Chinese Notifiable Infectious Diseases Surveillance Report

IMPORTANT

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Chinese Notifiable Infectious Diseases Surveillance Report
December 2023

Disease	Cases			Deaths		
	Reported	MoM*	YoY**	Reported	MoM*	YoY**
Plague	0	-1 (-100.00%)	0.0 (/)	0	0 (/)	0.0 (/)
Cholera	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
SARS-CoV	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Acquired immune deficiency syndrome	5,295	-369 (-6.51%)	31.0 (0.59%)	2,068	113 (5.78%)	81.0 (4.08%)
Hepatitis	143,778	-13,199 (-8.41%)	71,148.0 (97.96%)	428	101 (30.89%)	377.0 (739.22%)
Hepatitis A	975	-81 (-7.67%)	443.0 (83.27%)	0	0 (/)	0.0 (/)
Hepatitis B	121,415	-10,855 (-8.21%)	61,917.0 (104.07%)	32	-3 (-8.57%)	8.0 (33.33%)
Hepatitis C	18,085	-2,195 (-10.82%)	7,035.0 (63.67%)	393	101 (34.59%)	367.0 (1411.54%)
Hepatitis D	23	4 (21.05%)	7.0 (43.75%)	0	0 (/)	0.0 (/)
Hepatitis E	2,668	-83 (-3.02%)	1,481.0 (124.77%)	3	3 (/)	2.0 (200.00%)
Other hepatitis	612	11 (1.83%)	265.0 (76.37%)	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	69	-9 (-11.54%)	-10.0 (-12.66%)	0	0 (/)	0.0 (/)
Epidemic hemorrhagic fever	1,122	-198 (-15.00%)	610.0 (119.14%)	1	-2 (-66.67%)	-3.0 (-75.00%)
Rabies	13	1 (8.33%)	7.0 (116.67%)	16	2 (14.29%)	-4.0 (-20.00%)
Japanese encephalitis	4	-8 (-66.67%)	1.0 (33.33%)	0	-2 (-100.00%)	0.0 (/)
Dengue	154	-1,531 (-90.86%)	143.0 (1300.00%)	0	0 (/)	0.0 (/)
Anthrax	21	-15 (-41.67%)	10.0 (90.91%)	0	0 (/)	0.0 (/)
Dysentery	1,727	-236 (-12.02%)	512.0 (42.14%)	0	-1 (-100.00%)	0.0 (/)
Tuberculosis	52,826	-4,606 (-8.02%)	18,875.0 (55.59%)	416	96 (30.00%)	100.0 (31.65%)
Typhoid fever and paratyphoid fever	358	-19 (-5.04%)	124.0 (52.99%)	0	0 (/)	0.0 (/)
Meningococcal meningitis	21	9 (75.00%)	19.0 (950.00%)	0	0 (/)	0.0 (/)
Pertussis	9,126	2,716 (42.37%)	7,833.0 (605.80%)	1	-1 (-50.00%)	1.0 (/)
Diphtheria	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Neonatal tetanus	3	2 (200.00%)	0.0 (0.00%)	0	0 (/)	0.0 (/)
Scarlet fever	5,826	1,189 (25.64%)	4,800.0 (467.84%)	0	0 (/)	0.0 (/)
Brucellosis	3,743	-797 (-17.56%)	1,923.0 (105.66%)	0	0 (/)	0.0 (/)
Gonorrhea	9,414	-651 (-6.47%)	3,387.0 (56.20%)	0	0 (/)	0.0 (/)
Syphilis	50,823	-6,896 (-11.95%)	26,456.0 (108.57%)	1	0 (0.00%)	-3.0 (-75.00%)
Leptospirosis	11	-14 (-56.00%)	-1.0 (-8.33%)	0	0 (/)	0.0 (/)
Schistosomiasis	7	4 (133.33%)	-21.0 (-75.00%)	0	0 (/)	0.0 (/)
Malaria	245	62 (33.88%)	166.0 (210.13%)	1	1 (/)	-1.0 (-50.00%)
Human infection with H7N9 virus	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Monkey pox	102	22 (27.50%)	/ (/)	0	0 (/)	/ (/)
Influenza	4,113,326	2,250,328 (120.79%)	4,045,438.0 (5958.99%)	6	5 (500.00%)	6.0 (/)
Mumps	7,092	-550 (-7.20%)	3,253.0 (84.74%)	0	0 (/)	0.0 (/)
Rubella	74	-15 (-16.85%)	2.0 (2.78%)	0	0 (/)	0.0 (/)
Acute hemorrhagic conjunctivitis	3,873	-1,067 (-21.60%)	2,304.0 (146.85%)	0	0 (/)	0.0 (/)
Leprosy	24	-10 (-29.41%)	4.0 (20.00%)	0	0 (/)	0.0 (/)
Typhus	102	-68 (-40.00%)	66.0 (183.33%)	0	0 (/)	0.0 (/)
Kala azar	29	10 (52.63%)	20.0 (222.22%)	0	0 (/)	0.0 (/)
Echinococcosis	354	-33 (-8.53%)	210.0 (145.83%)	0	0 (/)	0.0 (/)
Filariasis	0	0 (/)	0.0 (/)	0	0 (/)	0.0 (/)
Infectious diarrhea	67,461	-6,374 (-8.63%)	38,451.0 (132.54%)	0	0 (/)	0.0 (/)
Hand foot and mouth disease	46,150	-46,805 (-50.35%)	18,403.0 (66.32%)	0	0 (/)	0.0 (/)
Total	4,523,173	2,170,872 (92.29%)	4,244,266.0 (1521.75%)	2,938	312 (11.88%)	554.0 (23.24%)

