Chinese Notifiable Infectious Diseases Surveillance Report

IMPORTANT

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Chinese Notifiable Infectious Diseases Surveillance Report
October 2023

Disease	Cases			Deaths		
	Reported	MoM*	YoY**	Reported	MoM*	YoY**
Plague	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Cholera	2	-7 (-77.78%)	-1.0 (-33.33%)	0	0 (/)	0.0 (/)
SARS-CoV	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Acquired immune deficiency syndrome	5,210	89 (1.74%)	1,245.0 (31.40%)	1,866	173 (10.22%)	317.0 (20.46%)
Hepatitis	152,695	4,937 (3.34%)	43,675.0 (40.06%)	257	80 (45.20%)	186.0 (261.97%)
Hepatitis A	986	-52 (-5.01%)	234.0 (31.12%)	0	0 (/)	0.0 (/)
Hepatitis B	129,041	5,546 (4.49%)	39,026.0 (43.35%)	32	12 (60.00%)	-1.0 (-3.03%)
Hepatitis C	19,466	-556 (-2.78%)	3,446.0 (21.51%)	224	67 (42.68%)	188.0 (522.22%)
Hepatitis D	15	0 (0.00%)	5.0 (50.00%)	0	0 (/)	0.0 (/)
Hepatitis E	2,543	-7 (-0.27%)	860.0 (51.10%)	1	1 (/)	-1.0 (-50.00%)
Other hepatitis	644	6 (0.94%)	104.0 (19.26%)	0	0 (/)	0.0 (/)
Poliomyelitis	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Human infection with H5N1 virus	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Measles	88	10 (12.82%)	-23.0 (-20.72%)	0	0 (/)	0.0 (/)
Epidemic hemorrhagic fever	439	241 (121.72%)	39.0 (9.75%)	3	2 (200.00%)	1.0 (50.00%)
Rabies	13	5 (62.50%)	1.0 (8.33%)	12	5 (71.43%)	6.0 (100.00%)
Japanese encephalitis	32	-30 (-48.39%)	5.0 (18.52%)	2	1 (100.00%)	2.0 (/)
Dengue	5,388	-1,106 (-17.03%)	5,062.0 (1552.76%)	0	-1 (-100.00%)	0.0 (/)
Anthrax	47	-14 (-22.95%)	12.0 (34.29%)	0	-1 (-100.00%)	0.0 (/)
Dysentery	3,067	-591 (-16.16%)	508.0 (19.85%)	0	0 (/)	0.0 (/)
Tuberculosis	59,239	-2,620 (-4.24%)	8,114.0 (15.87%)	354	30 (9.26%)	50.0 (16.45%)
Typhoid fever and paratyphoid fever	480	-116 (-19.46%)	-14.0 (-2.83%)	1	1 (/)	0.0 (0.00%)
Meningococcal meningitis	5	0 (0.00%)	1.0 (25.00%)	0	0 (/)	0.0 (/)
Pertussis	4,430	-87 (-1.93%)	1,836.0 (70.78%)	0	0 (/)	0.0 (/)
Diphtheria	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Neonatal tetanus	2	1 (100.00%)	1.0 (100.00%)	0	0 (/)	0.0 (/)
Scarlet fever	2,533	987 (63.84%)	1,150.0 (83.15%)	0	0 (/)	0.0 (/)
Brucellosis	4,477	-1,510 (-25.22%)	1,942.0 (76.61%)	0	-2 (-100.00%)	0.0 (/)
Gonorrhea	10,328	181 (1.78%)	2,369.0 (29.77%)	0	0 (/)	-1.0 (-100.00%)
Syphilis	56,981	1,214 (2.18%)	17,927.0 (45.90%)	3	-2 (-40.00%)	1.0 (50.00%)
Leptospirosis	76	5 (7.04%)	48.0 (171.43%)	0	0 (/)	0.0 (/)
Schistosomiasis	2	-1 (-33.33%)	-9.0 (-81.82%)	0	0 (/)	0.0 (/)
Malaria	193	0 (0.00%)	101.0 (109.78%)	1	0 (0.00%)	1.0 (/)
Human infection with H7N9 virus	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Monkey pox	127	47 (58.75%)	/ (/)	0	0 (/)	/ (/)
Influenza	340,969	172,006 (101.80%)	271,897.0 (393.64%)	1	1 (/)	0.0 (0.00%)
Mumps	8,287	-2,580 (-23.74%)	-1,250.0 (-13.11%)	0	0 (/)	0.0 (/)
Rubella	110	38 (52.78%)	-8.0 (-6.78%)	0	0 (/)	0.0 (/)
Acute hemorrhagic conjunctivitis	23,111	-102,153 (-81.55%)	21,102.0 (1050.37%)	0	0 (/)	0.0 (/)
Leprosy	24	1 (4.35%)	11.0 (84.62%)	0	0 (/)	0.0 (/)
Typhus	215	-12 (-5.29%)	97.0 (82.20%)	0	0 (/)	0.0 (/)
Kala azar	19	-7 (-26.92%)	3.0 (18.75%)	1	1 (/)	1.0 (/)
Echinococcosis	311	-56 (-15.26%)	196.0 (170.43%)	0	0 (/)	0.0 (/)
Filariasis	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Infectious diarrhea	90,744	-11,815 (-11.52%)	29,001.0 (46.97%)	0	0 (/)	0.0 (/)
Hand foot and mouth disease	165,527	-1,453 (-0.87%)	118,132.0 (249.25%)	0	0 (/)	0.0 (/)
Total	935,171	55,604 (6.32%)	513,943.0 (122.01%)	2,501	288 (13.01%)	564.0 (29.12%)

