A Dynamic Sensing Report of Notifiable Infectious Diseases Data in Mainland, China

2023 June

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Monthly Report -- 2023 June

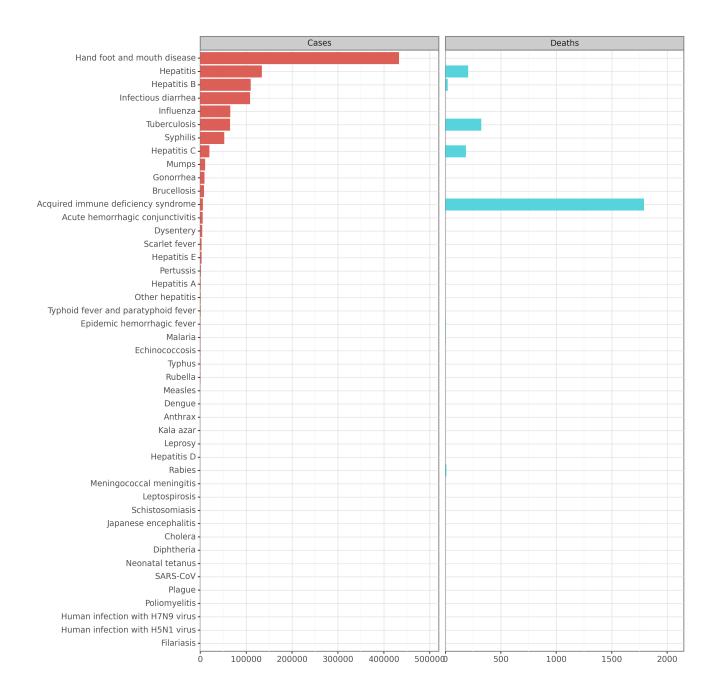


Figure 1: Monthly Notifiable Infectious Diseases Reports in 2023 June

Thank you for providing the data. Let's start by analyzing the overall trends and then we can focus on identifying seasonal patterns, peak and trough periods for specific diseases.

Overall Trends: - From May 2023 to June 2022, the total number of cases decreased by 29.49% (-379,151 cases), while the total number of deaths increased by 13.12% (271 deaths). - Some diseases showed significant changes in their total cases, such as Hand foot and mouth disease, which increased by 207.89% (292,423 cases), and Influenza, which decreased by 91.26% (-681,749 cases). - Similarly, some diseases showed notable changes in deaths, such as Hepatitis B, which decreased by 42.86% (-15 deaths), and Hepatitis C, which increased by 1140.00% (171 deaths). - Acquired immune deficiency

syndrome (AIDS) had a slight increase in cases (5.57%) but also an increase in deaths (8.80%). Seasonal Patterns, Peaks, and Troughs: - Acute hemorrhagic conjunctivitis had a peak in cases in June 2023, with 4,985 cases. It showed a seasonal pattern with higher cases in June compared to May and 2022 June. - Cholera had a peak in cases in 2022 June, with 3 cases. However, the number of cases decreased by 50% from May 2023 to June 2022. - Dengue had a significant increase in cases from 2022. June to May 2023 (5400%). It showed a seasonal pattern with higher cases in May 2023 compared to 2022 June. - Hand foot and mouth disease had a peak in cases in May 2023, with 433,084 cases. It showed a seasonal pattern with higher cases in May 2023 and 2022 June compared to other months. -Influenza had a significant decrease in cases from 2022 June to May 2023 (-91.26%). It showed a seasonal pattern with higher cases in 2022 June compared to May 2023. - Measles had a slight decrease in cases from 2022 June to May 2023 (-19.09%). It showed a seasonal pattern with higher cases in 2022 June compared to May 2023. - Mumps had a peak in cases in May 2023, with 10,710 cases. It showed a seasonal pattern with higher cases in May 2023 compared to 2022 June. - Rabies had a peak in deaths in 2022 June, with 9 deaths. It showed a seasonal pattern with higher deaths in 2022 June compared to May 2023. - Tuberculosis had a slight decrease in cases from 2022 June to May 2023 (-4.58%). It showed a seasonal pattern with higher cases in 2022 June compared to May 2023. - Syphilis had a slight increase in cases (7.22%) and a decrease in deaths (-75.00%) from 2022 June to May 2023.

These are some initial observations based on the provided data. Please let me know if you need further analysis or specific information for any particular disease.

