COVID-19 Clinical and Surveillance Data — December 9, 2022 to February 6, 2023, China

Chinese Center for Disease Control and Prevention

1. COVID-19 Infection Surveillance Data

1.1 COVID-19 Nucleic Acid Test Data

Since December 9, 2022, the number of positive nucleic acid tests and the positive rate reported from provincial-level administrative divisions (PLADs) had gradually increased, peaking on December 22, 2022 with 6.94 million positive tests and a 29.2% positive testing rate on December 25, 2022. After this peak, the number and rate of positive nucleic acid tests decreased steadily, reaching a low of 9,000 on February 6, with a rate of 1.5% (Figure 1-1).

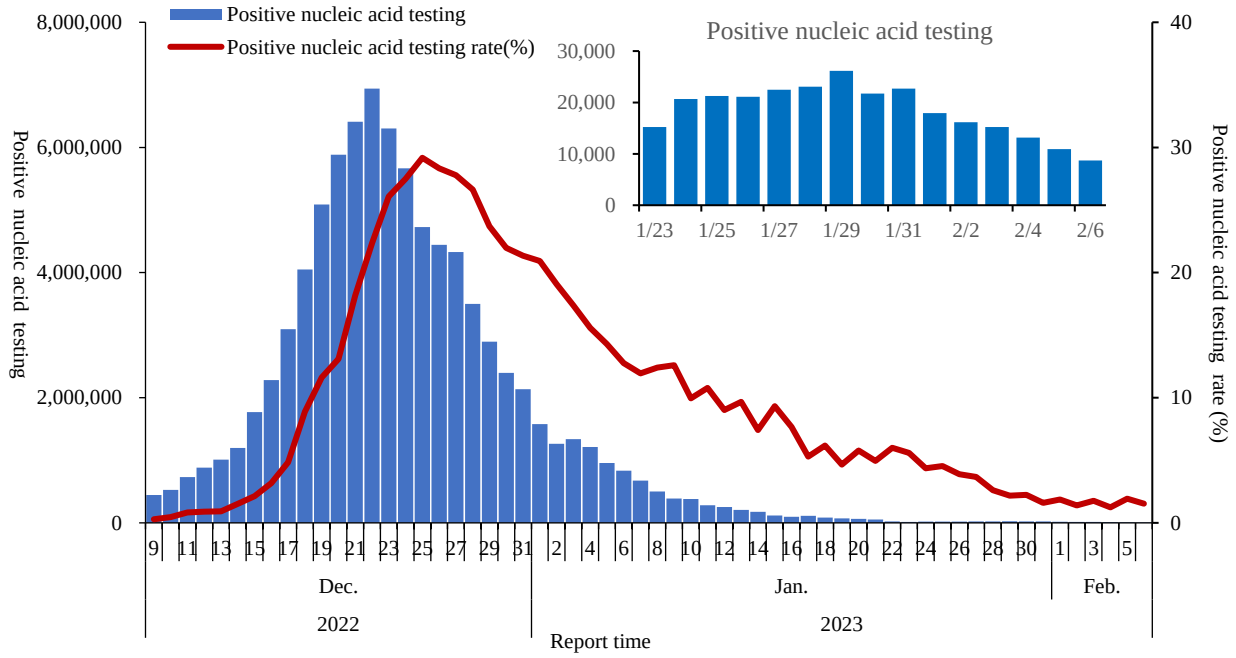

Figure 1-1 Daily number of positive nucleic acid tests and rate.
(Data reported by PLADs in Chinese mainland)

1.2 COVID-19 Antigen Test Data

The number of tests reported by PLADs was generally low and gradually decreased. For example, the number of tests reported reached a high of 1.89 million on December 19, 2022 and dropped to 85,000 on February 4, 2023, before rebounding to 190,000 on February 6, 2023. The number of positive antigen tests and the positive rate increased rapidly after December 9, peaking on December 22, 2022 (337,000, 21.3%) before fluctuating to 784 and 0.4%, respectively, by February 6, 2023 (Figure 1-2).

