Chinese Notifiable Infectious Diseases Surveillance Report

IMPORTANT

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Chinese Notifiable Infectious Diseases Surveillance Report
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.

Epidemiological Report: Analysis of Prevalence and Impact of Diseases in Mainland China, November 2023

Overview:

The month of November 2023 has shown a continuation of the multifaceted epidemiological profile characteristic of mainland China, with a wide variety of infectious diseases presenting public health challenges. Examining the sheer volume of cases reported within the National Notifiable Disease Reporting System, certain diseases display prominence in relation to incidence. Hand foot and mouth disease, with 193,230 reported cases, infectious diarrhea (excluding cholera, dysentery, typhoid fever, and paratyphoid fever) with 127,630 cases, and influenza with 51,676 cases stand out due to their high transmissibility and wide reach across the population. While these conditions typically exhibit lower mortality, their potential for widespread transmission underscores a heavy burden on public health infrastructure, with implications for healthcare provision and disease containment efforts.

In terms of mortality, the data for November 2023 shows significantly fewer deaths relative to the number of cases, a testament to the efficiency of medical interventions and the nature of the diseases. It's important to note that certain diseases, despite lower incidence, have higher fatality rates, for instance, rabies, which reported 42 cases resulting in 37 deaths. This stark case-fatality ratio reflects the lethality of rabies and the urgent need for post-exposure prophylaxis and preventive measures. This emphasizes the importance of not solely focusing on diseases with high incidence but also on those with high mortality rates, even when they occur less frequently.

Concerns:

High-incidence diseases, while generally less fatal, can serve as barometers for underlying systemic issues such as sanitation, access to healthcare, and public health awareness. Hand foot and mouth disease, being most prevalent, could indicate areas where hygiene practices need to be strengthened, especially in environments frequented by children. Public concern often arises parallel to highly infectious diseases due to their impact on day-to-day activities and the visible toll on communities. Awareness campaigns and public education on transmission prevention become crucial elements of the public health response.

Public concern can also increase with the emergence of new diseases or the re-emergence of past diseases. Even with no reported cases, diseases like Monkeypox which has only recently been included in the management of Class B infectious diseases in September, warrant close monitoring due to their potential for outbreaks and international concerns. Public sentiment often links closely with media coverage, necessitating accurate reporting and dissemination of information to avoid unnecessary panic.

Limitations:

The limitations of the data presented include potential underreporting, which can be attributed to disparities in healthcare access across the vast and diverse regions of China. This can result in underdiagnosis or delays in reporting, skewing the actual incidence and prevalence rates. Moreover, the data focuses on reported cases and may miss subclinical or asymptomatic infections that do not seek medical attention, particularly prevalent in diseases like influenza and other respiratory infections.

Monthly statistics also lack the rigor of annual verification, which might lead to issues with accuracy due to duplication or errors in the initial reporting that are only corrected through subsequent verification processes. The lack of real-time verification adds a temporal limitation to the data, meaning that real trend analysis may be more reliable retrospectively on an annual rather than monthly basis.

Recommendations:

Given the data from November 2023, it is recommended for the public to continue practicing basic hygiene measures such as hand washing, especially for diseases like hand foot and mouth disease, and influenza. For high-fatality diseases like rabies, awareness on the importance of timely post-exposure vaccination is crucial. Additionally, the public should be informed about the need for routine vaccinations and the awareness of symptoms that require immediate medical attention.

For emerging diseases like Monkeypox, while no cases have been reported, the public should be educated on the symptoms, modes of transmission, and preventive measures to contain potential outbreaks. The authorities should ensure surveillance systems are sensitive enough to detect early cases, which is important for disease containment. Meanwhile, enhancing the capabilities for accurate reporting and timely information dissemination can help better understand disease dynamics and guide public health interventions.

The key message for the public is to remain aware but not anxious; informed but not panicked. Leveraging the existing healthcare infrastructure, adhering to recommended public health guidelines, and remaining vigilant in the face of new and re-emerging diseases can significantly mitigate the impact of these diseases on society.

Notation from Data Source:

* According to the National Bureau of Disease Control and Prevention, not included coronavirus disease 2019 (COVID-19).

† The number of deaths of acquired immune deficiency syndrome (AIDS) is the number of all-cause deaths reported in the month by cumulative reported AIDS patients.

§ Since September 20, 2023, Monkey pox was included in the management of Class B infectious diseases.

¶ Infectious diarrhea excludes cholera, dysentery, typhoid fever and paratyphoid fever.