Table 1: Monthly Notifiable Infectious Diseases Cases in 2023 June

Diseases	Cases	Comparison with 2023 May	Comparison with 2022 June
Plague	0	0 (/)	0 (/)
Cholera	3	0 (0.00%)	-3 (-50.00%)
SARS-CoV	0	0 (/)	0 (/)
Acquired immune deficiency syndrome	5,759	304 (5.57%)	133 (2.36%)
Hepatitis	133,888	-7,604 (-5.37%)	2,031 (1.54%)
Hepatitis A	944	-132 (-12.27%)	-94 (-9.06%)
Hepatitis B	110,063	-5,871 (-5.06%)	3,217 (3.01%)
Hepatitis C	19,664	-1,299 (-6.20%)	-1,261 (-6.03%)
Hepatitis D	23	3 (15.00%)	1 (4.55%)
Hepatitis E	2,529	-293 (-10.38%)	118 (4.89%)
Other hepatitis	665	-12 (-1.77%)	50 (8.13%)
Poliomyelitis	0	0 (/)	0 (/)
Human infection with H5N1 virus	0	0 (/)	0 (/)
Measles	89	-20 (-18.35%)	-21 (-19.09%)
Epidemic hemorrhagic fever	365	-34 (-8.52%)	-201 (-35.51%)
Rabies	11	1 (10.00%)	-4 (-26.67%)
Japanese encephalitis	3	3 (/)	-4 (-57.14%)
Dengue	55	34 (161.90%)	54 (5400.00%)
Anthrax	31	6 (24.00%)	2 (6.90%)
Dysentery	4,353	600 (15.99%)	-355 (-7.54%)
Tuberculosis	64,788	-4,280 (-6.20%)	-3,113 (-4.58%)

Typhoid fever and paratyphoid fever	627	80 (14.63%)	-73 (-10.43%)
Meningococcal meningitis	9	7 (350.00%)	3 (50.00%)
Pertussis	1,512	178 (13.34%)	-2,701 (-64.11%)
Diphtheria	1	1 (/)	1 (/)
Neonatal tetanus	1	1 (/)	1 (/)
Scarlet fever	2,684	786 (41.41%)	-212 (-7.32%)
Brucellosis	8,326	-741 (-8.17%)	-1,617 (-16.26%)
Gonorrhea	8,863	-214 (-2.36%)	-125 (-1.39%)
Syphilis	52,007	-1,251 (-2.35%)	3,500 (7.22%)
Leptospirosis	9	1 (12.50%)	-3 (-25.00%)
Schistosomiasis	7	4 (133.33%)	2 (40.00%)
Malaria	264	52 (24.53%)	202 (325.81%)
Human infection with H7N9 virus	0	0 (/)	0 (/)
Influenza	65,289	-147,600 (-69.33%)	-681,749 (-91.26%)
Mumps	10,710	1,780 (19.93%)	-1,235 (-10.34%)
Rubella	110	37 (50.68%)	-57 (-34.13%)
Acute hemorrhagic conjunctivitis	4,985	2,674 (115.71%)	2,080 (71.60%)
Leprosy	24	-3 (-11.11%)	-13 (-35.14%)
Typhus	131	-40 (-23.39%)	7 (5.65%)
Kala azar	25	-7 (-21.88%)	5 (25.00%)
Echinococcosis	252	-62 (-19.75%)	2 (0.80%)
Filariasis	0	0 (/)	0 (/)
Infectious diarrhea	108,442	-7,456 (-6.43%)	13,430 (14.14%)
Hand foot and mouth disease	433,084	341,825 (374.57%)	292,423 (207.89%)
Total	906,707	179,062 (24.61%)	-379,151 (-29.49%)

Table 2: Monthly Notifiable Infectious Diseases Deaths in 2023 June

Diseases	Deaths	Comparison with 2023 May	Comparison with 2022 June
Plague	0	0 (/)	0 (/)
Cholera	0	0 (/)	0 (/)
SARS-CoV	0	0 (/)	0 (/)
Acquired immune deficiency syndrome	1,792	-141 (-7.29%)	145 (8.80%)
Hepatitis	206	36 (21.18%)	155 (303.92%)
Hepatitis A	0	0 (/)	0 (/)
Hepatitis B	20	3 (17.65%)	-15 (-42.86%)
Hepatitis C	186	35 (23.18%)	171 (1140.00%)
Hepatitis D	0	0 (/)	0 (/)

Hepatitis E	0	-2 (-100.00%)	0 (/)
Other hepatitis	0	0 (/)	-1 (-100.00%)
Poliomyelitis	0	0 (/)	0 (/)
Human infection with H5N1 virus	0	0 (/)	0 (/)
Measles	0	0 (/)	0 (/)
Epidemic hemorrhagic fever	2	2 (/)	-4 (-66.67%)
Rabies	9	2 (28.57%)	3 (50.00%)
Japanese encephalitis	0	0 (/)	0 (/)
Dengue	0	0 (/)	0 (/)
Anthrax	0	0 (/)	0 (/)
Dysentery	0	0 (/)	0 (/)
Tuberculosis	324	-19 (-5.54%)	-21 (-6.09%)
Typhoid fever and paratyphoid fever	0	0 (/)	0 (/)
Meningococcal meningitis	0	0 (/)	-1 (-100.00%)
Pertussis	0	0 (/)	0 (/)
Diphtheria	0	0 (/)	0 (/)
Neonatal tetanus	0	0 (/)	0 (/)
Scarlet fever	0	0 (/)	0 (/)
Brucellosis	0	0 (/)	0 (/)
Gonorrhea	0	0 (/)	0 (/)
Syphilis	1	-9 (-90.00%)	-3 (-75.00%)
Leptospirosis	0	0 (/)	0 (/)
Schistosomiasis	0	0 (/)	0 (/)
Malaria	2	2 (/)	2 (/)
Human infection with H7N9 virus	0	0 (/)	0 (/)
Influenza	1	-1 (-50.00%)	-3 (-75.00%)
Mumps	0	0 (/)	0 (/)
Rubella	0	0 (/)	0 (/)
Acute hemorrhagic conjunctivitis	0	0 (/)	0 (/)
Leprosy	0	0 (/)	0 (/)
Typhus	0	0 (/)	0 (/)
Kala azar	0	0 (/)	0 (/)
Echinococcosis	0	0 (/)	0 (/)
Filariasis	0	0 (/)	0 (/)
Infectious diarrhea	0	0 (/)	-1 (-100.00%)
Hand foot and mouth disease	0	0 (/)	-1 (-100.00%)
Total	2,337	-128 (-5.19%)	271 (13.12%)