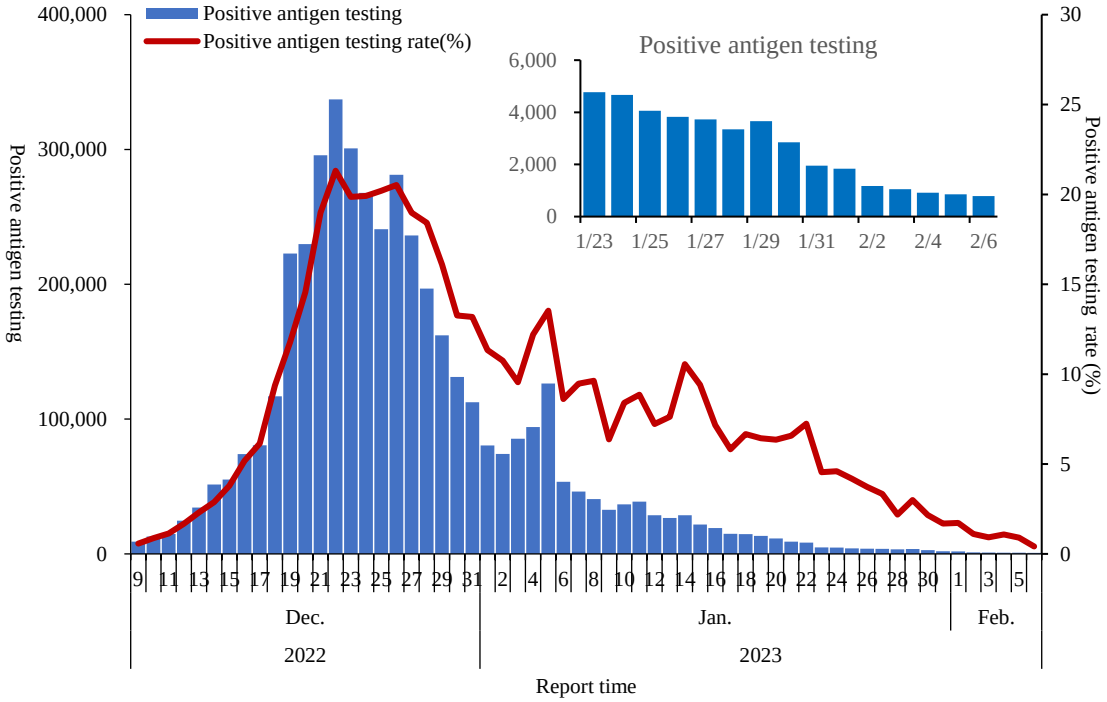

Figure 1-2 COVID-19 antigen test and positive rate.
(All data were reported by PLADs in Chinese mainland)

2. Fever Clinic Diagnosis and Treatment Data

2.1 Fever Clinic Visit Data

The number of fever clinic visits in mainland China peaked at 2.867 million on December 23, 2022, then decreased continuously until January 23, 2023, and fluctuated to 137,000 visits on February 6, 2023, representing a decrease of 95.2% from the peak (Figure 2-1).

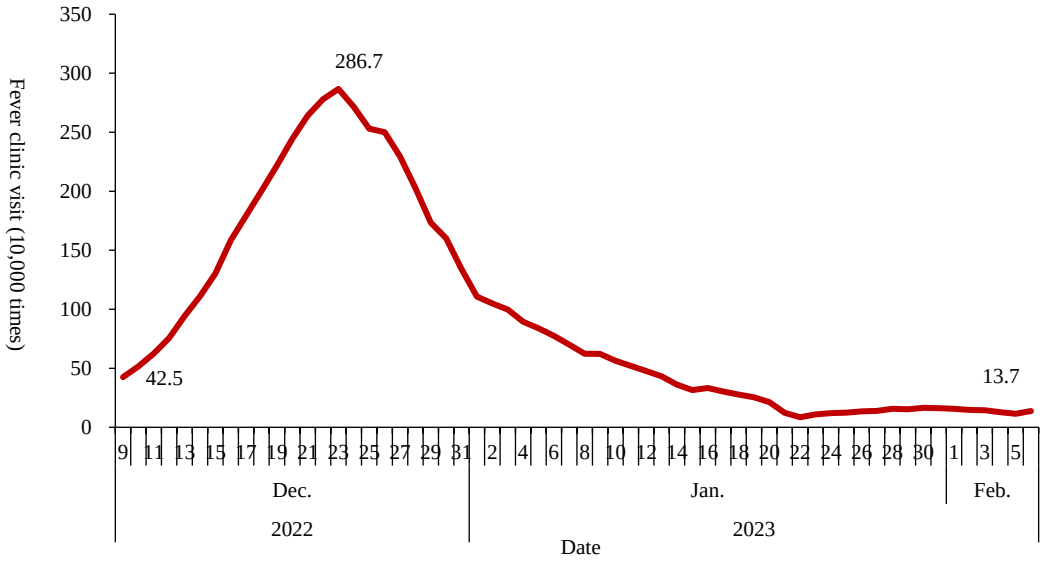

Figure 2-1 Fever clinic visit data.
(All data were reported by PLADs in Chinese mainland)

2.2 Rural Areas

The number of fever clinic visits at township health centers in rural area peaked at 922,000 on December 23, 2022 and then decreased continuously till January 22, 2022 and fluctuated to 58,000 visits on February 6, 2023 with a decrease of 93.7% from the peak (Figure 2-2).

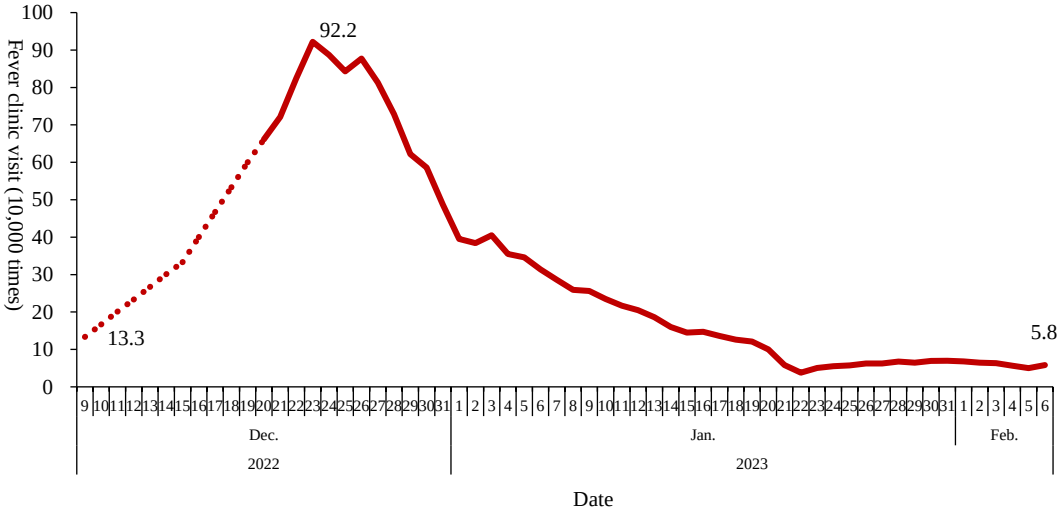

Figure 2-2 Rural fever clinic visit data.

