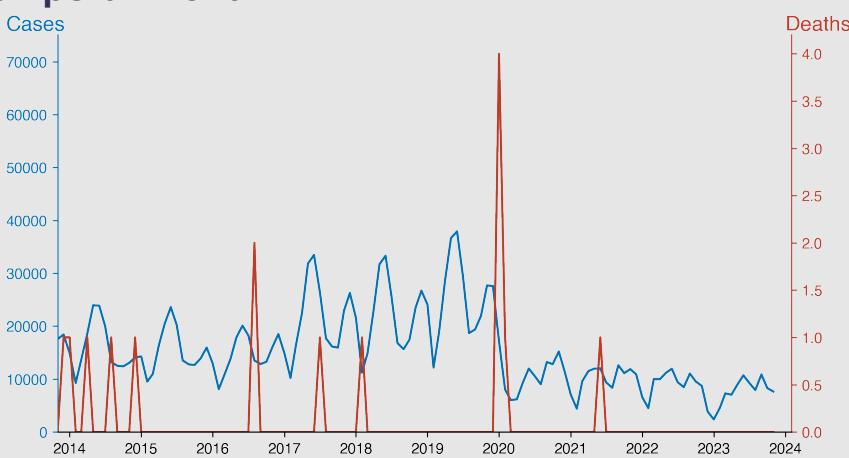
Mumps

November 2023

Introduction

Mumps is a contagious viral infection characterized by swelling and pain in the salivary glands. It primarily affects the parotid glands located near the jawline. Symptoms tend to include fever, headache, muscle aches, tiredness, and loss of appetite. The disease spreads via respiratory droplets or direct contact with an infected individual. Vaccination with the MMR (measles, mumps, and rubella) vaccine is the primary preventative measure. Despite vaccination efforts, occasional outbreaks still occur, particularly in close-quarters environments.

Temporal Trend



Cases Analysis

The dataset on Mumps cases in Chinese mainland from 2010 to 2023 shows seasonal patterns with peaks generally in the months of May to July, indicating a higher transmission in warmer months. A notable decreasing trend is observed starting from 2016, with significantly lower case counts from 2020 onwards which might be associated with public health interventions during the COVID-19 pandemic, such as social distancing and mask-wearing. The data for January and February 2013 are missing, which could skew analysis for that period.

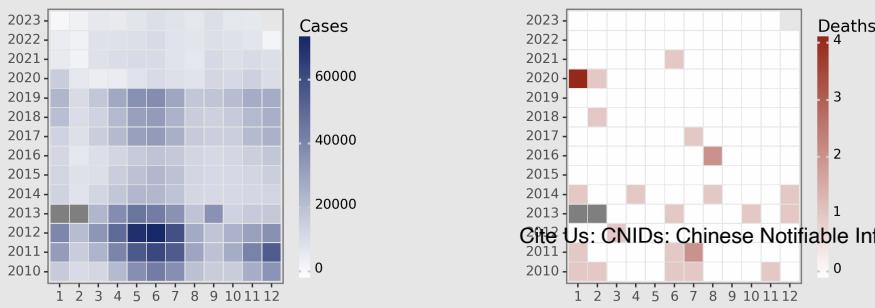
Highlights

- Consistent seasonality with cases peaking during the summer months (May to July), indicative of increased social interactions and outdoor activities during this period.
- A significant reduction in cases and deaths from mumps has been observed since the spike in 2016, showing improved disease control and possible impacts of vaccination efforts.
- The lowest numbers of cases in over a decade were reported in late 2022 and 2023, indicating a current low transmission rate for mumps in the Chinese mainland.
- The consistent low number of deaths since 2010 suggests that fatalities due to mumps are rare, likely due to effective clinical management and possibly high vaccination coverage.

Deaths Analysis

Deaths due to Mumps are extremely rare, with only 15 reported deaths over 13 years despite high case numbers, suggesting a low fatality rate. There was an atypical spike of 4 deaths in January 2020 which is an anomaly compared to other years. The data reflects good case management and the potentially effective role of vaccination and healthcare in preventing fatalities. Consistent zero-fatality months from March 2020 to November 2023 might also reflect improved disease surveillance and prevention measures amidst the COVID-19 response.

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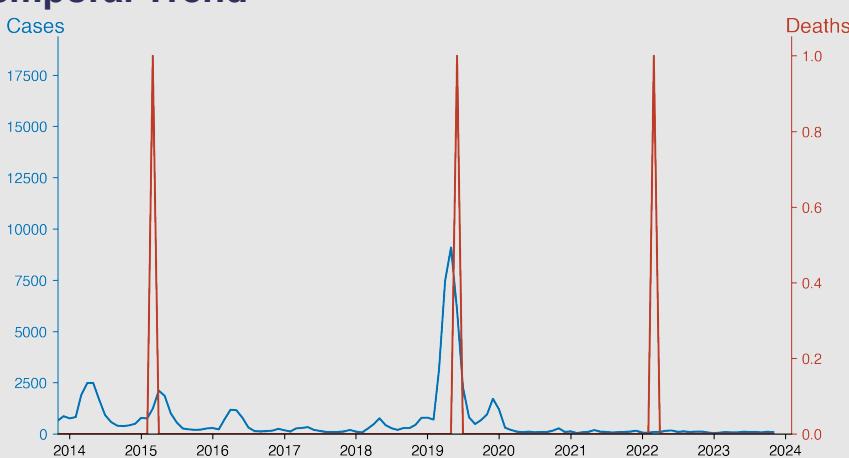
Rubella

November 2023

Introduction

Rubella, also known as German Measles, is a viral illness affecting the skin and lymph nodes. The disease typically manifests as a mild rash and fever, often mistaken for flu. Infection during pregnancy can lead to serious complications such as Congenital Rubella Syndrome (CRS) causing multiple birth defects. The rubella virus is airborne, transmitted through respiratory droplets. Immunization through the MMR (Measles, Mumps, Rubella) vaccine has significantly reduced rubella cases globally. However, the virus remains endemic in regions where immunization coverage is low.

