Large Quantity of Novel Coronaviruses Detected by China CDC in Wuhan Huanan Seafood Market

2020-01-27 00 :12 :10 Source : Xinhua Net http://www.xinhuanet.com/2020-01/27/c_1125504355.htm

Xinhua News Agency, Beijing, January 26 (Reporters Wang Bingyang and Wen Jinghua) Reporters learned from the Institute of Virology of China CDC on January 26 that the Institute has made progress in the source tracing of novel coronavirus. For the first time, 33 samples were found with novel coronavirus nucleic acid out of 585 environmental samples from Wuhan Huanan Seafood Market, and the virus was successfully isolated from positive environmental samples, suggesting that the virus originated from wild animals sold in Huanan Seafood Market.

The earlier diagnosed cases of novel coronavirus epidemic in Wuhan are closely related to Wuhan Huanan Seafood Market. According to the investigation, there was illegal sale of wild animals in the seafood market. Tracing the source of the virus, controlling the source and clarifying the intermediate host of the virus are the key steps toward containing continuous transmission of the virus from animals to people.

The reporters learned that on December 31, 2019, the Institute of Viral Diseases sent an expert group to Wuhan at the request of China CDC to participate in epidemic prevention and control. In the morning of January 1, 2020, the group went to Huanan Seafood Market and collected 515 environmental samples from the case-related stores and neighborhood, which were sent to the Virus Disease Center for testing. On January 12th, experts from the Institute of Virology collected 70 specimens from wild animal stores in Huanan Seafood Market again and transferred them to the laboratory for testing.

A total of 585 samples were collected in two batches from Huanan Seafood Market, and PCR results showed that 33 samples were novel coronavirus nucleic acid positive. These positive samples were distributed in 22 stands and a garbage truck in the market, of which 93.9% (31/33) were from the west area of Huanan Seafood Market. The investigation found that unlike what its name suggests, Wuhan Huanan Seafood Market is actually a market dealing various businesses. Wild animal trade was present in the west area of Huanan Seafood Market, especially in the areas near the seventh and eighth lanes of the market's west area, where positive samples concentrated, accounting for 42.4% (14/33) of all positive samples. Based on the above, it is highly suspected that the epidemic is related to wild animal trade.

For samples with positive nucleic acid results, coronavirus sensitive cell lines were used to isolate the viruses by the Institute of Viral Diseases. The results of electron

microscopy observation, PCR and deep sequencing all indicated that a novel coronavirus was successfully isolated from the environmental samples, which further confirmed that there were a large quantity of novel coronaviruses - 2019-nCoV - in Wuhan Huanan Seafood Market.

Gallery

[Flag errors] Responsible editor: Zhao Yanxin.