(All data were reported by PLADs in Chinese mainland)

2.3 Urban Areas

The number of fever clinic visits to the second level and above hospitals and urban community health service centers in urban area peaked at 1.954 million on December 22, 2022 and then decreased continuously till January 22, 2022 and fluctuated to 79,000 visits on February 6, 2023 with a decrease of 95.9% from the peak (Figure 2-3).

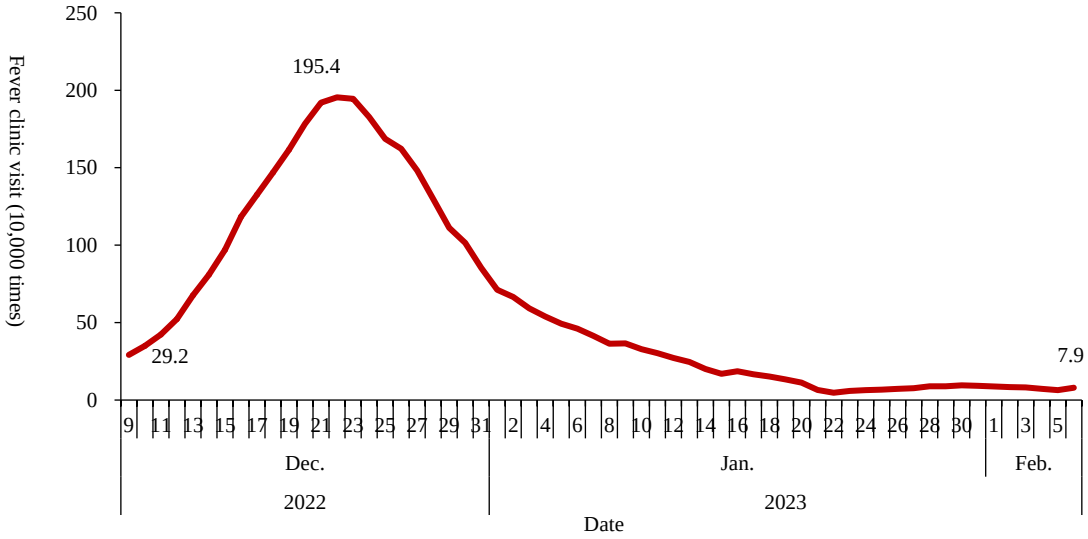

Figure 2-3 Urban fever clinic visit data

(All data were reported by PLADs in Chinese mainland)

2.4 Surveillance Data of Influenza Sentinel Hospitals and Laboratories

Since December 9, 2022, surveillance of SARS-CoV-2 has been conducted by influenza surveillance sentinel hospitals (824 sentinel hospitals reported data, including 546 national-level sentinel hospitals and 278 non-national-level sentinel hospitals) and national influenza surveillance network laboratories (402 laboratories reported data). From September to early December 2022, the weekly number of influenza-like illness (ILI, fever with temperature ≥38℃, accompanied by cough or sore throat) in sentinel hospitals remained around 100,000, and ILI% was between 2.7% and 3.6%. The ILI% began to increase rapidly from Week 50 (8.5%) and reached its peak in Week 51 (12.1%). It then started to decline dramatically from Week 52. In Week 5 (January 30–February 5, 2023), it decreased to 1.4% (Figure 2-4).