Temporal Trend



Cases Analysis

The Rubella cases in Chinese mainland exhibited periodic fluctuations over the years, with notable peaks observed during April and May from 2010 to 2019, potentially indicating seasonal patterns. A significant drop in cases began in 2020, persisting through 2023, which might be ascribed to improved vaccination efforts, heightened public health measures, or underreporting due to overlapping pandemic concerns. The decline to consistently low case numbers by 2021 suggests effective control, potentially also influenced by COVID-19 related restrictions impacting disease transmission dynamics.

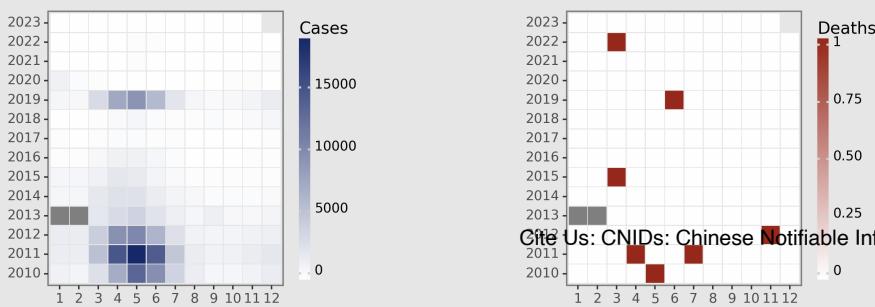
Highlights

- A significant decline in Rubella cases in Chinese mainland is observed, from peaks of over 18,000 cases in 2011 to consistently lower numbers below 200 monthly from 2018 to 2023.
- Mortality from Rubella is minimal, with only a few deaths reported over 13 years, signifying effective treatment and likely high population immunity.
- Cases have been in double or single digits since 2020, possibly due to better vaccination programs or COVID-19 overshadowing Rubella reporting.
- Data up to November 2023 shows a well-controlled Rubella situation, with low case counts and zero deaths.

Deaths Analysis

Throughout the observed period, Rubella-related deaths in Chinese mainland were extremely rare, totaling only 4 documented fatalities over 13 years. The deaths sporadically occurred in 2010, 2011, 2012, 2015, 2019, and 2022. Given the generally benign nature of Rubella and the low fatality rate, these deaths could be attributed to complications in vulnerable populations. The consistent low mortality rate underscores the non-severe nature of the disease and could reflect both the efficacy of healthcare interventions and the vaccination coverage among the population.

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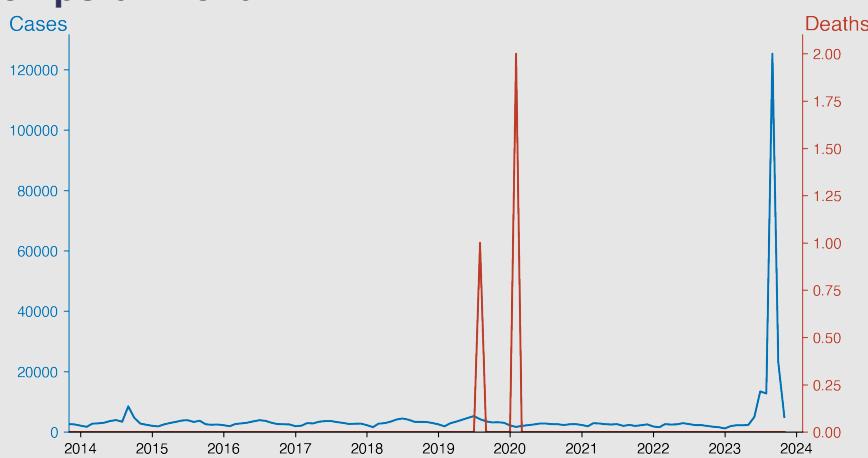
Acute hemorrhagic conjunctivitis

November 2023

Introduction

Acute Hemorrhagic Conjunctivitis (AHC) is an infectious disease characterized by rapid onset of severe conjunctival redness, swelling, discomfort, and watery discharge, often accompanied by blurry vision. The condition is typically paired with minor systemic symptoms including fever and upper respiratory tract infection. AHC is typically caused by Enterovirus 70 or Coxsackievirus A24 variant but can also be associated with other bacterial infections. Globally, it can cause significant seasonal outbreaks.

