FHB announces follow-up results of virus test for case number 9741

Regarding media reports about case number 9741 which was confirmed on January 20, and previously underwent COVID-19 testing and received a negative result, the Food and Health Bureau (FHB) responded on January 21, expressing concern and stated that follow up investigation on testing would be conducted. The FHB, having engaged Professor Yuen Kwok-yung, a member of the Government's Expert Advisory Panel, and his team at the University of Hong Kong to conduct a review and analysis, announced the results on January 24.

Case number 9741 consulted a private doctor on January 13. He had developed symptoms at that time but did not undergo testing. He went to the community testing centre at Henry G. Leong Yaumatei Community Centre (operated by KingMed Diagnostics (Hong Kong) Limited) on January 15 and the mobile specimen collection station on Canton Road (operated by Hong Kong Molecular Pathology Diagnostic Centre Limited) on January 18 for virus tests. Both tests returned negative results. The patient later felt unwell and was sent to the hospital on January 18. After admission, the hospital took nasopharyngeal aspirate and throat swab from him for testing and subsequently confirmed positive. The analysis found that the patient had a low viral load (Ct value of 33), and the serum antibody test was tested positive on January 20, indicating a low risk of spreading the virus. The upper respiratory tract specimens previously collected from the patient at community testing centre and mobile specimen collection station showed a viral reaction after re-examination, but the viral load was extremely low (Ct value 39), which exceeded the limit that the common nucleic acid tests can accurately and consistently detect as positive reactions.

Experts estimated that the patient only received sampling for testing many days after the onset of the disease. As a result, when tested repeatedly, there is a chance that results may not be consistently reproducible. Such occurrence is not unusual in the field of molecular biological testing and is not related to the accuracy of the testing procedures. It would be better if the patient in this case had been tested at the first medical consultation.

As for the two asymptomatic close contacts of case number 9741 (case number 9811 and 9812), both of them were tested at the mobile specimen collection station on Canton Road in the morning of January 18 and received negative results. During the quarantine period (January 19) at the quarantine centre, virus tests conducted by the Public Health Laboratory Services Branch of the Department of Health found that their specimens showed weak positive reactions (Ct values higher than 30) and they were arranged to be sent to hospital. After admission to the hospital, they were tested and confirmed, and the virus load was high (Ct values ranged from 16 to 24). Although the two close contacts were tested negative earlier, they were later discovered and diagnosed via contact tracing of case number 9741 by the Department of Health, indicating that the testees may have been in the early stages of the

incubation period. As such, relying on a single negative test result cannot completely rule out the possibility of infection. Relevant research also pointed out that virus testing may not be able to detect infected close contacts if they were in the early incubation period. These cases show that the Department of Health's epidemiological investigations and contact tracing work on all confirmed cases, requiring the relevant persons to undergo 14-day quarantine surveillance as well as undergo testing as necessary, have been effective in identifying the confirmed cases.

The same group of cases also includes two relatives of case number 9741 (case number 9625 and 9642). They were all discovered when they were sampled at a mobile specimen collection station for testing. It is thus a proof that relevant testing arrangements can effectively identify infected people, including asymptomatic patients, and stop the spread of the virus in the community. Case number 9642 tested positive for antibodies and has met the discharge criteria, and was discharged on January 21. Upon further investigation, case number 9637 mentioned earlier was unrelated to case number 9741.

The Government spokesman once again urged that as there are still many silent transmission chains in Yau Ma Tei and Jordan, with asymptomatic diagnosed as confirmed cases, the risk of infection in the community remains high. Local residents are encouraged to undergo testing as soon as possible even if they are not the subject of compulsory testing notices. The mobile specimen collection stations in the district will continue to provide free testing services for all residents in the area (including persons subject to and not subject to compulsory testing). At the same time, if a person subject to compulsory testing has shown symptoms, he/she should seek medical advice immediately and be tested in accordance with the instructions of medical staff. They should not go to mobile specimen collection stations or community testing centres. The Government also urges the public to remain vigilant and pay attention to personal hygiene after receiving a single negative test result. If they feel unwell, they should seek medical attention as soon as possible.