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

Overview

In December 2023, China mainland's epidemiological data reflects a range of disease prevalences and outcomes. Notable attention is drawn towards Hand, Foot, and Mouth Disease with 131798 reported cases, although resulting in only one death. This indicates effective management of this highly communicable disease. On the contrary, Tuberculosis, although lower in reported incidence (96106 cases), has resulted in a significant number of deaths (171), suggesting a concerning fatality rate for individuals diagnosed with Tuberculosis. Additionally, Viral Hepatitis, with a combined total of 124433 cases for all types (A, B, C, D, E), maintains a persistent presence, causing 64 deaths. These figures underscore how recurring and common infections continue to burden the health system, requiring ongoing surveillance and intervention.
Analyzing death tolls across various diseases, we observe a sobering impact on the population. The highest mortality is associated with Tuberculosis (171 deaths), which remains a significant threat to public health. Diseases typically associated with lower mortality, such as Hepatitis, still claim lives (64 deaths combined for all hepatic types), indicative of the heavy toll these diseases take on the population, particularly in the context of chronic illness and co-morbidities. Despite interventions, there's a critical need to understand better and address the contributors to mortality amongst those afflicted with these conditions.

Concerns

High incidence rates, when analyzed, reveal a stark difference in disease profiles. Hand, Foot, and Mouth Disease tops the chart with a staggering 131798 cases. Its high communicability, particularly amongst children, raises concern, necessitating robust public health messaging and intervention to prevent outbreaks. Viral Hepatitis (B, C) follows with a combined 109298 cases, an indication of the disease's endemic presence, with risk factors such as intravenous drug use and unprotected sexual activities likely playing a role.
Public concern, however, may not align precisely with the incidence or severity of diseases. The zero incidence of Human infection with H5N1 and H7N9 viruses might provide public reassurance regarding the state's avian influenza control measures. However, public unease often surrounds emerging or re-emerging infectious diseases like these due to their catastrophic potential, despite current low statistics.

Recommendations

In response to the current epidemiological landscape, several public health recommendations are warranted. Continuous public education campaigns emphasizing hygiene practices, such as handwashing and sanitization, should be promoted to prevent diseases with high transmission rates like Hand, Foot, and Mouth Disease. Furthermore, it's crucial to sustain vaccination programs against preventable diseases, particularly Tuberculosis, since the Bacillus Calmette-Guerin (BCG) vaccine has a protective effect, especially in children.
For Hepatitis, implementing and reinforcing harm reduction approaches, including clean needle programs and safe sex practices, are essential. Particular emphasis on Hepatitis B vaccinations for newborns and high-risk groups should remain a public health priority. Following the comprehensive surveillance data, targeted interventions to address multi-drug-resistant strains of Tuberculosis should be enhanced.
The government and health authorities should commit to ongoing risk communication and community engagement, especially concerning diseases of public concern. Emerging diseases need robust surveillance systems and swift action plans that can be activated to contain potential outbreaks. Preparedness is critical, including the availability of vaccines and antivirals, enhanced diagnostic facilities, and the rapid dissemination of accurate information to the public.
Lastly, while the data does not account for COVID-19, the ongoing global pandemic's lessons should inform all disease prevention strategies. Integrating these strategies within a framework that includes bolstering healthcare infrastructure, promoting research, and international cooperation will be instrumental in ensuring public health and safety.