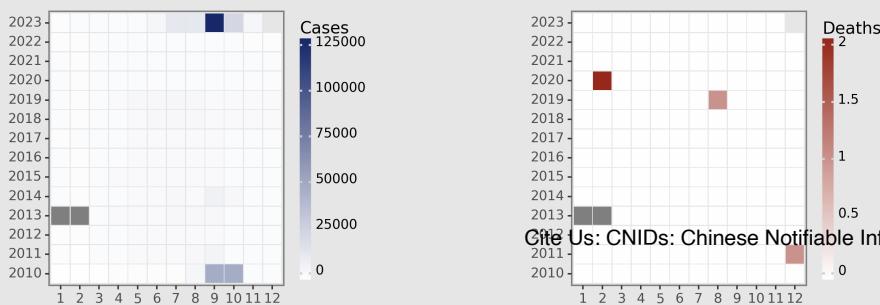
Temporal Trend



Cases Analysis

The data on Acute hemorrhagic conjunctivitis (AHC) in China from 2010 to 2023 shows seasonal fluctuations with peaks typically in summer months, as seen in July and August. A significant surge occurred in September 2010, 2013, and notably in 2023 with 125,264 cases, suggesting potential outbreaks. The reason for such spikes could be viral mutations, environmental factors, or increased transmission rates, necessitating further investigation. Steady inter-annual presence with occasional surges indicates AHC is endemic with periodic epidemic potential. No cases are recorded in January and February 2013, possibly due to data reporting issues.

Distribution



Highlights

- **Seasonal Trend with Unprecedented Peak**: Acute hemorrhagic conjunctivitis cases peaked unprecedentedly in September 2023, with 125,264 cases, signifying a dramatic rise compared to previous years.
- **Zero Mortality Despite Surge**: Notably, the spike in cases did not lead to an increase in mortality, with no deaths reported during the September peak.
- **Decline After Peak**: Following the September surge, cases dropped substantially to 4,940 by November, indicating a sharp decline from peak levels.
- **Incomplete Data Requires Caution**: Missing data for January and February 2013 warrants cautious interpretation of the trends for those periods.

Deaths Analysis

Over the same period, AHC has been associated with low mortality, evidenced by only three reported deaths despite numerous cases. One death each was recorded in December 2011 and August 2019, followed by two deaths in February 2020; this could indicate either isolated severe cases or data anomalies, as AHC generally doesn't lead to fatality. The sparse number of deaths signifies efficient clinical management and low virulence of the causal pathogen, but the 2020 increase requires attention to rule out any change in disease dynamics or diagnostic criteria. Overall, the condition appears non-fatal with proper healthcare measures.

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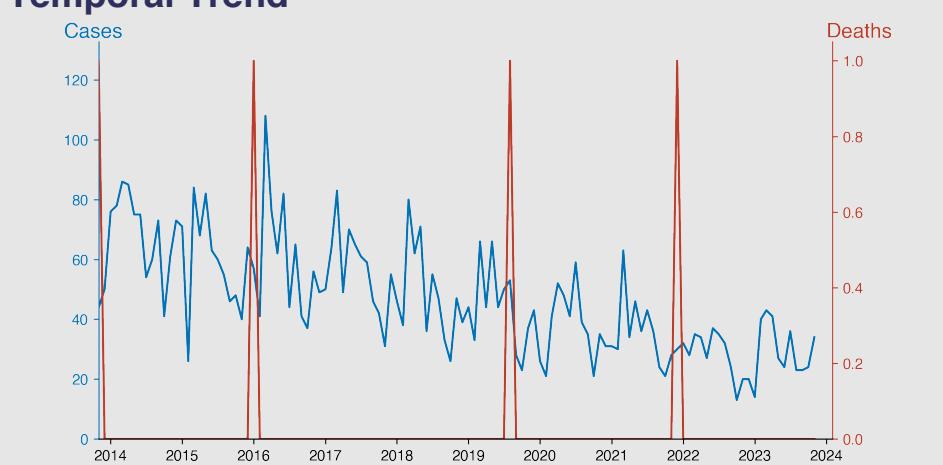
Leprosy

November 2023

Introduction

Leprosy, also known as Hansen's disease, is a chronic infectious ailment caused by *Mycobacterium leprae*. This bacterium primarily affects the skin, peripheral nerves, mucosal surfaces of the upper respiratory tract, and the eyes. Leprosy is recognized by WHO into two categories: paucibacillary and multibacillary. Transmission usually comes from close contact with untreated cases. Despite its debilitating reputation, leprosy is eminently curable with multidrug therapy. Early detection and treatment prevent disability and curtail transmission.

Temporal Trend



Cases Analysis

Between 2010 and 2023, there is a visible downward trend in reported leprosy cases in Chinese mainland, with the highest cases reported in March 2012 (127 cases). Fluctuations are observed, such as peaking during 2011-2013, followed by a general decrease. Sparse data exists for January and February 2013. A notable decrease in cases is observed from 2018 onward, potentially indicating either improved control measures, underreporting, or changes in the population's immunity or surveillance systems.

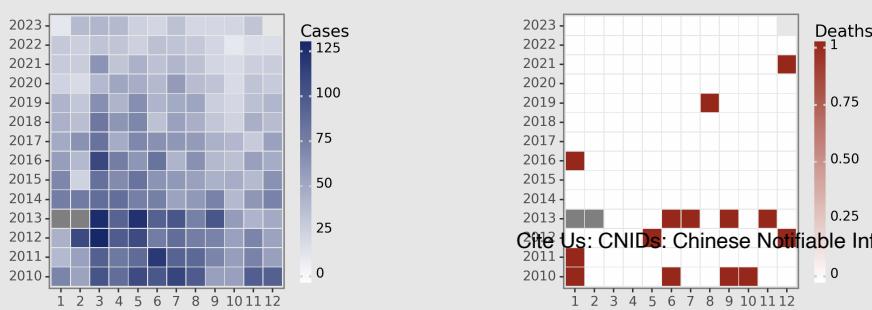
Highlights

- Notable decline in leprosy cases from 2010 to 2023, with a peak incidence in mid-2011 and 2012, followed by a general downward trend.
- Mortality due to leprosy remains consistently low across the surveyed period, with most months reporting zero deaths, indicating enhanced disease management.
- November 2023 reports 34 cases and no deaths, reflecting sustained control efforts on the Chinese mainland.
- The data reveals the lowest incidence in October 2022 with only 13 cases, signifying significant progress in leprosy containment.