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

Epidemiological Report on Diseases in Mainland China
October 2023
Overview:
The month of October 2023 in mainland China saw a varied landscape of disease prevalence and impact. Cases of hand, foot, and mouth disease (HFMD) were notably high, with reported infections reaching up to 199,938 in a week but resulting in minimal fatalities (3 deaths over the entire month). Infectious diseases such as tuberculosis and hepatitis (all types combined) also presented significant case numbers, with tuberculosis cases exceeding 83,000 with over 200 deaths and hepatitis cases totaling over 120,000 with nearly 50 deaths in a single week. Other conditions such as syphilis and gonorrhea displayed significant prevalence, albeit with no reported fatalities. Infectious diarrhea and the flu showed high incidences but low fatalities. More serious in terms of mortality, epidemic hemorrhagic fever resulted in 33 deaths in one particular week, notwithstanding lower overall reported case numbers. This suggests a high case-fatality rate for this condition in the observed period.
In terms of deaths, diseases including rabies, Japanese encephalitis, and hepatitis B were amongst the leading causes of mortality due to infectious diseases. Hepatitis B alone was responsible for 40 deaths in a single week, underscoring its high impact on public health. Tuberculosis also represented a significant public health challenge with over 200 deaths reported in a week, indicating ongoing transmission and impact despite global control efforts. It's important to note that several diseases, such as scarlet fever, measles, and mumps, although widespread, had zero reported deaths during the month, showcasing the effectiveness of medical interventions or potentially lower pathogenicity in the context of mainland China.
Concerns:
High incidence diseases, such as HFMD, infectious diarrhea, and the flu, typically observed in the Chinese population, have remained prevalent throughout October 2023 without excessive mortality, indicating effective management practices in place for these endemic conditions. Conversely, diseases with lower incidence but higher mortality, such as epidemic hemorrhagic fever and hepatitis B, are of particular concern due to their significant case-fatality rates, warranting ongoing surveillance and targeted public health measures.
In terms of public concern, the persistence of tuberculosis as a widely prevalent disease with considerable mortality indicates a need for sustained public health focus and resource allocation. Additionally, the presence of diseases such as brucellosis and leptospirosis, with their potential to cause outbreaks and higher mortalities in specific populations or regions, has remained a persistent concern, reflecting the complex epidemiological environment in mainland China.
Limitations:
One of the primary limitations in the data is the potential underreporting or misreporting of both cases and deaths, which can be influenced by varying levels of healthcare access, reporting practices, or diagnostic capabilities across regions. It is necessary to interpret the data with caution, considering the potential disparities in surveillance sensitivity and specificity. Similarly, attributing deaths to specific diseases can be challenging due to comorbid conditions and insufficient diagnostic facilities, particularly in rural areas. This limitation can lead to misclassification of cause-specific mortality and morbidity, therefore impacting the reliability of the data presented.
Lastly, seasonal variations can impact the reported cases and diseases such as the flu have known seasonality effects that might contribute to higher case numbers during certain months. This seasonality, combined with complex interactions between diseases, weather patterns, and environmental factors, can affect disease transmission dynamics, challenging the accuracy and representation of the presented data.
Recommendations:
Considering the prevalence and impact of the diseases reported during October 2023 in mainland China, it is crucial to continue prioritizing vaccination programs, specifically for diseases such as influenza, measles, and rubella, which demonstrate high incidence but low mortality due to effective vaccine coverage. Public health messaging should emphasize the importance of vaccinations to prevent these diseases.
Efforts should also focus on strengthening surveillance systems to detect and respond to diseases with high mortalities, such as tuberculosis and hepatitis B. This includes expanding access to diagnostic services, facilitating prompt and appropriate treatment, and implementing targeted interventions to curb transmission in high-risk populations. Awareness programs aimed at populations at risk of zoonotic diseases, such as brucellosis and leptospirosis, should be ongoing to reduce exposure.
Finally, given the limitations in the data, continued investment in healthcare infrastructure is recommended to enhance disease reporting and diagnostic capabilities. Emphasis on data quality and the establishment of robust surveillance can further refine disease control strategies effectively addressing both endemic and emerging health threats in mainland China.

