

**For information  
on 17 November 2014**

**Legislative Council Panel on Health Services**

**Measures for the Prevention and Control of  
Ebola Virus Disease**

**PURPOSE**

This paper sets out the Administration's latest measures for the prevention and control of Ebola virus disease ("EVD").

**BACKGROUND**

2. The EVD is caused by infection with Ebola virus. EVD is a severe acute viral illness often characterised by sudden onset of fever, intense weakness, muscle pain, headache and sore throat. This is followed by vomiting, diarrhoea, rash, impaired kidney and liver function, and in some cases, both internal and external bleeding.

3. Ebola virus is introduced into the human population through close contact with the blood, secretions, organs or other bodily fluids of infected animals. It then spreads in the community through human-to-human transmission, with infection resulting from direct contact (through broken skin or mucous membranes) with the blood, secretions, organs or other bodily fluids of infected people, and indirect contact with such fluids in contaminated environments.

4. We have been closely monitoring the current EVD outbreak in West Africa. The World Health Organization ("WHO") announced on 7 November 2014 that there have been 13 268 cases, including 4 960 deaths, in Guinea, Liberia, Sierra Leone, Nigeria, Senegal, Mali, Spain and the United States. The latest overall case fatality rate is about 37.4%. Besides, WHO also reported that there have been 66 EVD cases, including 49 deaths, in the Equateur province of the Democratic Republic of the Congo, but these cases are not connected with the EVD outbreak in West Africa. As at 10 November 2014, the EVD affected countries include Guinea, Liberia, Sierra Leone and the Equateur province of the Democratic Republic of the Congo.

5. The WHO declared on 8 August 2014 the Ebola outbreak in West Africa a Public Health Emergency of International Concern and a series of preventive and control measures are recommended for the states with Ebola transmission and other member states. Hong Kong has already adopted the preventive strategies which are in line with those recommended by the WHO. Moreover, the WHO has convened three meetings of the Emergency Committee on EVD under the International Health Regulations (2005) (“IHR(2005)”). The Committee emphasised that there should be no ban on general international travel or trade, except for the restrictions regarding the travel of EVD patients and their contacts. Additional recommendations were also made by the Committee on exit and entry screening, as well as arrangements for international events and mass gatherings.

6. Hong Kong has an effective and comprehensive surveillance system in place to identify cases of EVD. To enhance the effectiveness of response to possible risks of EVD as well as to strengthen the handling capacity when a confirmed case of EVD is found in Hong Kong, the Government announced the “Preparedness and Response Plan for Ebola Virus Disease” (“the EVD Plan”) on 20 August 2014 which sets out in detail the Government’s preparedness and response plan for the disease. The Alert Response Level under the EVD Plan was activated on the same day. No confirmed case of EVD has been identified so far in Hong Kong. As of 10 November 2014, the Centre for Health Protection (“CHP”) of the Department of Health (“DH”) has received notification of 2 suspected cases of EVD and both were tested negative subsequently.

## **PREVENTION AND CONTROL MEASURES**

7. Due to extensive international travel, the risk of importation of EVD cases into Hong Kong does exist. In this regard, the Administration has already implemented a series of measures to safeguard Hong Kong against EVD –

### ***Enhanced Surveillance***

- (a) Since July 2008, viral haemorrhagic fever, including EVD, 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 Hong Kong. In this connection, any suspected or confirmed cases as well as leakage of the virus in laboratories are required to be notified to the CHP.

- (b) The CHP has issued letters to doctors and private hospitals to provide them with information of latest outbreak development, the EVD affected countries, reporting criteria as well as recommendations on infection control and remind them to notify the CHP any suspected cases promptly.
- (c) The CHP will initiate immediate investigation and control measures once notification of suspected cases is received. Patients will be referred to the Hospital Authority (“HA”) Infectious Disease Centre (“HAIDC”) in Princess Margaret Hospital for isolation, diagnosis and treatment; and specimens will be collected for laboratory testing to confirm or refute the diagnosis of EVD.

#### ***Liaison with other Health Authorities***

- (d) The IHR (2005) is an international legal instrument binding on all WHO member states, including the People’s Republic of China, which extends to cover Hong Kong. The CHP has been closely monitoring the latest developments of overseas situation and communicating with the WHO as well as neighbouring health authorities (including the Mainland and Macao authorities) to exchange information of the outbreak and updated preventive and control measures.