Deaths Analysis

The mortality associated with leprosy in Chinese mainland appears to be infrequent, reflected by low death counts from 2010 to 2023. A total of 9 deaths were reported during this period, with no particular yearly or monthly pattern observed in occurrence. A zero-death count is present across multiple consecutive months, indicating that leprosy, with proper management, is not resulting in high mortality. This could also suggest successful treatment protocols or the non-virulent nature of the prevalent mycobacterium strain.

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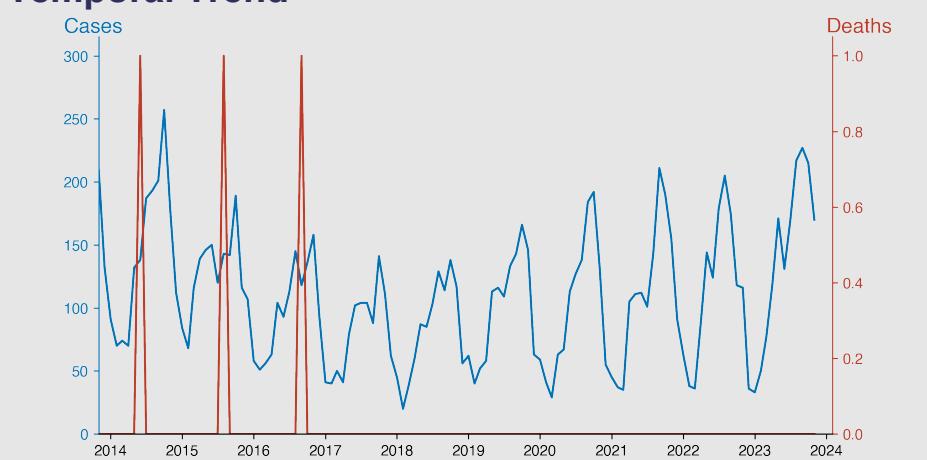
Typhus

November 2023

Introduction

Typhus is a group of infectious diseases caused by Rickettsia bacteria, transmitted through insect vectors such as fleas, lice, and ticks. Notable forms include epidemic typhus, murine typhus, and scrub typhus. Symptoms often involve high fever, headache, body aches, and sometimes rash. Serious complications can occur if left untreated, potentially leading to organ damage or death. It commonly occurs in overcrowded and unsanitary conditions and some forms may cause epidemic outbreaks. Though eradicated in many areas, typhus remains a problem in developing nations.

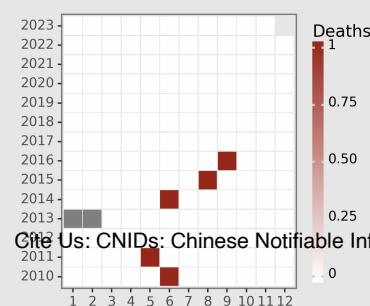
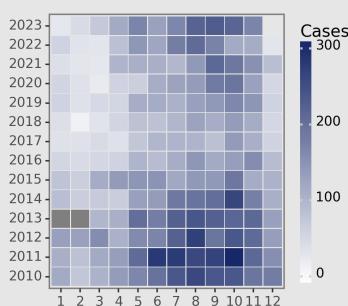
Temporal Trend



Cases Analysis

The reported data for Typhus in the Chinese mainland over the years show a cyclical pattern, with case counts typically peaking during the summer months, which is consistent with increased vector activity in warmer weather. From 2010 to 2023, there is no clear trend in the annual number of cases, oscillating without a significant upward or downward trajectory. While cases hit a peak of 301 in October 2011, numbers generally remain below 300 cases per month. Data for January and February 2013 are missing, which may affect the accuracy of the trend analysis for that year.

Distribution



Highlights

- Seasonal peaks in typhus cases are apparent during warmer months (June-September) across multiple years in China.
- A long-term decreasing trend in case numbers is observed, with early 2010s showing higher incidence compared to 2023.
- Very low fatality rates suggest effective disease management and possibly lower virulence of the pathogen.
- As of November 2023, the data indicates 170 cases with no fatalities, confirming ongoing disease presence but controlled impact.

