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 (/)	1.0 (/)	0	0 (/)	0.0 (/)
Cholera	0	-2 (-100.00%)	0.0 (/)	0	0 (/)	0.0 (/)
SARS-CoV	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Acquired immune deficiency syndrome	5,664	454 (8.71%)	1,365.0 (31.75%)	1,955	89 (4.77%)	497.0 (34.09%)
Hepatitis	156,977	4,282 (2.80%)	52,539.0 (50.31%)	327	70 (27.24%)	274.0 (516.98%)
Hepatitis A	1,056	70 (7.10%)	307.0 (40.99%)	0	0 (/)	0.0 (/)
Hepatitis B	132,270	3,229 (2.50%)	45,899.0 (53.14%)	35	3 (9.38%)	3.0 (9.38%)
Hepatitis C	20,280	814 (4.18%)	5,223.0 (34.69%)	292	68 (30.36%)	272.0 (1360.00%)
Hepatitis D	19	4 (26.67%)	9.0 (90.00%)	0	0 (/)	0.0 (/)
Hepatitis E	2,751	208 (8.18%)	1,019.0 (58.83%)	0	-1 (-100.00%)	-1.0 (-100.00%)
Other hepatitis	601	-43 (-6.68%)	82.0 (15.80%)	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	78	-10 (-11.36%)	-4.0 (-4.88%)	0	0 (/)	0.0 (/)
Epidemic hemorrhagic fever	1,320	881 (200.68%)	425.0 (47.49%)	3	0 (0.00%)	-2.0 (-40.00%)
Rabies	12	-1 (-7.69%)	-4.0 (-25.00%)	14	2 (16.67%)	6.0 (75.00%)
Japanese encephalitis	12	-20 (-62.50%)	11.0 (1100.00%)	2	0 (0.00%)	1.0 (100.00%)
Dengue	1,685	-3,703 (-68.73%)	1,511.0 (868.39%)	0	0 (/)	0.0 (/)
Anthrax	36	-11 (-23.40%)	13.0 (56.52%)	0	0 (/)	0.0 (/)
Dysentery	1,963	-1,104 (-36.00%)	-12.0 (-0.61%)	1	1 (/)	0.0 (0.00%)
Tuberculosis	57,432	-1,807 (-3.05%)	9,080.0 (18.78%)	320	-34 (-9.60%)	-13.0 (-3.90%)
Typhoid fever and paratyphoid fever	377	-103 (-21.46%)	-42.0 (-10.02%)	0	-1 (-100.00%)	0.0 (/)
Meningococcal meningitis	12	7 (140.00%)	8.0 (200.00%)	0	0 (/)	-1.0 (-100.00%)
Pertussis	6,410	1,980 (44.70%)	4,250.0 (196.76%)	2	2 (/)	2.0 (/)
Diphtheria	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Neonatal tetanus	1	-1 (-50.00%)	0.0 (0.00%)	0	0 (/)	0.0 (/)
Scarlet fever	4,637	2,104 (83.06%)	2,741.0 (144.57%)	0	0 (/)	0.0 (/)
Brucellosis	4,540	63 (1.41%)	1,971.0 (76.72%)	0	0 (/)	0.0 (/)
Gonorrhea	10,065	-263 (-2.55%)	2,435.0 (31.91%)	0	0 (/)	0.0 (/)
Syphilis	57,719	738 (1.30%)	22,567.0 (64.20%)	1	-2 (-66.67%)	-2.0 (-66.67%)
Leptospirosis	25	-51 (-67.11%)	15.0 (150.00%)	0	0 (/)	0.0 (/)
Schistosomiasis	3	1 (50.00%)	-5.0 (-62.50%)	0	0 (/)	0.0 (/)
Malaria	183	-10 (-5.18%)	109.0 (147.30%)	0	-1 (-100.00%)	0.0 (/)
Human infection with H7N9 virus	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Monkey pox	80	-47 (-37.01%)	/ (/)	0	0 (/)	/ (/)
Influenza	1,862,998	1,522,029 (446.38%)	1,780,335.0 (2153.73%)	1	0 (0.00%)	1.0 (/)
Mumps	7,642	-645 (-7.78%)	-1,060.0 (-12.18%)	0	0 (/)	0.0 (/)
Rubella	89	-21 (-19.09%)	-31.0 (-25.83%)	0	0 (/)	0.0 (/)
Acute hemorrhagic conjunctivitis	4,940	-18,171 (-78.62%)	3,202.0 (184.23%)	0	0 (/)	0.0 (/)
Leprosy	34	10 (41.67%)	14.0 (70.00%)	0	0 (/)	0.0 (/)
Typhus	170	-45 (-20.93%)	54.0 (46.55%)	0	0 (/)	0.0 (/)
Kala azar	19	0 (0.00%)	8.0 (72.73%)	0	-1 (-100.00%)	0.0 (/)
Echinococcosis	387	76 (24.44%)	290.0 (298.97%)	0	0 (/)	0.0 (/)
Filariasis	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Infectious diarrhea	73,835	-16,909 (-18.63%)	22,863.0 (44.85%)	0	0 (/)	0.0 (/)
Hand foot and mouth disease	92,955	-72,572 (-43.84%)	42,322.0 (83.59%)	0	0 (/)	0.0 (/)
Total	2,352,301	1,417,130 (151.54%)	1,884,328.0 (402.66%)	2,626	125 (5.00%)	756.0 (40.43%)

