FHB responds to media enquiries on specimen collection for COVID-19 test

In response to media enquiries regarding deep-throat saliva (DTS) specimens found not suitable for testing, the Food and Health Bureau (FHB) responded on December 28 as follows:

The Government has been monitoring the latest developments of COVID-19 testing and making reference to scientific research, practical experience and expert opinions from various places and Hong Kong in selecting the appropriate specimen collection method for different testing schemes.

Currently, specimen collection for the purpose of compulsory testing has mostly adopted professional swab sampling of combined nasal and throat swab (CNTS) to ensure specimen quality. For instance, the Government sets up mobile specimen collection stations with professional swabbing service for virus testing near residential buildings of persons subject to compulsory testing specified under the Prevention and Control of Disease (Compulsory Testing for Certain Persons) Regulation (Cap. 599J). For the free testing arranged by the Government for groups subject to compulsory testing such as staff of residential care homes for the elderly and persons with disabilities, as well as taxi drivers, professional swab sampling (CNTS) is also adopted.

The 19 community testing centres which provide services to over 20 000 citizens per day and may issue testing certificates to citizens for travel purposes also adopt professional swab sampling as the specimen collection method. The Hospital Authority (HA) also uses professional swab sampling (throat swab or nasopharyngeal aspirate) or collection of DTS under medical professionals' supervision for testing as a criterion in discharging from isolation condition.

To further prevent importation of cases, the temporary specimen collection centre set up at the Hong Kong International Airport has already adopted the specimen collection method of professional swab sampling (CNTS) for people arriving Hong Kong. As for people arriving Hong Kong from places outside China who are subject to compulsory quarantine, the sampling and testing required at designated quarantine hotels (including two tests on the 12th and 19th or 20th day of arrival in Hong Kong) will also adopt professional swab sampling.

From November 15 to December 22, a total of more than 450 000 tests have been carried out through the above-mentioned "compulsory testing", with professional swab sampling accounting for close to 60 per cent of the specimens tested. During the same period, the community testing centres' feepaying testing service had provided professional swabbing service to over 220 000 persons, accounting for close to 50 per cent of the 1.36 million tests conducted in Hong Kong during that period.

Other community testing arrangement for surveillance purpose under "targeted testing" and "voluntary testing" for general public and targeted groups are conducted on voluntary basis. The Government would adopt different sampling methods, including distribution of DTS specimen bottles, having regard to the venue and other factors. In fact, through the 188 distribution points (including 47 designated general outpatient clinics under HA, 121 post offices or vending machines set up at 20 MTR stations) and 83 collection points for citizens to obtain free testing, it is indeed more convenient for citizens who feel that they are at a higher risk of infection or are mildly unwell to submit DTS samples. It would facilitate voluntary testing as well as "early identification, early isolation, early treatment" as recommended by overseas and local experts. From November 15 to December 22, we have distributed close to 540 000 specimen bottles through these distribution points and collected about 240 000 samples for testing. Among them, 238 positive cases were detected (0.10%).

DTS, nasopharyngeal swab (NPS) and combined nasal and throat swab (CNTS) are the most common specimen types used in Hong Kong for specimen collection. The three methods are generally on par in terms of accuracy and sensitivity, and have so far been effective in identifying COVID-19 cases. At present, the Government would select different specimen collection methods having regard to the actual situation, including factors such as testing purpose, site environment and convenience to the public, etc.