Deaths Analysis

The mortality data associated with Typhus cases from 2010 to 2023 indicate low fatality, with only 4 reported deaths despite numerous cases. The deaths occurred in June 2010, May 2011, June 2014, and August 2016, all during the summer season, which could potentially correspond with higher case numbers or strain on healthcare systems. However, the sporadic nature of deaths suggests that the healthcare response is generally effective or that the pathogenicity of the circulating typhus strain(s) is low. The fatality rate is negligible across the observed period, pointing to the non-lethal nature of the disease with proper treatment or to successful control

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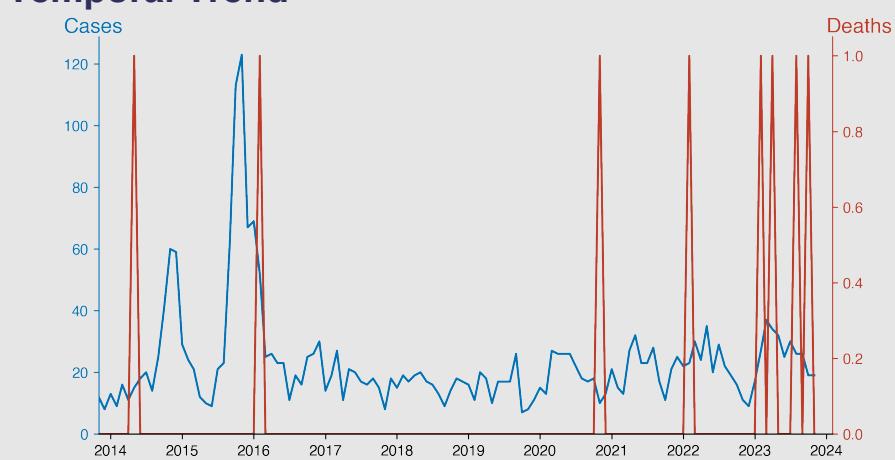
Kala azar

November 2023

Introduction

Kala azar, also known as visceral leishmaniasis, is a systemic disease primarily affecting organs such as the liver, spleen, and bone marrow. It's caused by a parasitic protozoan of the Leishmania species, transmitted through the bite of infected female phlebotomine sandflies. Symptoms include irregular bouts of fever, weight loss, enlargement of the spleen and liver, and anemia. If left untreated, the fatality rate in developing countries can be as high as 100% within two years. It is prevalent in tropical and subtropical regions, particularly in India, Bangladesh, Nepal, Sudan, and Brazil.

Temporal Trend



Cases Analysis

Kala azar cases in Chinese mainland from January 2010 to November 2023 demonstrate fluctuating patterns, with a notable spike observed during October and November 2015, reaching a peak of 123 cases. An overall declining trend is apparent post-2015 spike. The highest number of cases within the given time frame was in November 2015, while the data for January and February 2013 is missing. Yearly, cases tend to rise modestly during summer months, potentially reflecting seasonal vectors' activity patterns.

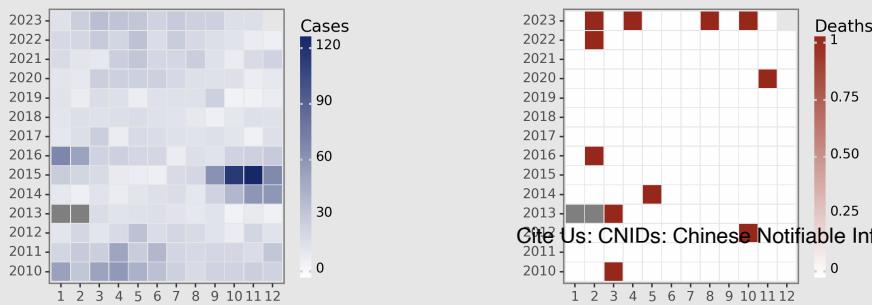
Highlights

- Incidence of Kala azar in Chinese mainland has fluctuated, with a notable peak in 2015 (123 cases) followed by a decline to approximately 19 cases by November 2023.
- Mortality has been low, with infrequent deaths (1 per incident), suggesting effective case management and a low case-fatality rate.
- No distinct seasonal trend is evident, as months with higher case counts vary across years.
- Recent 2023 data indicates intermittent surges in cases, exemplified by 27 to 37 cases in early months, but with 19 cases in November, reflecting a controlled yet ongoing disease presence.

Deaths Analysis

Over the same period, the total reported deaths due to Kala azar were minimal, totalling 8. The deaths were sporadically distributed across the years with only one fatality occurring in particular months of 2010 (March), 2012 (October), 2013 (March), 2014 (May), 2016 (February), 2020 (November), 2022 (February), 2023 (April), and August and October of 2023. The fatality rate per reported cases remained very low, indicating either a high success rate in treatment or underreporting of fatal cases.

Distribution



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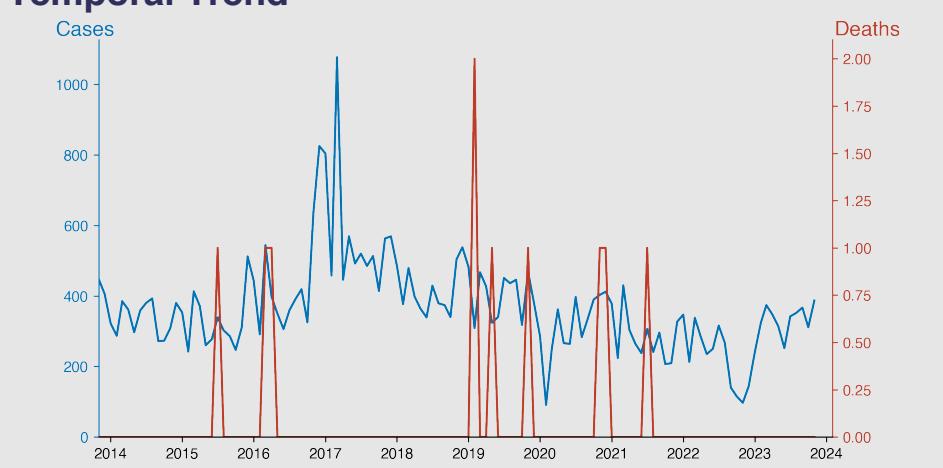
Echinococcosis