History Data Analysis2023 June

Total

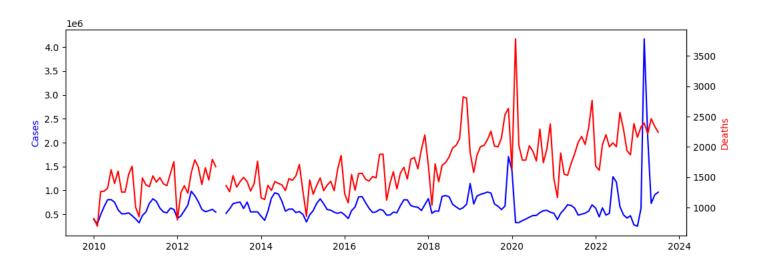


Figure 2: The Change of Total Reports before 2023 June

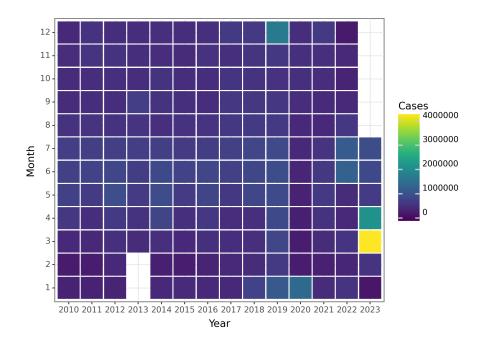


Figure 3: The Change of Total Cases before 2023 June

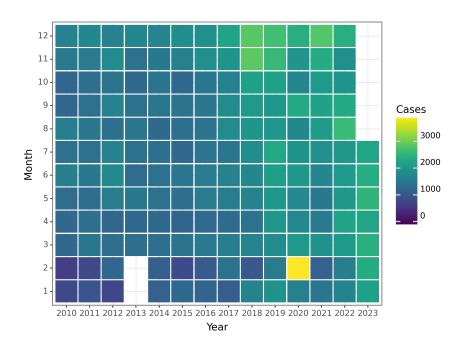


Figure 4: The Change of Total Deaths before 2023 June

Cholera

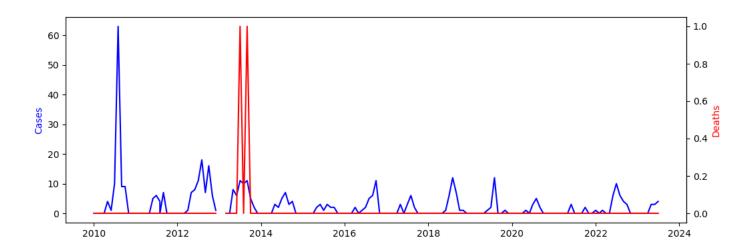


Figure 5: The Change of Cholera Reports before 2023 June

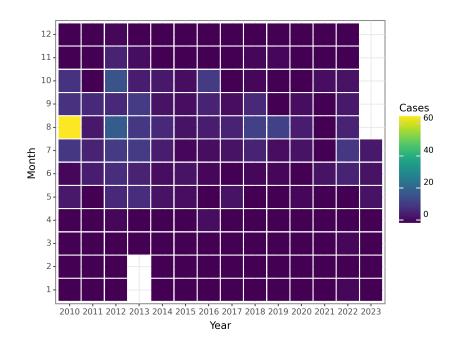


Figure 6: The Change of Cholera Cases before 2023 June

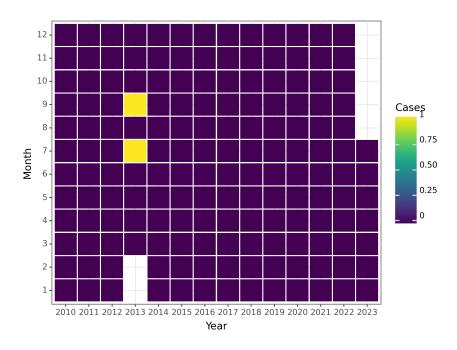


Figure 7: The Change of Cholera Deaths before 2023 June