Question on preventive measures against Middle East Respiratory Syndrome
(Paper IDC 62/2015)

Matters Related to Islands District Council's Concern on Middle East Respiratory Syndrome

Measures for the Prevention and Control of Middle East Respiratory Syndrome

The Government has been highly concerned about the prevention and control of Middle East Respiratory Syndrome ("MERS"). MERS is a viral infection caused by a novel coronavirus (i.e. Middle East Respiratory Syndrome Coronavirus ("MERS-CoV")) which has not been identified in humans before. The virus is different from any coronaviruses (including SARS-coronavirus) found in humans or animals. Infected persons may present with acute serious respiratory illness and symptoms including fever, cough, shortness of breath and breathing difficulties. Most patients also develop pneumonia. It is still uncertain how MERS is transmitted. Based on the available information, people may be infected with MERS-CoV upon exposure to animals (such as camels), environment or other confirmed patients (such as in a hospital setting).

Disease Prevention and Response

Since September 2012, MERS has been made a statutorily notifiable disease under the Prevention and Control of Disease Ordinance (Cap. 599). In this connection, the Centre for Health Prevention ("CHP") of the Department of Health ("DH") must be notified of any suspected or confirmed cases for investigation and follow-up action. To enhance the effectiveness of response to possible risks of MERS, the Government announced the Preparedness Plan for MERS ("MERS Plan") on 12 June 2014, which sets out in detail the Government's preparedness and response measures for the disease. The "Alert" response level under the MERS Plan was activated on the same day, having regard to the information released by the World Health Organization and various factors.

The risk of community outbreak of MERS in Korea has significantly increased. Besides, Hong Kong has very close contacts with Korea in all aspects. Air traffic between the two places is busy, with quite a number of flights from Korea arriving at Hong Kong and many Hong Kong people visiting Korea every day. With a view to protecting the Hong Kong people, and taking into account the dense population of Hong Kong and the capacity of our healthcare system, the Government convened an interdepartmental steering committee meeting under the MERS Plan on 8 June 2015 and decided to adopt more prudent measures. The response level for MERS was raised from "Alert" to "Serious" with effect from that day.

Hong Kong has an effective and comprehensive surveillance system in place to identify cases of MERS. The Government has also implemented a series of prevention measures in surveillance, risk communication, publicity and public education, port health measures and liaison with other health authorities to enhance preparedness and the prevention and control capability. In view of the latest situation of MERS outbreak in Korea, the Administration has further strengthened the prevention and control measures. DH has enhanced surveillance with public and private hospitals, practising doctors and at boundary control points.

DH has been implementing a series of port health measures. It continues to carry out temperature screening of all inbound travellers, and all visitors with fever will be referred to the port health officers for diagnosis. From 5 June 2015 onwards, all incoming flights from Korea are directed as far as possible to designated areas with a view to facilitating health assessment of inbound travellers by port health officers. Thermal imaging systems are in place for taking body temperature checks for them when they enter the terminal. Port health officers will further assess the medical, travel and contact history of travellers with fever or reporting sick. Patients of suspected cases will be taken to public hospitals for isolation and management until their specimens test negative for MERS. Port health officers will also request sick travellers to sign the health assessment form and remind them of the legal liability for providing false information. Inbound travellers who have visited Korea and relevant Middle East region recently and have fever or unexplained clinical feature(s) of lower respiratory tract infection will be classified as suspected MERS cases.

DH advises the public, in particular those with chronic illnesses, to avoid unnecessary travel to Korea. Travellers to Korea and the Middle East should avoid unnecessary visit to healthcare facilities. Travellers to the Middle East should also avoid contact with sick persons and animals, especially camels, birds or poultry. People who develop a fever or respiratory symptoms after returning to Hong Kong should report truthfully to the medical staff at the boundary control points or family doctors. Local medical institutions and personnel are advised to suspend all exchange or visit activities with healthcare facilities and personnel in Korea.

The Administration will report to the Legislative Council Panel on Health Services on the relevant prevention and control measures on 15 June 2015, the details of which are attached in **Annex** for reference.

Food and Health Bureau
Department of Health
June 2015

For information
on 15 June 2015

Legislative Council Panel on Health Services

Measures for the Prevention and Control of Middle East Respiratory Syndrome

PURPOSE

This paper sets out the latest measures of the Administration for the prevention and control of Middle East Respiratory Syndrome ("MERS").

BACKGROUND

2. MERS is a viral infection caused by a novel coronavirus (i.e. Middle East Respiratory Syndrome Coronavirus ("MERS-CoV")) which has not been identified in humans before. The virus is different from any coronaviruses (including SARS-coronavirus) found in humans or animals. Infected persons may present with acute serious respiratory illness and symptoms including fever, cough, shortness of breath and breathing difficulties. Most patients also develop pneumonia.