November 2023

Introduction

Echinococcosis, also known as hydatid disease, is a parasitic infection caused by the tapeworms *Echinococcus granulosus* or *Echinococcus multilocularis*. These parasites commonly infect animals like dogs and livestock but can also infect humans. The infection occurs through ingestion of parasitic eggs present in contaminated food, water, or soil. In humans, Echinococcosis results in the formation of cysts within organs, primarily the liver and lungs, and can lead to severe health complications if left untreated. Prevention measures include proper handwashing, food safety practices, and controlling the infection in animal populations.

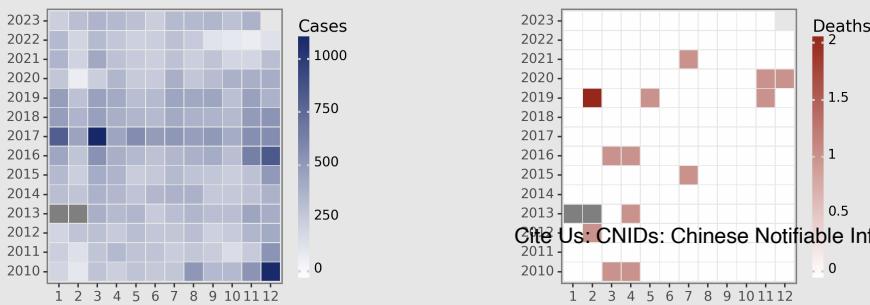
Temporal Trend



Cases Analysis

The data indicates a fluctuating trend of echinococcosis cases in Chinese mainland from January 2010 to November 2023, with noticeable peaks and troughs. The highest number of cases was reported in March 2017 (1077 cases), and there is a consistent increase in cases towards the end of each year, peaking in December. The sharp decrease in February 2020 to 91 cases might be attributed to the COVID-19 pandemic affecting healthcare services and reporting rates. A general uptick in cases is observed from the beginning of each year, followed by a mid-year dip and an end-of-year rise.

Distribution



Highlights

- Periodic case spikes occur annually around December in mainland China, with a diminishing pattern of peaks observed in recent years, suggesting a gradual decrease in Echinococcosis incidence.
- A notable sustained reduction in cases is evident from early 2022, continuing through November 2023, indicating an improving epidemiological situation.
- Mortality remains very low, with sporadic deaths, implying either a low fatality rate or efficient treatment protocols.
- Missing data for early 2013 and an abrupt drop in February 2020 cases could reflect reporting disruptions, potentially due to external factors such as the COVID-19 pandemic.

Deaths Analysis

Echinococcosis-related mortality remained consistently low from January 2010 to November 2023, with only 7 reported deaths in the entire time frame. Deaths are sporadic with no identifiable pattern or increase over time, suggesting that while echinococcosis has a presence in the mainland, it is not a common cause of death. Two deaths reported in February 2019 represent the highest mortality in a single month. The low fatality rate may indicate effective treatment or management of the disease when cases are identified.

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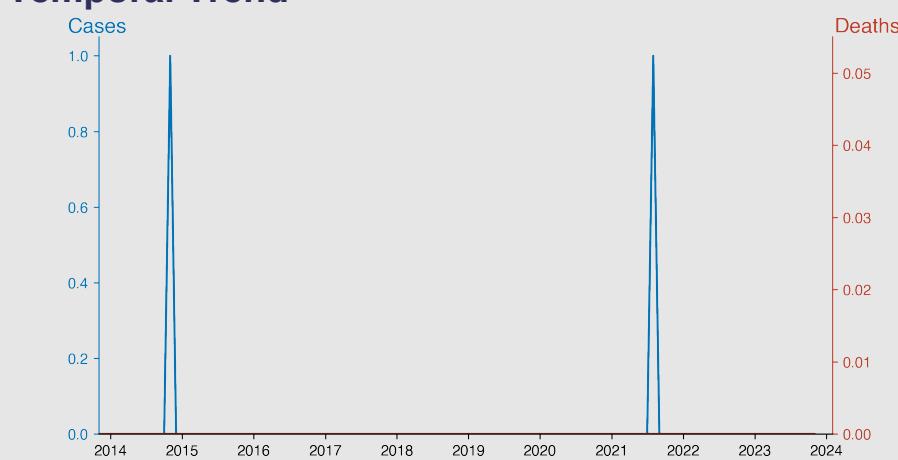
Filarisis

November 2023

Introduction

Filarisis is a parasitic disease caused by an infection with roundworms of Filarioidea type. These are spread by blood-feeding insects such as black flies and mosquitoes. They affect multiple parts of the body including the lymphatic system and subcutaneous tissue, depending on the worm species. Three types of worm cause Filarisis: Wuchereria bancrofti, Brugia malayi, and Brugia timori. Major forms of the disease include lymphatic filariasis, affecting the lymphatic system, and onchocerciasis (river blindness), affecting the skin and eyes. Chronic infections can lead to conditions like elephantiasis.