Notation from Data Source:
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News information since October 2023 in Chinese Mainland

Summary:
Since October 2023, mainland China has faced a surge in respiratory illnesses, predominantly among children in the northern provinces. The WHO has actively engaged with Chinese officials to monitor the situation. The healthcare system in some regions, including Beijing and Liaoning, has been under stress due to the influx of patients with respiratory symptoms. By November 2023, the cause of this uptick in cases had not been conclusively identified, but it is believed to be associated with seasonal patterns and the recent relaxation of COVID-19 preventative measures.

Outbreaks of Known Diseases:
The respiratory illness surge is linked to several familiar pathogens. The escalation of mycoplasma pneumoniae cases began in May 2023, worsening by August, and then turning into a severe outbreak by October. Alongside mycoplasma pneumoniae, influenza, respiratory syncytial virus (RSV), and SARS-CoV-2 have contributed to the growing number of respiratory infections. The National Health Commission of China provided these updates in November 2023, suggesting a connection to the earlier loosening of COVID-19 controls.

Emergence of Novel Pathogens:
There have been no reports of new or unidentified pathogens that could be responsible for the recent rise in respiratory illnesses in China. The WHO, along with Chinese health authorities, assert that the observed infections are due to well-known pathogens. The investigation has noted an uncommonly high severity of mycoplasma pneumoniae infections, particularly in children, but there has been no detection of novel infectious agents associated with this outbreak.

News information since October 2023 around world

Summary:
There have been several prominent infectious disease events globally since October 2023. Notable incidents include routine surveillance of diseases such as Marburg virus disease (MVD), avian influenza A(H7N9) and A(H5N1) viruses, Middle East respiratory syndrome (MERS-CoV), Mpox (Clade I), Nipah virus, and the ongoing assessment of COVID-19 cases. Additionally, a spike in respiratory illnesses among children was noted in Northern China.
Outbreaks of Known Diseases:
- For Marburg virus disease (MVD), there were no new cases reported as of October 2023.
- Human infections by avian influenza A(H5N1) were previously reported in Cambodia, but no new cases have occurred in the recent time frame.
- Middle East respiratory syndrome (MERS-CoV) has not shown new incidences as well.
- There were confirmed cases and fatalities due to Mpox (Clade I) in Cameroon and the Republic of the Congo.
- No new outbreaks of the Nipah virus have been reported.
- The spread of COVID-19 has been on a decline, with lower cases and deaths leading up to October 22, 2023.
Emergence of Novel Pathogens:
The increase in respiratory illnesses observed among children in Northern China has been linked to known pathogens such as influenza, Mycoplasma pneumoniae, respiratory syncytial virus (RSV), and SARS-CoV-2. This surge is attributed to the easing of COVID-19 restrictions and the onset of the winter season. No new or unusual pathogens have been detected in relation to these cases.
Health organizations and governments continue to monitor and respond to these infectious disease threats, emphasizing control measures for known diseases and vigilance for new pathogenic threats.