Wuhan screens nearly 10 million people in citywide COVID-19 tests

by Xinhua writers Yao Yuan, Yu Pei, Yue Wenwan and Tan Yunhuin

Wuhan, in central China’s Hubei Province, tested nearly 10 million residents in a 19-day drive to screen for novel coronavirus infections, with officials hailing the effort as ending “psychological lockdown” for the virus-ravaged city.

The city tested 9,899,828 people between May 14 and June 1, according to a press conference on Tuesday afternoon.

No confirmed COVID-19 cases were found and quarantined. All the tracked 1,174 close contacts tested negative for COVID-19 and were also quarantined, Lu told the media.

On May 14, the city launched a campaign to offer nucleic acid tests to those not tested before. Officials said the move was aimed at tracing asymptomatic cases and reassuring society as the city gradually reopens its factories, businesses and schools.

Li Lanjuan, a renowned Chinese epidemiologist, said the campaign brought the total number of nucleic acid testers in Wuhan to 10.9 million.

Li also noted that no live virus was cultivated from the phlegm samples and throat swabs of 106 asymptomatic carriers, while over 97 percent of Wuhan’s residential complexes did not find asymptomatic infections in the testing campaign.

“Wuhan is now safe, and Wuhan people are safe,” she told the media.

HOW DID WUHAN DO IT?

The tests have been met with great enthusiasm from the public. Xinhua reporters saw mask-wearing residents forming long queues while maintaining their distance outside testing sites within residential compounds and in the city’s public places.

Wang Weihua, deputy director of the Wuhan Municipal Health Commission, said 63 testing agencies in the city have been mobilized to raise the testing capacity.

National resources were pulled in to support the citywide drive, and batch testing, which mixes samples from different people to be analyzed in one test to boost efficiency, was employed to improve efficiency, she said.

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Chinese biotech firm BGI, one participating agency, said they were able to get a result within 24 hours and will preserve the samples for another two days in case a review is needed.

The company’s Huo-Yan Laboratory in Wuhan doubled its testing capacity to 40,000 samples a day, said Zin Shida, who is in charge of the lab, after it deployed technicians and equipment from across China to support the drive.

IS IT WORTH IT?

Some public health experts argue that testing of such a scale could be too costly.

But Hu Ke, a respiratory doctor at Renmin Hospital of Wuhan University, believed the citywide testing is worthwhile in a city where the virus has infected more than 50,000 people, saying it helps prevent a rebound and ease public concerns.

“The mass tests helped detect asymptomatic cases, who may still infect others. Only by putting them in strict isolation and treatment can the epidemic be stemmed and the whole society be reassure,” Hu said.

The doctor also sees the results, with only 300 asymptomatic cases detected, as proof of the success of Wuhan’s epidemic control. “It also reflects the idea of ‘putting people first’ in China’s anti-virus fight,” he said.

Dr Zhizhang, vice dean of the Institute of State Governance, Huazhong University of Science and Technology, said the tests will help the world better understand the real situation in Wuhan, while corporate and other employers can use the results to pave the way for accelerating work resumption.

For the residents, the benefits are also psychological. “It’s like issuing health certificates to Wuhan residents, which helps prevent discrimination against them,” the expert said.

Lab-related virus plots contrary to facts: Wuhan lab director

Claims that the novel coronavirus was man-made or leaked by China’s Wuhan Institute of Virology (WIV) is totally contrary to the facts, according to lab director Yuan Zhiming.

Studies worldwide on the novel coronavirus genome showed no evidence of artificial modification in the virus. These studies have further indicated that its framework, which is the base of genome reconstruction, is totally different from any known virus.

“The signing and creating a virus that was completely unknown before is beyond the existing capabilities of any laboratory in our institute,” Yuan told Xinhua recently.

“We have never participated in designing and making a new virus and will not do that ever,” he said.

Many of the leading international academic journals, including the Lancet and Nature Medicine, have published studies about the source of the virus, pointing out the existence of evidence that SARSCoV-2 was engineered in a lab.