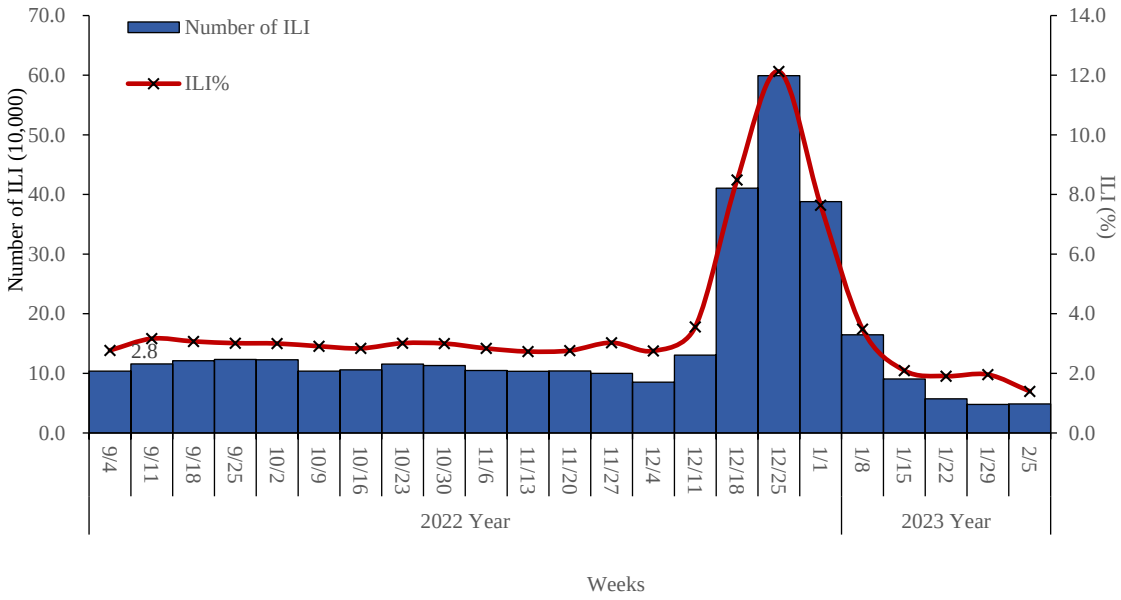

Figure 2-4 ILI and ILI% reported by sentinel hospitals in Chinese mainland.
(Reported data were from 824 sentinel hospitals)

Influenza surveillance network laboratories tested both SARS-CoV-2 and influenza viruses in ILI samples simultaneously. In Week 49 (December 9–15, 2022), the positive rate of SARS-CoV-2 began to increase and reached its peak between Weeks 51 and 52, then started to decline with fluctuation, then continued to reduce. In Week 5 (January 30–February 5, 2023), the positive rate of SARS-CoV-2 had reduced to 5.7%. During the same period, the positive rate of influenza virus gradually decreased to a very low level in late December 2022, and it was less than 1%. In Week 5 (January 30–February 5, 2023), it remained around 0.6% (Figure 2-5).

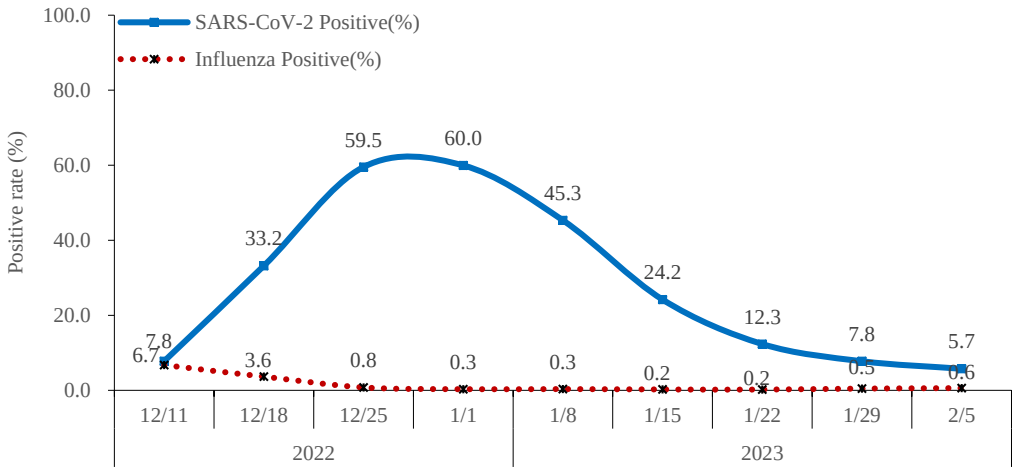

Figure 2-5 The positive rate of SARS-CoV-2 and influenza virus in ILI samples from sentinel hospitals in Chinese mainland.
(Reported data were from 402 laboratories)

3. Hospitalization Data

3.1 No. of COVID-19

The number of COVID-19 in hospitals nationwide peaked (1.625 million) on January 5, 2023, and then decreased continually to 60,000 on February 6, 2023, with 96.3% reduction from the peak (Figure 3-1).

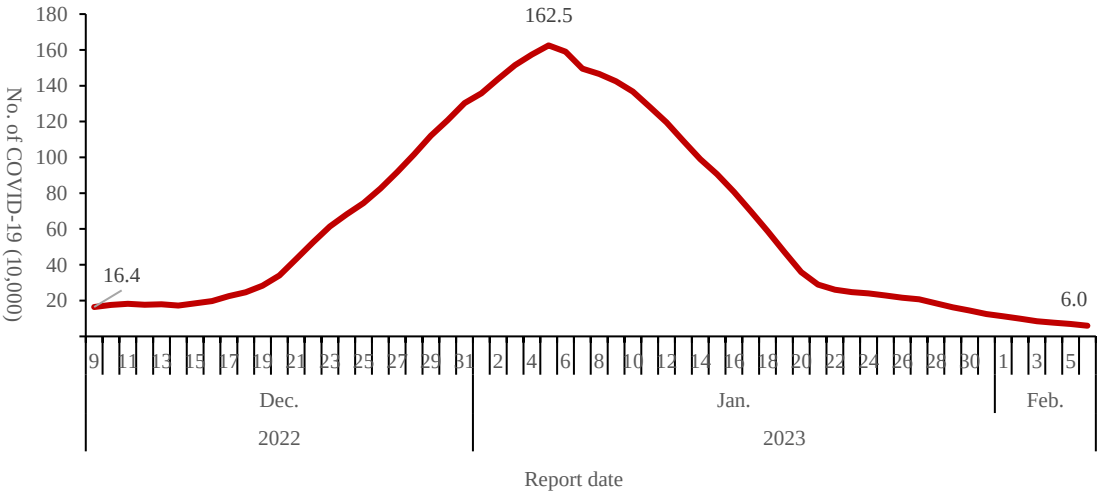

Figure 3-1 The number of COVID-19 cases in hospitals.
(All data were reported by PLADs in Chinese mainland)

3.2 No. of Severe Cases in Hospitals

The number of severe cases in hospitals increased by nearly 10,000 per day between December 27, 2022 and January 3, 2023, peaked at 128,000 on January 5, 2023, and then decreased continually to 2,000 on February 6, 2023 with 98.1% reduction from the peak (Figure 3-2).