#### ***Enhanced Port Health Measures***

- (e) The DH has implemented a series of port health measures. DH continues to adopt temperature screening of all inbound travellers and surveillance of sick travellers has been enhanced. In view of ongoing spread of EVD overseas, a health surveillance questionnaire was launched at the Hong Kong International Airport (“the Airport”) on 20 October 2014 to enhance health surveillance of arriving passengers from or recently travelled to the EVD affected countries. Arriving passengers at the Airport are required to complete the health surveillance questionnaire if he/she has travelled to the EVD affected countries in the past 21 days or is

holding a travel document issued by the affected countries. The content of the questionnaire includes their personal information, travel history, health status and contact history with EVD patients. As of 9 November 2014, DH has received 267 questionnaires from targeted travellers. None of them required referral to HAIDC for further management.

- (f) To enhance dissemination of EVD related health promotion messages to travellers, 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. Although there is no direct flights from the EVD affected countries to Hong Kong, the DH has also been requesting airlines through Airline Operators Committee to conduct in-flight broadcast of health message at all incoming passenger flights to alert travellers about the disease. In addition, regular updates to the airlines, the tourism industry and relevant stakeholders at BCPs are provided through meetings, briefings and correspondences.
- (g) Immigration officers at all BCPs also assist in identifying arrival passengers holding travel documents issued by the EVD affected countries and provide them with information sheets about EVD. The information sheets remind the sick travellers to approach port health personnel immediately if they are already sick upon arrival. If these travellers develop symptoms during their visit to Hong Kong, they should call 999 immediately for arrangement of consultation in Accident and Emergency (“A&E”) Department.

### ***Prompt Control and Transparency in Dissemination of Results***

- (h) Any suspected case fulfilling the reporting criteria and notified to the DH 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 positive results after one day. The dissemination of information on EVD by the DH is prompt and transparent.

- (i) As the conditions of a suspected EVD patient may deteriorate quickly, and in order to achieve secure containment of the disease, HA has adopted a centralised approach by transferring immediately all suspected EVD cases to the HAIDC, in line with the principle of “early notification, early isolation and early testing”. HAIDC has, from 3 September 2014, newly set up the reverse transcription polymerase chain reaction (“RT-PCR”) service to provide backup testing capacity and to meet the uncommon clinical situation where, say, a clinician finds RT-PCR for Ebola virus necessary as part of a basket of laboratory investigations for infectious disease of unknown origin.
- (j) The HA has worked out with the Fire Services Department (“FSD”) the transfer arrangement of suspected EVD case from HA’s A&E Department to the HAIDC and promulgated such arrangement to all hospitals on 1 August 2014. The transfer arrangement has been extended to cover suspected cases identified in HA’s clinics since 14 August 2014.

### ***Infection Control in Healthcare Settings and Community***

- (k) The DH has convened the Scientific Committee for Infection Control to review the infection control measures including the use of personal protective equipment (“PPE”), provided guidelines on infection control to healthcare professionals including Chinese medicine practitioners, and organised training for provision of updated information to the healthcare workers.
- (l) The DH has provided guidelines to various governments department on PPE for handling suspected EVD cases. Training sessions have been organised.
- (m) The DH has provided health advice to specific sectors of the community including hotel industry, public transport, property management and workplace to heighten their awareness of EVD and brief them the measures to handle a sick person suspected of EVD.
- (n) Making reference to the guidelines of the Centre for Diseases Control and Prevention (“CDC”) of the United States and that of the WHO, and considering the practical needs of the clinical setting

in Hong Kong, the HA has adopted necessary infection control measures, including those related to the use and standards of PPE, at hospitals and clinics. The recommended PPE aims at providing full coverage to staff's skin and mucosa. Such measures were duly promulgated on 30 July 2014.

- (o) HA has centrally coordinated PPE procurement to a 90-day PPE contingency stockpile for EVD. Around 20,000 pieces of each PPE item, including hood and water resistant gown, had already been delivered to hospitals in early September this year, with the remaining expected to be delivered in February 2015 (except for the second batch of hood which will be arrived in June 2015).