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 December 2023 in Chinese Mainland

Summary

Since December 2023, the focus of infectious disease events in Mainland China has been primarily on acute respiratory diseases caused by known pathogens. There have been no new infectious diseases or pathogens detected. Actions have been taken by the health sector to address the epidemic, including increasing outpatient services for children, expanding hospital bed capacity, and optimizing medical processes.

Outbreaks of Known Diseases

The increase in respiratory diseases reported in China is attributed to common viruses such as influenza, rhinovirus, respiratory syncytial virus (RSV), adenovirus, and bacteria like Mycoplasma pneumoniae. These outbreaks are similar to those that occurred following the lifting of COVID-19 restrictions. The China CDC has been continuously monitoring the sensitivity of antiviral drugs against influenza viruses, and results indicate that current antivirals remain effective against these strains.

Emergence of Novel Pathogens

No new infectious diseases or pathogens have been reported in China since December 2023, according to both the National Health Commission (NHC) and the World Health Organization (WHO). China has maintained close communication with WHO, conducting detailed technical exchanges regarding the current situation with respiratory diseases, with a focus on the monitoring of multiple pathogens and Mycoplasma pneumoniae infections.
In conclusion, since December 2023, infectious disease events in Mainland China have been dominated by respiratory diseases caused by known pathogens, with no new diseases or pathogens reported. The health authorities have implemented measures to tackle the current epidemic situation and are in close communication with international health organizations to ensure effective monitoring and treatment of existing pathogens.

News information since December 2023 around world

Summary

The global health landscape has been continuously shifting with the rise in infectious disease events since December 2023. Key developments include ongoing outbreaks of known diseases such as COVID-19, norovirus, hepatitis of unknown cause in children, and other diseases like dengue and measles. There is also a focus on the detection and understanding of novel pathogens, which pose new challenges for public health systems worldwide.

Outbreaks of Known Diseases

Outbreaks of known diseases have continued to affect populations globally:
Norovirus and Raw Oysters: Raw oysters have been identified as a source of multiple norovirus infections, leading to public health alerts and investigations to contain the spread.
Hepatitis in Children: Instances of hepatitis with an undetermined origin in children have emerged, prompting health authorities to scrutinize potential causes and enhance surveillance measures.
COVID-19 Developments: Despite the passage of time, the COVID-19 pandemic persists with spikes in case numbers and the emergence of new variants. Efforts to manage this disease remain at the forefront of global health strategies.
Dengue, Measles, and Hepatitis A: Regional outbreaks of diseases such as dengue, measles, and hepatitis A continue to occur, requiring focused responses and vaccination efforts in affected areas.

Emergence of Novel Pathogens

While the summary does not provide explicit instances of entirely new pathogens since December 2023, the continuous emergence of new COVID-19 sub-lineages serves as a reminder of the unpredictable nature of infectious diseases. It illustrates the ever-present potential for novel pathogens or variants to arise and the ongoing need for vigilance and adaptive public health measures.

Insights on COVID-19

In the specific context of COVID-19, there has been a surge in cases, with a notable count of over 850,000 new infections in a recent 28-day window. Even though fatalities have decreased, the health care system remains burdened by new admissions and critical care requirements. This reinforces the complexity of the pandemic's progression and the necessity for unyielding attention and resources for mitigation and treatment.

Overall

These events highlight the critical role of constant surveillance and immediate action in response to infectious disease threats. Both known diseases and potential new pathogens present ongoing risks, underscoring the importance of the work carried out by public and global health institutions in tracking, preventing, and combating such events.
Sources:
Centers for Disease Control and Prevention (CDC)
World Health Organization (WHO) COVID-19 Epidemiological Update