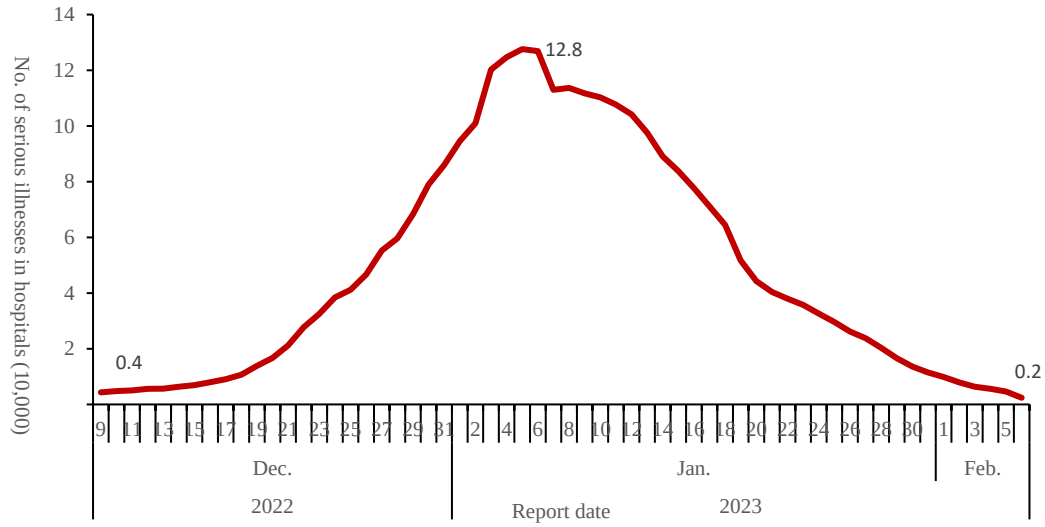

Figure 3-2 No. of severe cases in hospitals.
(All data were reported by PLADs in Chinese mainland)

3.3 No. of Deaths with SARS-CoV-2 in Hospitals

The number of deaths with SARS-CoV-2 in hospitals reached a daily peak of 4,273 on January 4, 2023 and continued to decline thereafter, falling back to 102 on February 6, 2023, with a 97.6% reduction from the peak number (Figure 3-3).

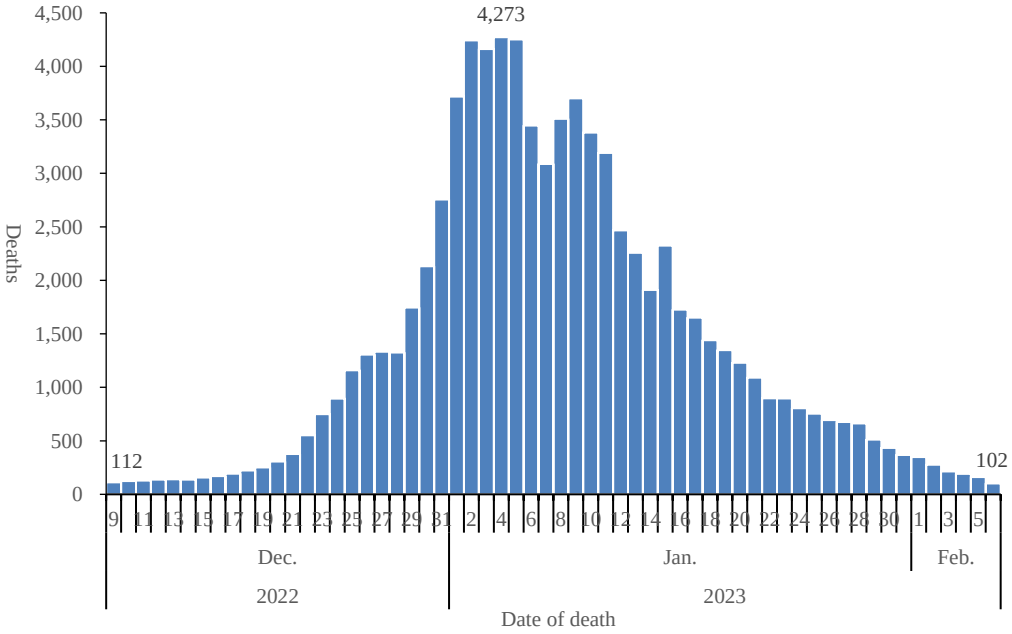

Figure 3-3 No. of deaths with SARS-CoV-2 in hospitals
(All data were reported by PLADs in Chinese mainland)

4. SARS-CoV-2 Variants Surveillance of Domestic Cases in Chinese mainland

4.1. The Dynamic Trend of SARS-CoV-2 Variants from Domestic Cases in Chinese mainland

From September 26, 2022 to February 6, 2023, 23,217 valid SARS-CoV-2 genome sequences from domestic cases were reported nationwide. Of these, 76 Omicron

lineages were identified with the predominant lineages being BA.5.2.48 (53.0%), BF.7.14 (24.1%) and BA.5.2.49 (14.8%). Twenty lineages had a proportion of 0.1% to 2.5%, including BA.5.2, etc. The other 53 lineages were minority with the proportion below 0.1%, accounting for 0.7% (Figure 4-1).