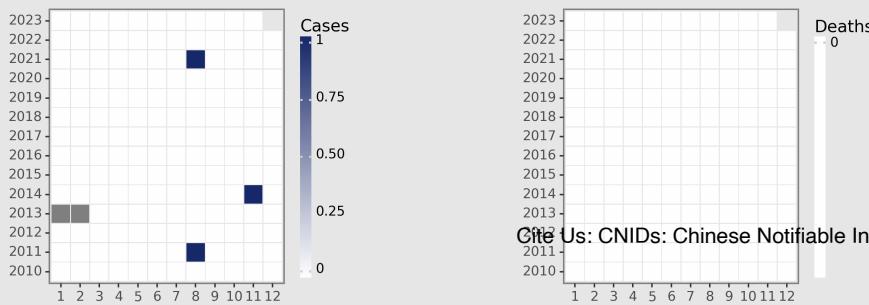
Temporal Trend



Cases Analysis

The data indicates an extremely low incidence of filariasis in the Chinese mainland over the 13-year span, presenting only two cases without seasonal variation. One reported case in August 2011 followed by another isolated case in August 2021 suggest sporadic occurrence without any concerning outbreak pattern. The consistent zero-case reports highlight effective control measures and possibly successful elimination strategies adopted by the region, aligning with China's lymphatic filariasis elimination status as recognized by the World Health Organization (WHO).

Distribution



Highlights

- Filarisis appears to be very well-contained in Chinese mainland, with only 3 cases reported and no deaths from 2010 to November 2023.
- The sporadic cases occurred in August 2011, November 2014, and August 2021, suggesting a potential seasonality or localized transmission events.
- The consistent reporting of zero cases and deaths in the majority of months indicates an effective control and surveillance system for filariasis.
- The absence of any fatalities and the low case count over the years suggest that filariasis is not a significant public health concern in China as of the current data up to November 2023.

Deaths Analysis

Throughout the provided data period, there were no reported deaths due to filariasis in the Chinese mainland. This finding corroborates the negligible case incidence and indicates that the health system efficiently manages the few arising instances with appropriate treatment. The absence of fatalities underscores the success of public health interventions, including mass drug administration (MDA), vector control, and surveillance systems, in sustaining the elimination of filariasis as a public health problem.

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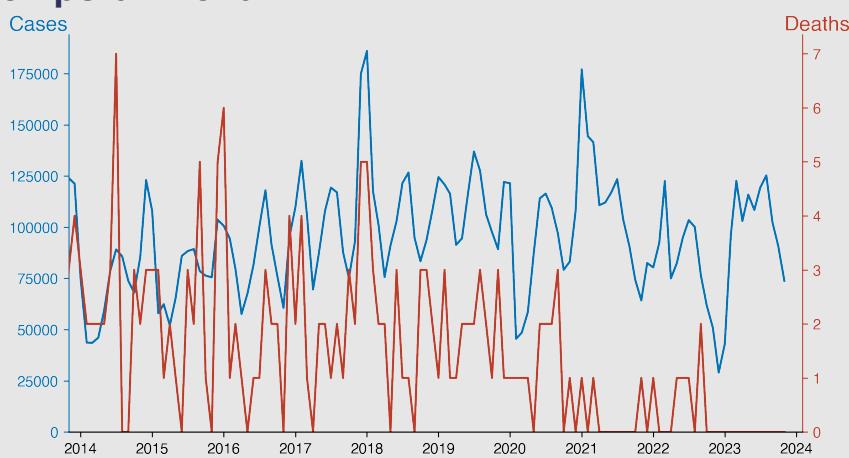
Infectious diarrhea

November 2023

Introduction

Infectious diarrhea, primarily caused by bacteria, viruses, or parasites, is a prevalent global health concern, characterized by abnormally frequent and liquid bowel movements. It gets transmitted through contaminated food, water, or person-to-person contact. Symptoms include abdominal cramps, fever, and dehydration. High-risk groups include children, elderly, people with weakened immune systems, and travelers to areas with poor sanitation. Significant parts of global morbidity and mortality, especially among children in developing countries, can be attributed to infectious diarrhea.

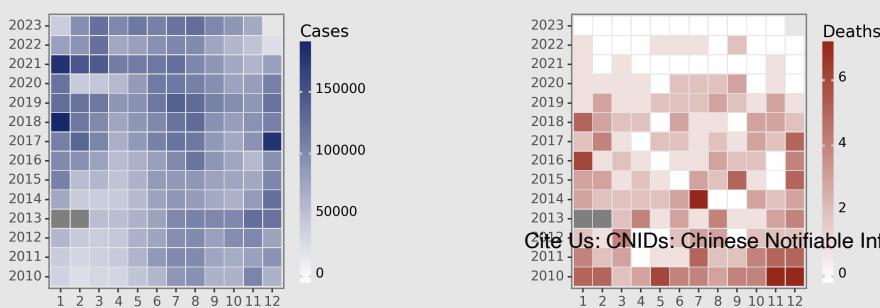
Temporal Trend



Cases Analysis

The data for infectious diarrhea in China from 2010 to 2023 show seasonal fluctuation with peaks in summer months (June, July, and August), possibly due to temperature and humidity favoring pathogen proliferation. A gradual increase in reported cases over the years is observed, with significant spikes occurring; for instance, January 2018 reached a high of 186,071 cases. Reduction in case numbers occurs in winter months, and an atypical drop in February 2020 coincides with the onset of the COVID-19 pandemic, suggesting possible underreporting or reduced transmission due to lockdowns and increased hygiene measures.