3. It is still uncertain how MERS is transmitted. Based on the available information, people may be infected with MERS-CoV upon exposure to animals (such as camels), environment or other confirmed patients (such as in a hospital setting).

4. We have been closely monitoring the outbreak of MERS in the Middle East region and Korea. Since the Department of Health ("DH") learnt of the first two MERS cases identified in Korea on 21 May 2015, there were 122 confirmed MERS cases (including nine deaths) in Korea as at 11 June 2015. Confirmed MERS cases have been continuously found in Korea. The total number of cases has kept increasing in the past two weeks and the number of third tier transmission cases has exceeded that of second tier transmission cases. On the other hand, another 1 155 MERS cases have been reported to the World Health Organization ("WHO"), including at least 444 deaths. Of these cases reported to WHO, 1 130 (98%) were confirmed in nine Middle East countries, including 1 015 in Saudi Arabia, 73 in the United Arab Emirates, 13 in Jordan, 12 in Qatar, six each in Iran and Oman, three in Kuwait, and one each in Lebanon and Yemen.

5. Hong Kong has an effective and comprehensive surveillance system in place to identify cases of MERS. To enhance the effectiveness of response to possible risks of MERS and to strengthen the handling capacity when a confirmed case of MERS is found in Hong Kong, the Government announced the Preparedness Plan for MERS ("MERS Plan") on 12 June 2014, which sets out in detail the Government's preparedness and response measures for the disease. The "Alert" response level under the MERS Plan was activated on the same day, having regard to the information released by the WHO and various factors.

6. The risk of community outbreak of MERS in Korea has significantly increased. Besides, Hong Kong has very close contacts with Korea in all aspects. Air traffic between the two places is busy. Quite a number of flights from Korea arrive at Hong Kong every day and many Hong Kong people visit Korea. In view of the above, and taking into account the dense population of Hong Kong and the capacity of our healthcare system, the Government convened an interdepartmental steering committee meeting under the MERS Plan on 8 June 2015 and decided to adopt more prudent measures. The response level for MERS was raised from "Alert" to "Serious" with effect from that day, and the public was advised to avoid unnecessary travel to Korea. Travellers in Korea should adopt appropriate prevention measures such as wearing a mask in healthcare facilities or crowded places.

7. The Food and Health Bureau ("FHB") has been maintaining a close dialogue with the Security Bureau ("SB") over the disease outbreak in Korea. If there are public health grounds, SB may, on FHB's recommendation, disseminate information under the "Outbound Travel Alert System" to assist citizens and the travel industry in getting a clearer grasp of the possible health risks involved so as to make corresponding arrangements. Having regard to the health risk associated with MERS outbreak in Korea, SB issued a red Outbound Travel Alert on Korea on 9 June 2015.

The case imported to the Mainland from Korea

8. It came to the notice of the Centre for Health Protection ("CHP") of the DH that a 44-year-old man ("the target patient"), who was a close contact of the third MERS case in Korea (a 76-year-old man), arrived in Hong Kong from Korea and transited to the Mainland on 26 May 2015. The CHP immediately liaised with WHO and the health authorities of the Mainland and Korea to obtain the latest updates.

9. Epidemiological investigations revealed that the target patient was a passenger of OZ723 of Asiana Airlines and arrived at the Hong Kong International Airport at around 1 pm on 26 May 2015. He then set off for Huizhou via Sha Tau Kok by taking two buses operated by Eternal East Cross-Border Coach Mgt. Ltd. in the afternoon of the same day.

10. Even before the target patient was confirmed by the Mainland authorities as infected with MERS, the CHP had already taken precaution measures. Together with other parties (including the Immigration Department, the airline company and Eternal East Cross-Border Coach Mgt. Ltd.), the CHP traced the contacts of the target patient, including those on the same flight and bus. The results show that among the 158 passengers on board OZ723 of Asiana Airlines on 26 May 2015, 81 were in the same cabin with the target patient, and 29 of them were within two rows of him and are thus classified as close contacts. As for the buses, the CHP immediately contacted Eternal East Cross-Border Coach Mgt. Ltd. to trace the staff members who had contacted the target patient (including the drivers who drove the above buses). As no passenger list was kept for the buses, the CHP released the bus information to the public as soon as possible and appealed repeatedly to anyone who had contact with the target patient to get in touch with the CHP for follow-up.

11. As at 11 June 2015, all the 29 close contacts on board the flight were identified. 19 of them were asymptomatic and had been sent to the Lady MacLehose Holiday Village for isolation and surveillance. They completed the 14-day quarantine period and left the holiday village on 9 June 2015. The remaining 10 close contacts were not in Hong Kong and their information had been delivered to the Immigration Department. Another 35 persons were classified as other contacts and were under medical surveillance. They also completed the first 14-day medical surveillance period.