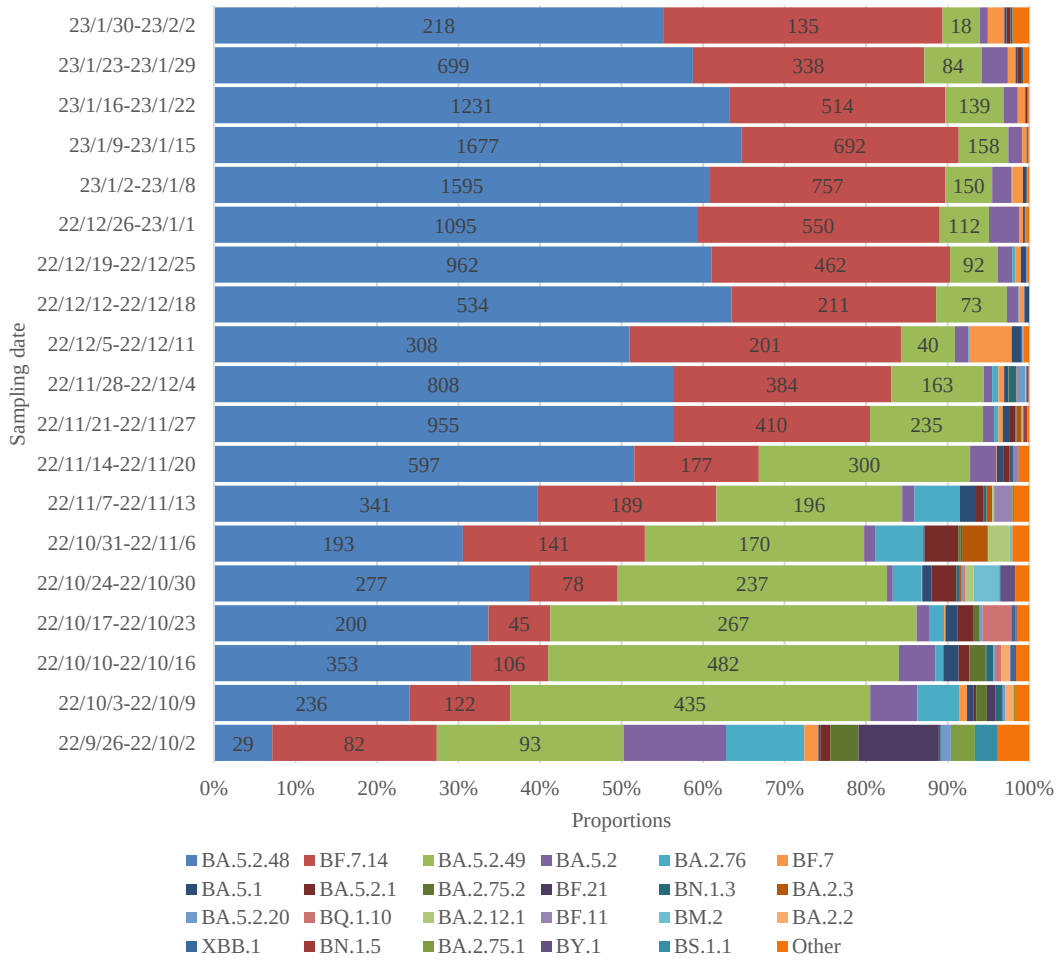

Figure 4-1 Dynamic trend of SARS-CoV-2 lineages from domestic cases in Chinese mainland by week.

Note: 1. Sampling date interval: September 26, 2022 to February 2, 2023; 2. The numbers marked in the figure were the number of valid genome sequences of BA.5.2.48, BF.7.14 and BA.5.2.49 lineages respectively; 3. “Other” referred to the lineages with the proportions of Omicron variants less than 0.1% nationwide.

4.2. Genomic Surveillance of SARS-CoV-2 Variants among Domestic Cases

From December 1, 2022 to February 6, 2023, 14,515 valid SARS-CoV-2 genome sequences from domestic cases were reported nationwide, all of which were Omicron variants with a total of 31 lineages. The predominant lineages are BA.5.2.48 (60.9%) and BF.7.14 (28.3%) (Table 4-1). A total of 13 cases of variants of concern were found, including 1 case of XBB.1, 5 cases of BQ. 1.1, 1 case of BQ.1.1.17, 4 cases of BQ.1.2, and 2 cases of BQ.1.8.

Table 4-1 National proportions of SARS-CoV-2 variants.

