LCQ3: Coping with the Coronavirus Disease 2019

Following is a question by Ir Dr the Hon Lo Wai-kwok and a reply by the Secretary for Food and Health, Professor Sophia Chan, in the Legislative Council today (November 11):

Question:

Last month, the Secretary for Commerce and Economic Development indicated that, in order to facilitate the movement of people between Hong Kong and other parts of the world, the Government was studying the introduction of a rapid nucleic acid test for Coronavirus Disease 2019 (COVID-19) at the airport. In this connection, will the Government inform this Council:

(1) of the details of the relevant study, including the progress made so far and the implementation timetable; whether it will study the provision of rapid test services at all boundary control points; if so, of the details; if not, the reasons for that;

(2) as the World Health Organization (WHO) announced in September this year that affordable antigen rapid test kits, which were to be priced at a maximum of about HK$40 per unit and could provide results in 15 to 30 minutes, would be made available for low and middle-income countries, whether the Government has gained an understanding from WHO of the suitability of using such test kits in Hong Kong and discussed with it the procurement arrangements; if so, of the details; if not, the reasons for that; and

(3) whether it will allocate additional resources to promote the collaboration between local universities and research institutions in the research and development of rapid test kits, vaccines and drugs for COVID-19; if so, of the details; if not, the reasons for that?

Reply:

President,

The Government's priority at the moment is to incorporate disease prevention and control and infection management into the new normal of the day-to-day operation of society with an aim to minimising new cases as far as possible. Adhering to the principle of "preventing the importation of cases and the spreading of the virus in the community", on one hand, we have strictly implemented epidemic control measures at various boundary control points, including testing and quarantine for inbound travelers to suppress any chance that the virus might enter the community. On the other hand, we have continued to implement various prevention and control measures, including monitoring and surveillance, targeted group testing, social

distancing measures, etc., in accordance with the principle of "early identification, early isolation and early treatment of the infected" to prevent the spread of the virus in the community.

The Government has been implementing suitable cross-boundary control measures having regard to the epidemic situation to prevent importation of COVID-19 cases. Although we have now restricted the entry of foreigners who are non-Hong Kong residents, there are still local residents who continue to return to Hong Kong from abroad, and quite a number of them are returning from places with severe epidemic situations. The continued risk of importation of the virus and infected patients has created considerable strain on disease prevention and control in Hong Kong. As the epidemic is still rampant across the globe, Hong Kong will need to continue to strictly implement entry testing and quarantine arrangements for some time. At the same time, we must allow limited cross-boundary people flow having regard to actual needs with the implementation of risk control measures.

In consultation with the Innovation and Technology Bureau, our reply to the various parts of the question raised by Ir Dr the Hon Lo Wai-kwok is as follows:

(1) At present, all persons arriving at the Hong Kong International Airport (HKIA) are required to undertake testing for COVID-19. Currently, the arrival testing is based on a nucleic acid test using the reverse transcription polymerase chain reaction (RT-PCR) technique, which normally takes a few hours. With the exception of a few exempted persons (e.g. Government officials and consular corps), the majority of persons entering Hong Kong must wait for the test results before leaving the airport (i.e. the "test-and-hold" arrangement).

As it is necessary to continue the arrival testing arrangement to prevent the importation of virus, and with an increase in the number of travellers who need to undertake testing under various entry facilitating measures such as "travel bubbles", the Government has been closely monitoring the development of various COVID-19 testing technologies. The goal is to adopt faster and reliable testing technologies where appropriate, in order to ensure prevention of importation of cases with controllable risks while facilitating travellers as far as practicable.

After a preliminary assessment conducted by the Department of Health (DH), a trial run of a nucleic acid test using reverse transcription loop-mediated isothermal amplification (RT-LAMP) technique began at HKIA on October 28. The trial run was conducted in parallel with the RT-PCR nucleic acid test, which is the highest standard currently used by the DH to examine the sensitivity and reliability of the RT-LAMP technique. During the trial, passengers were still required to wait for a negative RT-PCR test result before proceeding to compulsory quarantine. The trial run was expected to last for two weeks, and may be extended subject to the amount of data gathered during the trial period. We will study the data collected from the trial, and assess the efficacy of the testing technique and the feasibility for applying it to different uses, including testing for arriving passengers.

As regards the identification of rapid test technologies, the Government and the Airport Authority Hong Kong are open to any testing technologies that have the potential in achieving a level of sensitivity and specificity suitable for boundary screening purposes.

(2) On nucleic acid tests, laboratories in Hong Kong are using the nucleic acid test which is adopted as the reference method. Although the World Health Organization (WHO) considered that antigen tests could expand the scope of testing, particularly in countries that do not have extensive laboratory facilities or trained health workers to implement molecular (polymerase-chain reaction) tests, the WHO guidance published on September 11 reiterated that antigen tests are only valuable in areas where community transmission is widespread and where nucleic acid testing is either unavailable or where test results are significantly delayed. The Government will closely monitor the latest development of the technology concerned.

(3) In order to combat the epidemic, since April 2020, the Health and Medical Research Fund (HMRF) administered by the Food and Health Bureau has approved a total funding of $47 million to support four local universities to conduct 11 studies relating to the testing methods, vaccines and antivirals of COVID-19. The HMRF will suitably allocate additional resources to support research in these areas in order to complement the Government's work in combating the epidemic.

On the other hand, through the Innovation and Technology Fund (ITF), the Innovation and Technology Commission (ITC) has provided funding support for local Research and Development (R&D) centres, universities, other designated local public research institutes and private companies to conduct R&D projects. From 2017-18 to 2019-20, the ITF has funded 35 public health-related R&D projects, involving funding of about $75.4 million.

Besides, the ITC launched a special call for projects under the Public Sector Trial Scheme in March this year to support product development and application of technologies for the prevention and control of the epidemic. In August this year, the ITF also supported in-principle a COVID-19 related project on the development of technology for vaccine production.

Thank you, President.