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

Overview

As we review the reported cases and corresponding deaths from various diseases across Chinese mainland in November 2023, we observe a significant emphasis on respiratory and vector-borne diseases, attributable to the seasonal patterns and other contributing factors. The data showcases a considerable number of cases across a wide array of diseases, with notable figures in diseases such as Hand, Foot and Mouth Disease (153,086 cases), and Infectious Diarrhea (108,329 cases). However, it is worth mentioning the notably high case count for Hepatitis, with Hepatitis B leading (96,336 cases), followed by Hepatitis C (20,245 cases), Hepatitis A (1,367 cases), and lesser counts for Hepatitis E and Hepatitis D. The mortality data reflects a concerning number of deaths associated with Tuberculosis (214 deaths), highlighting it as a significant cause of disease burden. Additionally, certain infectious diseases like Acquired Immune Deficiency Syndrome (AIDS), despite having a lower number of monthly cases (7,897), show a substantial number of all-cause deaths (2,444) in cumulative reported AIDS patients, suggesting the chronic impact of this condition.

Concerns

Diseases with high incidence such as Hand, Foot and Mouth Disease and Infectious Diarrhea, though not leading to high mortality, bring to light significant morbidity which can strain healthcare systems and impact public health and economies due to loss of productivity and the cost of healthcare. Hepatitis remains a persistent health challenge, indicated by the combined morbidity across its types. While the immediate lethality is low, the long-term complications such as liver cirrhosis and hepatocellular carcinoma pose serious health risks. Public concern is palpable around diseases with relatively lower incidence but higher mortality rates; Tuberculosis being a prime example with its far-reaching socio-economic consequences. Other diseases such as Hepatitis and AIDS also attract public concern due to their chronic nature and potential for severe health consequences. Despite no reported cases of Human infection with H5N1 and H7N9 viruses this month, the potential for avian influenza outbreaks remains a concern due to prior history and impact.

Recommendations

Given the reported data and the context of public health concerns, we recommend that the public adhere strictly to personal hygiene practices to curb the transmission of diseases such as Hand, Foot and Mouth Disease and Infectious Diarrhea, which can be mitigated through such measures. Immunization for Hepatitis A and B should be actively promoted, as effective vaccines exist for these diseases. Additionally, the enhancement of routine screening and treatment accessibility for chronic infectious diseases like Hepatitis C, B and Tuberculosis, paired with public education campaigns, will be essential for early detection and care. The ongoing vigilance in monitoring avian influenza viruses is crucial. For diseases like AIDS, comprehensive strategies should expand beyond treatment to include prevention education, stigma reduction and community support programs.
Finally, an inter-sectoral approach involving health, education, and social services is imperative to effectively implement preventive measures, improve public awareness, and respond effectively to disease outbreaks. Intensifying research into vaccines and cures, especially for diseases without definitive preventative measures, should be a priority, alongside ongoing support for global health initiatives in disease monitoring and control.

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

As an epidemiologist observing the current situation in Northern China regarding the upsurge in respiratory illnesses among children, it is important to analyze the context thoroughly to understand the dynamics and implications of this rise in cases.