(December 1, 2022 to February 6, 2023)

Omicron Lineages	Proportions (%)
BA.5.2.48	60.9
BF.7.14	28.3
BA.5.2.49	6.6
BA.5.2	2.1
BF.7	1.0
BA.5.1	0.3
BA.2.76	0.2
BA.5.2.20	0.1
BA.5.2.1	0.1
BN.1.3	0.1
Other	0.3
Total	100.0

4.3. Genomic Surveillance of SARS-CoV-2 Variants among Domestic Cases in Each PLAD

Overall, BF.7 and its descendant lineages were predominant in Beijing, Tianjin, and Inner Mongolia. The proportions of BF.7 and its descendant lineages and BA.5.2 and its descendant lineages were approximately equal in Jiangsu. BA.5.2 and its descendant lineages were predominant in other PLADs.

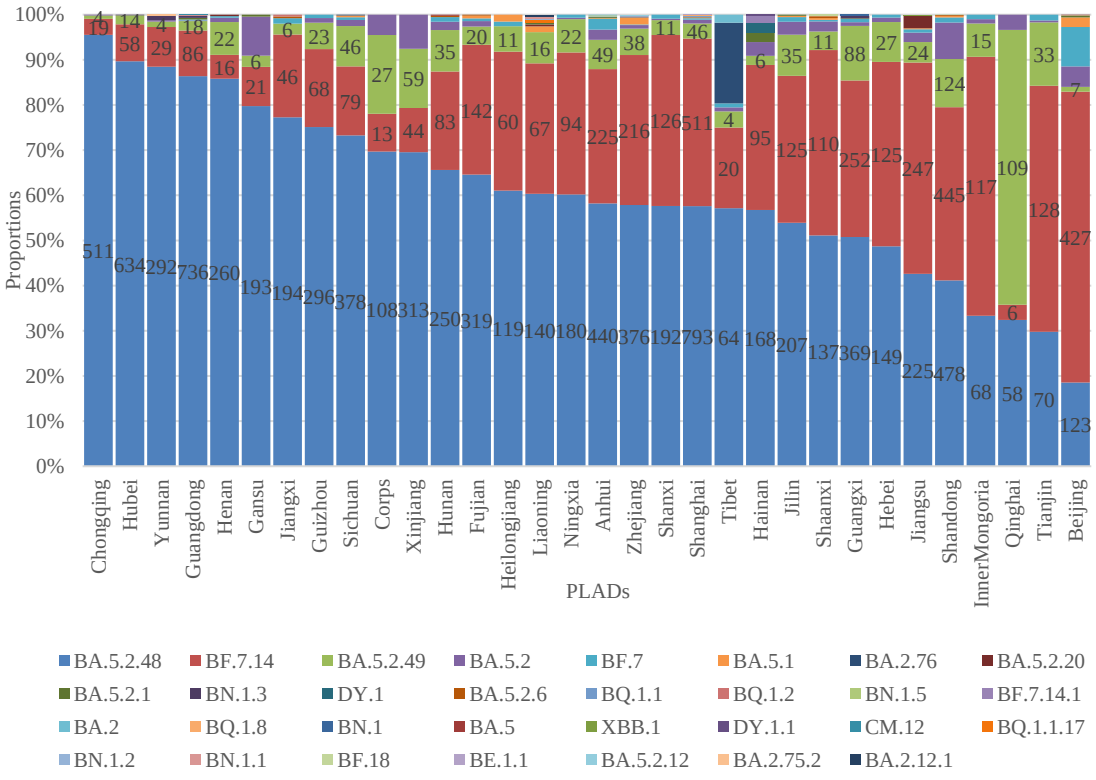

Figure 4-2 SARS-CoV-2 variants surveillance by PLADs.

Notes: 1. Sampling date interval: December 1, 2022 to February 2, 2023; 2. The numbers marked in the figure represented the number of valid genome sequences of BA.5.2.48, BF.7.14 and BA.5.2.49 lineages respectively.

5. COVID-19 Vaccination Progress

On December 15, 2020, the nationwide COVID-19 vaccination campaign was launched and accelerated at the start of 2021. At its peak, 100 million doses were administered in a five-day period, with a single-day record of 24.74 million doses. As of February 6, 2023, China has administered 3.49 billion doses of COVID-19 vaccine (Figure 5-1). According to the seventh census of mainland China, 92.9% of the entire population has initiated vaccination and 90.6% have completed their primary series (Figure 5-2).

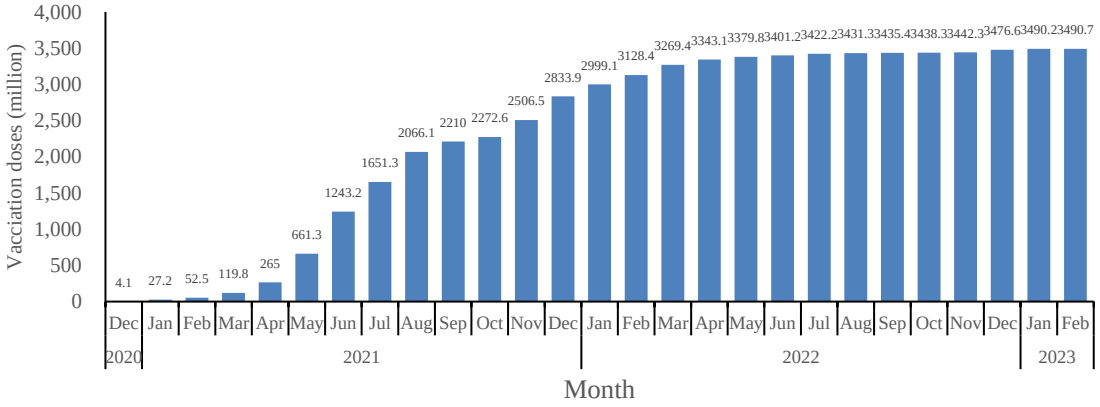

Figure 5-1 Cumulative COVID-19 vaccine doses administered in China by month.
(All data were reported by PLADs in Chinese mainland)