Prevention and Control Measures

12. Due to extensive international travel, there remains a risk of importation of MERS cases into Hong Kong. Nonetheless, the Administration has implemented a series of prevention measures, and will update the risk assessment having regard to the latest situations for adjusting the measures if necessary –

Enhanced Surveillance

(a) Since September 2012, MERS has been made a statutorily notifiable disease and the virus a scheduled infectious agent under the Prevention and Control of Disease Ordinance (Cap. 599). In this connection, the CHP must be notified of any suspected or confirmed cases and leakage of the virus in a laboratory.

(b) The CHP has issued letters to doctors and private hospitals in Hong Kong, providing them with information on the latest outbreak, countries affected by MERS, reporting criteria and recommendations on infection control. They are also reminded that any suspected cases should be promptly reported to the CHP.

(c) The CHP has worked with hospitals under the Hospital Authority ("HA") and private hospitals to enhance the laboratory testing for MERS-CoV in pneumonia cases with unknown cause, pneumonia cases that require intensive care, clusters of pneumonia cases or pneumonia cases of healthcare workers, irrespective of their travel history.

(d) Taking into account the latest outbreak in Korea, the CHP revised the reporting criteria of MERS on 1 and 8 June 2015. Under the latest reporting criteria, patients who have visited Korea and relevant Middle East region recently and have fever or unexplained clinical feature(s) of lower respiratory tract infection will be classified as suspected MERS cases, and taken to public hospitals for isolation and management until their specimens test negative for MERS.

(e) The CHP will initiate epidemiological investigation and follow-up measures once notification of suspected cases is received. Patients will be transferred to hospitals nearby for isolation, diagnosis and treatment. Specimens will be collected for laboratory testing to confirm or refute the diagnosis of MERS.

Liaison with other Health Authorities

(f) The International Health Regulations (2005) is an international legal instrument binding on all WHO member states, including the People's Republic of China, and therefore extends to cover Hong Kong. The CHP has been closely monitoring the latest developments of overseas situation and communicating with WHO as well as neighbouring health authorities

(including the Mainland and Korean authorities) to exchange information on the outbreak and updated preventive and control measures.

Enhanced Port Health Measures

(g) The DH has implemented a series of port health measures. It continues to carry out temperature screening of all inbound travellers, and surveillance of sick travellers has been enhanced. All visitors with fever will be referred to the port health personnel for diagnosis. They will also be required to sign the health assessment form and reminded of the legal liability for providing false information.

(h) From 5 June 2015 onwards, all incoming flights from Korea are directed as far as possible to designated areas with a view to facilitating health assessment of inbound travellers by port health personnel. Thermal imaging systems are in place at the terminal for body temperature checks. Travellers found to have fever will be escorted to the health posts for further health assessment. For those incoming flights from Korea which cannot be directed to designated areas due to busy traffic, the travelers concerned will still be subject to temperature screening by port health personnel.

(i) To enhance dissemination of MERS-related health promotion messages to travellers, the DH has been delivering relevant information to travellers through health leaflets and broadcasting at the airport and other boundary control points ("BCPs"), and the travel health website. In view of the outbreak in Korea, the DH has since 2 June 2015 been distributing Korean version of leaflets with MERS-related information to the relevant travellers. It has also requested airlines to make in-flight broadcast of health messages at relevant incoming passenger flights to alert travellers to the disease. In addition, regular updates are provided for airlines, the tourism industry and relevant stakeholders at BCPs through meetings, briefings and correspondence.

Prompt Control and Dissemination of Results

(j) In any suspected case which fulfils the reporting criteria and has been reported to the DH, the subject person will be immediately isolated in a hospital setting. Specimens from the patient will be sent to the Public Health Laboratory Services Branch ("PHLSB") of the CHP for testing. The PHLSB has established sensitive laboratory tests with confirmatory capacity, and is capable of providing preliminary test results within hours

and confirmatory results after one day. The dissemination of information on MERS by the DH is prompt and transparent.

(k) As the conditions of a suspected MERS patient may deteriorate quickly, in order to achieve secure containment of the disease, the HA decided to adopt the principle of "early notification, early isolation and early testing". All suspected MERS cases will be transferred to hospitals nearby for isolation, responsive risk communication will be maintained and specimens will be sent to the PHLSB for testing. Test results will usually be available within 24 hours.

(l) The HA has worked out with the Fire Services Department the transfer arrangements of confirmed MERS cases from the A&E Departments to the HA Infectious Disease Centre ("HAIDC"), and informed hospitals all points to be noted.

Infection Control in Healthcare Settings and Community

(m) The DH has provided guidelines on infection control for healthcare professionals and various government departments, and organised training to give them updated information.