The number of cases and cause-specific deaths refer to data recorded in National Notifiable Disease Reporting System in China, which includes both clinically-diagnosed cases and laboratory-confirmed cases. Only reported cases of the 31 provincial-level administrative divisions in Chinese mainland are included in the table, whereas data of Hong Kong Special Administrative Region, Macau Special Administrative Region, and Taiwan, China are not included. Monthly statistics are calculated without annual verification, which were usually conducted in February of the next year for de-duplication and verification of reported cases in annual statistics. Therefore, 12-month cases could not be added together directly to

calculate the cumulative cases because the individual information might be verified via National Notifiable Disease Reporting System according to information verification or field investigations by local CDCs.

News information since November 2023 in Chinese Mainland

Summary:
Since November 2023, mainland China has experienced a significant rise in respiratory illnesses, primarily affecting children, following the lifting of COVID-19 restrictions and coinciding with the cold season. The increase in respiratory diseases, including influenza, Mycoplasma pneumoniae, respiratory syncytial virus (RSV), and persistent cases of SARS-CoV-2, is attributed to an "immunity debt" phenomenon. This concept suggests that the population's immunity to these pathogens has waned due to prolonged public health measures against COVID-19. However, there has been no indication of a novel pathogen causing these illnesses.

Outbreaks of Known Diseases:

The outbreaks of respiratory illnesses in China stem from known diseases, particularly influenza, Mycoplasma pneumoniae, and RSV. Mycoplasma pneumoniae and RSV are common among the pediatric population, leading to hospitals, especially in regions such as Beijing and Liaoning, being overwhelmed with sick children. Symptoms caused by these infections range from cough and cold to fever, which are generally manageable with treatment. Health officials expected a "lockdown exit wave," similar to patterns observed in other countries that lifted COVID-19 restrictions. In response to the outbreaks, the Chinese health ministry has increased the number of fever clinics and strengthened disease surveillance measures.

Emergence of Novel Pathogens:

To date, health authorities, including the World Health Organization (WHO) and Chinese health officials, have not reported any new pathogens related to the upsurge in respiratory illnesses. The current situation is linked to known circulating pathogens, rather than any newly identified viruses. Health experts are scrutinizing the possibility of "immunity debt" where a reduced level of immunity in the population due to the absence of regular exposure to these pathogens during strict COVID-19 measures has led to increased vulnerability.

In conclusion, the situation in China marks a renewed challenge of managing known respiratory pathogens, with substantial impacts on the healthcare system, but it does not pose a new threat to global health.

News information since November 2023 around world

Summary:
Recent global infectious disease events extend across continents, highlighting both the resurgence of known diseases and the potential threat of novel pathogens. While no new pathogens have been reported from the available sources, several outbreaks underline the importance of vigilance in the public health sphere.
Outbreaks of Known Diseases:
1. In France, a study found 39 cases of Campylobacter fetus infections, with a high mortality risk linked to the 21 patients who developed bacteremia.
2. The Democratic Republic of the Congo reported intrauterine transmission of mpox in a stillborn fetus, a reminder of the ongoing concerns surrounding mother-to-child transmission of infectious agents.
3. Twenty New Zealand children suffered from primary peritonitis caused by Group A Streptococcus, indicative of a broader rise in invasive GAS infections worldwide.
4. Two distinct subtypes of unencapsulated Neisseria meningitidis, sequence type 11, were recognized in Japan, suggesting wider global spread.
5. Australia faced a melioidosis outbreak where seven children contracted the disease after a communal sporting event, prompting calls for increased surveillance and public health initiatives.
6. Non-cystic fibrosis patients in German intensive care units experienced infections with Pandoraea pneumotropica, an unusual pathogen requiring further attention for healthcare-associated infection control.
7. Studies utilizing Micro-GPS systems to track Egyptian Rousette Bats (ERBs) presented evidence of potential Marburg virus transmission risks to humans.
8. An international study highlighted the spread and multidrug resistance of Carbapenem-Resistant Klebsiella pneumoniae.
9. Research from Chicago identified a higher risk of SARS-CoV-2 reinfection among persons with HIV, emphasizing the critical need for vaccination within this community.
10. In Italy, a case that saw a strain of Klebsiella pneumoniae evolve antibiotic resistance during treatment provided insights into the dynamic nature of bacterial adaptation.
11. Findings related to SARS-CoV-2 in dogs suggested potential neurological implications and the virus's ability to switch hosts, raising concerns for zoonotic disease dynamics.
12. Lassa Virus (LASV) studies shed light on the virus's environmental persistence and resistance, as well as effective disinfection strategies.
13. Enhanced detection methods for novel SARS-CoV-2 variants emerged from simulation studies, adding tools for early discovery and management of new virus forms.
Emergence of Novel Pathogens:
The current sources do not indicate the emergence of any novel pathogens since November 2023. The monitoring of infectious diseases is an ongoing effort, and the absence of reported novel pathogens in these sources may not fully represent the current situation. For the most current and comprehensive information on this topic, seeking data from the World Health Organization and other public health authorities is essential.