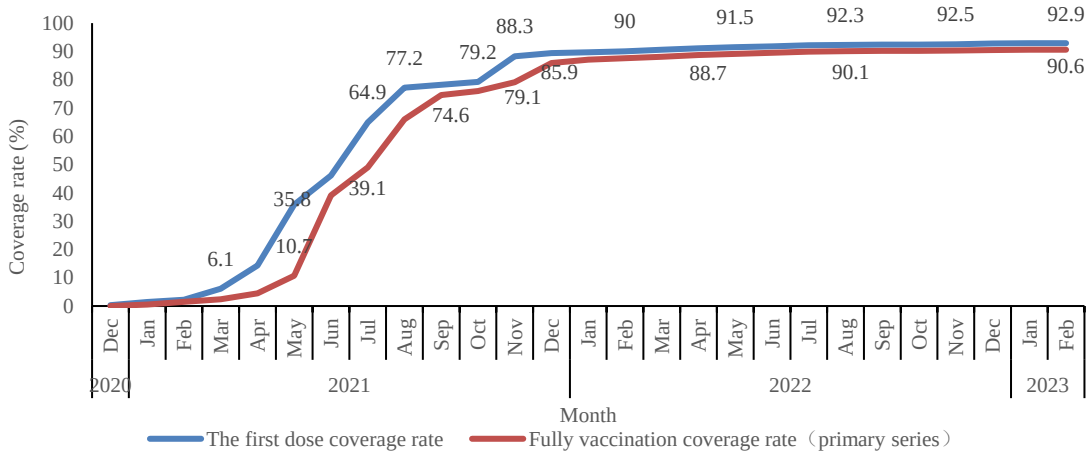

Figure 5-2. First-dose and primary series COVID-19 vaccine coverage of the entire population of Chinese mainland, by Month.
(All data were reported by PLADs in Chinese mainland)

An investigation conducted in early December 2022 revealed that the vaccination rate among individuals aged 60 and over was 96.1%. Of these elderly populations, 96.6% had completed their full primary series, and 92.2% of those eligible for a minimum-interval booster dose had received it (Figure 5-3).

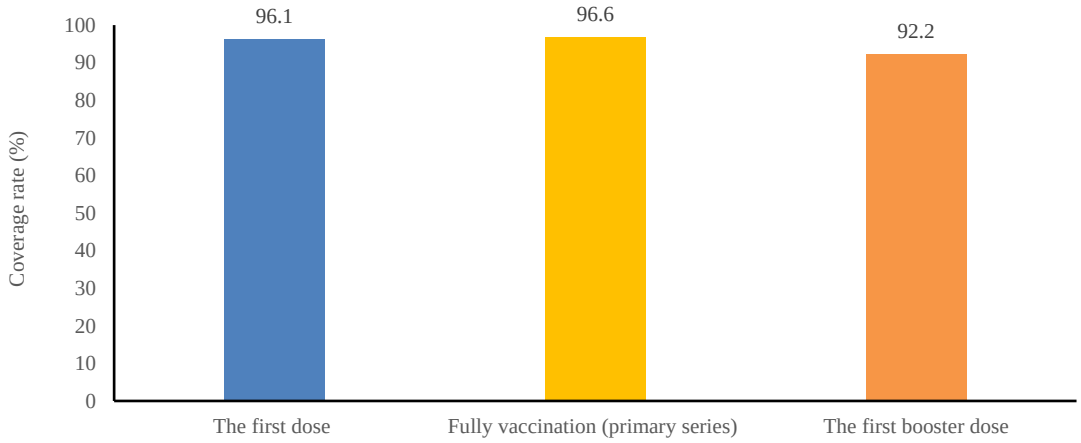

Figure 5-3 COVID-19 vaccine coverage among individuals 60 years and older: first-dose coverage, primary series coverage among interval-eligible individuals, and booster dose coverage among booster-dose-eligible individuals.
(All data were reported by PLADs in Chinese mainland)

Notes: For calculating first dose coverage, the numerator was the number of people who had received at least one dose of a COVID-19 vaccine approved at the time, and the denominator was the size of the registered population of elderly people (aged 60 or older) in a recent investigation targeting the elderly population.
For calculating full, primary series coverage, the numerator was the number of elderly people who received two doses of inactivated vaccine, one dose of adenovirus vectored vaccine, or three doses of recombinant protein vaccine. The denominator was the number of people who had received one dose of inactivated vaccine, one dose of adenovirus vectored vaccine, or two doses of recombinant protein vaccine with the recommended interval of 28 days (4 weeks).
For calculating first booster dose coverage, the numerator was the number of elderly people who received their first booster dose, and the denominator was the number of people who received full primary series with either two doses of inactivated vaccine or one dose of adenovirus vectored vaccine, with a three-month interval between primary series completion and booster dose administration. Individuals who received three doses of recombinant protein vaccine were not included in the denominator due to the short time between approval of that vaccine and the booster vaccination effort.

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