(n) To complement the raise of the response level for MERS from "Alert" to "Serious", the HA has stepped up the infection control measures in public hospitals and clinics. These measures include requiring visitors to clinical areas of public hospitals to put on surgical masks; and requiring patients who have fever and influenza symptoms but without travel history to stay in the Influenza-like Illness Segregation Area in the A&E Departments while waiting for consultation. Virus testing and isolation arrangements have also been stepped up. Patients who have fever or respiratory illness, and with history of travel to affected areas (including Korea) in the past two to 14 days will be arranged for viral test and immediate isolation. Furthermore, there will be no visiting at isolation wards of public hospitals unless on compassionate ground. For general acute wards, visiting hours would be not more than two hours per day and not more than two visitors per visit. For convalescent and infirmary wards, visiting hours would be not more than four hours per day and not more than two visitors per visit. Visitors are also required to put on surgical masks and perform hand hygiene before and after visiting patient areas.

(o) In respect of protective equipment, the HA has kept over 1.4 million N95 masks and 38 million surgical masks, maintaining a contingency stockpile level sufficient for 90-day use. Besides, the HA monitors the utilisation of isolation wards regularly. As at 7 June 2015, the HA provided about 1 300 isolation beds in 630 isolation wards.

Enhanced Risk Communication

(p) The HA has been monitoring the overall corporate preparedness. All reports of suspected and confirmed MERS cases from frontline medical staff will be submitted to the senior management of the HA, the CHP and the FHB through the Rapid Communication System. The Central Committee on Infectious Disease and Emergency Response of the HA has also convened meetings in conjunction with the CHP to coordinate all actions.

(q) The HA has set up a dedicated intranet webpage on MERS in March 2012 to disseminate all relevant information on the disease, including infection control measures to be adopted by various clinical departments. Such information will be updated as necessary. The HA has organised various staff fora at hospital and corporate level to share information on MERS. Communication kit on infection control is regularly updated and is available at the MERS webpage. Moreover, the Corporate Clinical Psychology Service of the HA is ready to provide psychological support to the staff if needed.

Publicity and Public Education

(r) The DH has been working closely with its partners, such as government bureaux/departments (including the Home Affairs Department, the Transport Department and the Housing Department), District Councils, Healthy Cities projects at the district level and non-governmental organisations, to provide them with regular updates on the latest disease situation and solicit their collaboration in disseminating relevant health information.

(s) Health educational materials, including leaflets, pamphlets and posters, have been produced and widely distributed in the community. A dedicated webpage on MERS has been produced under the CHP website with information including disease updates, travel advice, frequently asked questions and guidelines for various sectors. Information on preventive measures has also been disseminated via Announcements in the Public

Interest on television and radio and the 24-hour health education hotline (2833 0111).

(t) The CHP has urged the public to pay special attention to safety during travel and take due consideration of the health risks of the places of visit. Apart from avoiding unnecessary visit to Korea, travellers to the Middle East should avoid going to farms, barns or markets with camels, and refrain from contact with sick persons and animals, especially camels, birds or poultry. In addition, travellers should avoid unnecessary visit to healthcare facilities at the places of visit. The DH has advised travellers through the issue of press releases to wear face masks, seek medical attention and report their travel history to the doctor if they develop relevant symptoms after returning from the affected areas.

(u) The Education Bureau has sent letters to all schools in Hong Kong, reminding them to take note of the travel health advice issued by the DH. Schools are also reminded to consider the safety of students and whether the destinations and duration of the tours can meet the learning needs of students when planning for study tours.

Patient Management

(v) Once a confirmed case is identified, the subject patient will be transferred to the HAIDC in Princess Margaret Hospital for central management having regard to the circumstances. The expert group of the HA has formulated the treatment protocol, which will be updated according to circumstances.

(w) To facilitate communication with patients from different ethnic groups, the HA has made available 24-hour interpretation service covering 17 languages.

Contingency Plans and Drills for Concerted Interdepartmental Actions

(x) The DH will continue to update the contingency plans on major outbreaks of infectious diseases, including the MERS Plan. It will conduct inter-departmental drills in close collaboration with the relevant parties and stakeholders. The HA has also put in place designated contingency plans.

(y) Since its establishment in 2004, the CHP has organised 17 ground movement exercises to test the preparedness and responsiveness of relevant departments for public health actions.

WAY FORWARD

13. The Government will continue to maintain vigilance, enhance surveillance and keep itself abreast of the latest developments concerning MERS. Risk assessment will be conducted on an ongoing basis, the effectiveness of the contingency plans will be reviewed and public health measures will be reinforced as and when necessary. We will also step up publicity to inform the public of the latest disease situation, heighten their awareness and prepare them for the appropriate preventive and response measures as necessary.

ADVICE SOUGHT

14. Members are invited to note the content of this paper.

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