Distribution



Highlights

- The pattern shows peaks in warmer months (May-August) but a significant drop in cases from December 2022, continuing into 2023.
- November 2023 recorded just 73,835 cases, a sharp decrease compared to the highs of previous years.
- No deaths from infectious diarrhea reported from January to November 2023, suggesting improved disease management or reporting accuracy.
- A long-term decline in mortality is evident, with fatalities reducing to zero in 2023, indicative of effective treatment or prevention methods.

Deaths Analysis

Mortality associated with infectious diarrhea in China from 2010 to 2023 remained low, with deaths per month rarely exceeding 5 and often at 0 or 1. The data exhibit no clear seasonal pattern in fatalities and indicate that the condition's fatality rate is low. Notably, from 2020 onwards, no deaths were reported in several months, which might be attributed to improved medical care, heightened awareness, or underreporting. The limited mortality amidst rising case numbers suggests effective management in preventing severe outcomes of infectious diarrhea cases.

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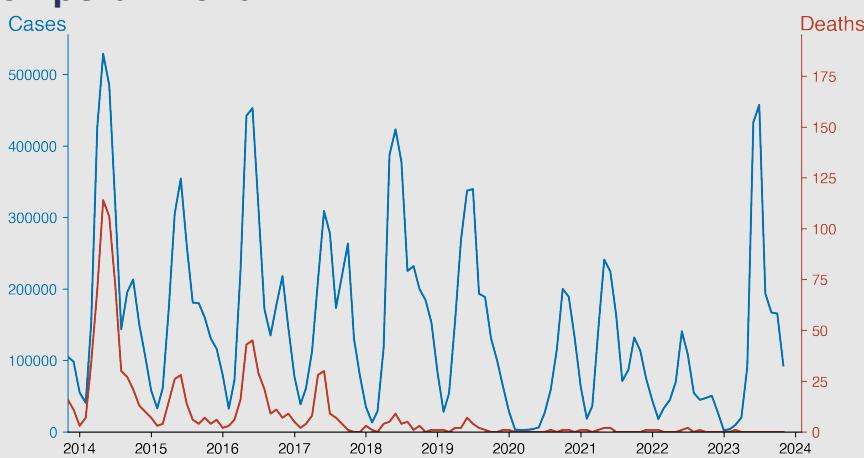
Hand foot and mouth disease

November 2023

Introduction

Hand, Foot, and Mouth Disease (HFMD) is a contagious illness caused primarily by the Coxsackievirus. Typically affecting children under the age of 5, HFMD is characterized by sores in the mouth and a rash on the hands and feet. Other symptoms can include fever, reduced appetite, sore throat, and lethargy. HFMD is spread through direct contact with saliva, mucus, or feces from an infected person. While there is no specific treatment, the symptoms can be managed with over-the-counter remedies for pain and fever. It usually resolves spontaneously within 1 week.

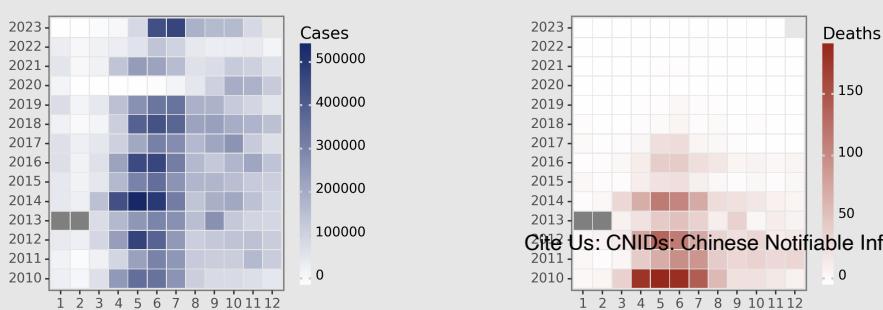
Temporal Trend



Cases Analysis

Hand, foot, and mouth disease (HFMD) cases in China from 2010 to 2023 show seasonality, peaking notably each April to July with a decline towards winter. In 2020, a dramatic decrease in cases coincides with the COVID-19 pandemic onset and associated control measures, with unusual lows persisting into 2021. The following years demonstrate an eventual return towards previous patterns. The highest recorded month was May 2012, reaching 462,116 cases, while post-pandemic months in 2023 are rebounding but remain below peak historical figures.

Distribution



Highlights

- Seasonal peaks in spring and summer, with the highest case numbers reported between May and July, suggesting warm weather may play a role in transmission dynamics.
- A marked decrease in cases and deaths since 2020, coinciding with the COVID-19 pandemic response measures such as increased hygiene practices and reduced public gatherings.
- No reported deaths from Hand, Foot, and Mouth Disease in November 2023, indicating improved disease management or underreporting.
- A resurgence in cases in June and July 2023 following a substantial decline in cases reported in early 2023, warranting close surveillance to prevent potential outbreaks.

Deaths Analysis

Fatal cases of HFMD show a similarly seasonal pattern, with most deaths occurring in the peak seasons of April to July. There's a decrease in fatalities correlating with the decrease in overall cases in 2020, though the fatality rate is not necessarily lower during that period. The highest death count is observed in May 2010, with 186 deaths. From 2018 onwards, there's a noticeable reduction in deaths, even as case numbers remained significant pre-pandemic, suggesting improved clinical management and control measures. Post-2020, HFMD deaths are minimal, with numerous months reporting zero fatalities.

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