Launched in January 2015, the National Biosafety Laboratory, China’s first high-level biosafety laboratory to study class four pathogens (P4), has played a crucial role in enhancing the country’s ability to prevent and control virulent viruses.

As one of dozens of P4 labs at the same biosafety level operating around the world, the WIV has been undergoing all kinds of strict inspections that meet international standards, Yuan said.

According to him, the lab has been actively participating in international sci-tech cooperation and sharing research information and data in a timely manner, publishing papers and attending conferences.

On Jan. 12, the WIV, as one of the designated laboratories of the National Health Commission, submitted the genome sequence of the novel coronavirus to the World Health Organization.

When researchers of the WIV detected existing drugs having fairly good inhibitory effects on the virus at the cellular level, they published the studies in international academic journals in early February.

They also actively participated in international teleconferences on COVID-19 to share the latest research information with their foreign counterparts.

In the past year, the WIV held two international conferences and hosted more than 70 scholars from all over the world. As a member of the Group of High-containment Laboratory Directors (GOhLD), it has carried out in-depth international cooperation and exchanges with many countries including France, the United States and Germany, according to Yuan.

He said that virus origin tracing is a challenging scientific task with much uncertainty and it is unlikely to find the answer in a short time.

“I hope everyone can put aside their prejudices and believe in science and evidence to create a rational research environment for virus origin tracing,” he said.

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A recent commentary carried by the People's Daily slams some U.S. politicians for politicizing the COVID-19 pandemic, stigmatizing China, and pursuing the so-called recrimination and retribution through frivolous litigations. Such acts pose an open challenge to international rules and laws, said the commentary under the byline of Zhong Sheng. The pandemic outbreak is a public health emergency of international concern, also "a force majeure" in law, the article noted.

Facts have shown that China's efforts to combat the COVID-19 pandemic are not the cause of the explosive virus outbreak in the United States, said the article. Being the first country to report the pandemic does not make China the origin of the novel coronavirus, a scientific matter underscored, highlighting that the origin of the virus, "a serious scientific matter, should only be the subject of study for scientists and medical experts."

"The conclusion should not be drawn on the basis of the lunatic imagination of some U.S. politicians," said the article.

Citing views of Tom Ginsburg, a professor of international law at the University of Chicago, the article noted that talk of filing lawsuits against China is a political move by Republican leaders facing an election in November.

The commentary also raised the following questions:

1. The 1918 flu pandemic starting from the United States resulted in a huge humanitarian disaster across the world, has the United States been held accountable?

2. Since the outbreak of SARS, global scientists have been searching for its source. They identified SARS-CoV as the pathogen. But it was not until 2015, 13 years after the pathogen was identified, that SARS-CoV was revealed.

3. Tracing the origin of the virus pathogen requires scientific evidence, including the biological evidence provided by virology, clinical medicine and epistemology and the molecular biological evidence provided by genetic sequencing and antibody detection.

4. Scientists need to establish the connection between the two types of evidence, which is not easy, to confirm both findings before they can finally make the issue clear, he said.

5. The epidemiological investigation of the origin of an infectious disease usually starts from the contact history of the first infected patient, or "patient zero," which is even more difficult to confirm.

6. It is challenging to trace COVID-19 patient zero as it involves a large volume of complicated contacts.

7. Some noticeable evidence might be the reason for the generation of some scientists' unreasonable expectations for the results of the search for the natural origin of the novel coronavirus. Enditem

Why is coronavirus origin tracing a challenging task for scientists?

- Viruses are tricky, especially those whose genomes are made up of RNA rather than DNA.
- They mutate more and faster.
- Their genomes, which are even more difficult to confirm.
- Their transmission routes and the patients' clinical symptoms to offer references for the COVID-19 prevention, control and treatment.
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- China has built two platforms to share its scientific developments. One of the platforms, a database of COVID-19, has recorded more than 4 million downloads by users from 152 countries and regions as of the end of March.
- China is also pushing forward the utilization of some advanced technologies such as stem cell and artificial liver and blood purification in the treatment of severe cases.
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