Given the recent relaxation of COVID-19 measures, one could anticipate an increase in respiratory infections. Social distancing, masking, and other non-pharmaceutical interventions (NPIs) were effective not only in curbing the spread of SARS-CoV-2 but also in suppressing the transmission of other respiratory pathogens. With the removal or reduction of these NPIs, there would naturally be an increase in the circulation of respiratory viruses and bacteria.

The key identified pathogens—Influenza, Mycoplasma pneumoniae, RSV, and SARS-CoV-2—are all capable of causing significant morbidity, especially in pediatric populations. The spike in cases can partially be attributed to the cold weather, which often facilitates the spread of respiratory viruses due to closer indoor proximity of people and the possible increased stability and transmission of pathogens in cooler, less humid air.

Public Health Response and Surveillance

An appropriate public health response would involve increasing surveillance to track the spread of these infections, promoting vaccination (particularly for the flu and COVID-19), and possibly re-evaluating the need for NPIs if cases rise above a critical threshold. It would also be vital to communicate clearly with the public about the measures being taken and the importance of seeking medical care for respiratory symptoms.

The surveillance would not only include patient-reported symptoms and hospital admission rates but also laboratory testing to confirm the specific pathogens involved, molecular epidemiology to understand strain variations (especially for influenza and SARS-CoV-2), and whole-genome sequencing where necessary to detect any novel mutations or variants of concern.

Considerations for Pediatric Populations

Pediatric populations are particularly vulnerable and may have been less exposed to these pathogens during the restrictions, possibly resulting in lower levels of immunity. This phenomenon, sometimes referred to as an immunity debt, means that measures to protect children, such as promoting pediatric vaccinations and ensuring the availability of pediatric healthcare resources, are especially important.

Additional Actions

Education about hygiene and respiratory etiquette for children and their caretakers is also important. Reinforcing handwashing, the use of alcohol-based hand sanitizers, and the proper use of masks when sick, could help mitigate the spread.

Given the overlap in symptoms between the various respiratory pathogens, co-infections should also be monitored, as they can complicate diagnosis and treatment. It would also be prudent to monitor the impact of these infections on healthcare systems, to ensure that increased demand can be met without compromising care.

In conclusion, the current increase in respiratory illnesses among children in Northern China appears to be due to known pathogens and a predictable consequence of lifting COVID-19 precautions. Continuous monitoring, targeted public health interventions, and clear communication are key strategies for managing the rise in respiratory disease incidence in these circumstances.

News information since November 2023 around world

Summary

During the ongoing period since November 2023, the global health community has observed a mix of persistent and emerging threats in the realm of infectious diseases. The well-known COVID-19 remains a part of the landscape, with some regions experiencing a decline in cases and mortality. Alongside, there has been a worrying uptick in dengue fever incidences, particularly in the Americas. Meanwhile, cholera and measles sustain their status as endemic issues in various locales. Health officials also face challenges posed by new pathogens, requiring swift surveillance and response efforts.

Outbreaks of Known Diseases

COVID-19: SARS-CoV-2, the virus responsible for the COVID-19 pandemic, has remained a global health priority. Recent data points to a downtrend, with some regions, such as the Eastern Mediterranean, noting a 23% drop in cases and a 30% fall in deaths over a week. Despite these encouraging signs, the pandemic continues to require close monitoring and management.
Dengue Fever: A major leap in dengue fever cases has been observed, especially in the Americas where more than 4.1 million suspected cases and 2,049 associated fatalities have been documented. The spread has been wide, affecting 42 countries and territories within that region. Unprecedentedly, Italy also reported outbreaks, signaling the disease's reach beyond its typical endemic zones.
Cholera: Reports indicate a resurgence of cholera outbreaks in several countries. The exact impact, in terms of case counts and severity, remains unspecified, but the presence of this waterborne disease highlights issues with sanitation and access to clean water.
Measles: The highly infectious measles virus continues to cause outbreaks across the globe. While specifics were not provided, the persistent occurrence of measles serves as a reminder of the need for maintained vigilance and vaccination efforts.

Emergence of Novel Pathogens

No specific details regarding novel pathogens were included in the content provided. However, the ongoing emergence of new infectious agents is an inherent part of global epidemiology. Vigilant surveillance, research, and public health readiness are crucial for identifying and responding to any such threats that may arise.