### ***Enhanced Risk Communication***

- (p) The DH has convened meetings of the Scientific Committee for Emerging and Zoonotic Diseases on 19 August 2014 and 8 October 2014 to assess the risk of and local response to EVD. The DH has also convened the interdepartmental meeting on 13 August 2014 and 22 October 2014 to gear up other Government departments with necessary preparation.
- (q) HA's senior management has been monitoring the overall corporate preparedness since 30 July 2014. All reports of suspected and confirmed EVD will be submitted to HA's senior management, the CHP and the Food and Health Bureau through the HA Rapid Communication System ("RCS"). HA's Central Committee on Infectious Disease and Emergency Response has convened meetings in conjunction with the CHP to coordinate all actions.
- (r) The HA has set up a dedicated intranet webpage on EVD on 30 July 2014 to disseminate all relevant information on EVD, including infection control measures to be adopted by various clinical departments. Such information will be updated as necessary. HA has organised various staff fora at hospital and corporate level to share information on EVD. Training videos and posters on the sequence of removal of PPE were prepared and promulgated to staff on 27 August 2014. Communication kit on infection control is regularly updated and is available at the EVD webpage.

- (s) HA Corporate Clinical Psychology Service (“CCPS”) is ready to provide psychological support to the staff if needed. In response to the growing concerns of staff over EVD, CCPS has arranged an Emotional Support Helpline for staff working in high risk areas since 11 August 2014. CCPS has also been providing pre-incident briefings or pre-deployment trainings to enhance the psychological preparedness of staff to cope with the possible crisis. About 40 psychological support kits have been prepared to support HA staff who may be infected with EVD.

### ***Publicity and Public Education***

- (t) The DH has been closely working with its partners to provide regular updates on the latest disease situation and solicit their collaboration in disseminating relevant health information. They are 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.
- (u) Targeting specific population groups, including the local African community, the CHP earlier visited guesthouses in relevant buildings to deliver health advice, pamphlets and posters, followed by health talks and briefings for representatives of guesthouses in Yau Tsim Mong District as well as management companies and owners’ corporations of relevant buildings.
- (v) The CHP has held briefings for private hospitals, relevant government departments (including Food and Environmental Hygiene Department (“FEHD”) and the staff of its cemetery and crematoria section) as well as the hotel, funeral parlour (including muslim cemetery) and guesthouse industry to provide updates on the latest epidemiology of, infection control for and preparedness against EVD. Health talks have also been delivered to community organisations, hotel and guesthouse operators, public and private property management bodies and transport operators.
- (w) Health educational materials, including leaflets, pamphlets and posters, have been produced and widely distributed in the community. A dedicated webpage on EVD 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 delivered via television and radio Announcements in the Public Interest and the 24-hour health education hotline (2833 0111).

- (x) Travellers have been advised to avoid unnecessary travel to the EVD affected countries. Travel advice has been uploaded to the front page of the CHP and DH's Travel Health Service websites, as well as the Outbound Travel Alert website of the Security Bureau.

### ***Availability of Drugs and Vaccines Against EVD***

- (y) Currently, no drug regulatory authorities have registered any drugs or vaccines for the treatment or prevention of EVD. There are, however, some investigational drugs and vaccines against the disease in the early stage of product development. Most of these drugs and vaccines are in the stage of pre-clinical studies with animals; while a small number of them are either conducting, or planning to conduct, Phase I clinical studies in healthy human subjects.
- (z) According to the announcement made by the WHO and the publication of the guidance on ethical considerations for use of unregistered interventions for EVD, it is ethical to offer unproven interventions with yet unknown efficacy and adverse effects as potential treatment or prevention. The Administration has made enquiries with the Western Pacific Regional Office ("WPRO") of the WHO for advice on distribution or supply arrangement of the interventions when required. In addition, the Administration has also made enquiries with the various developers of the potential drugs and vaccines under investigation and trial on the latest situation of product development and the possibility to obtain them.
- (aa) According to the Pharmacy and Poisons Ordinance (Cap. 138), pharmaceutical products must satisfy the criteria of safety, quality and efficacy, and must be registered with the Pharmacy and Poisons Board before they can be sold in Hong Kong. Currently, the above investigational drugs and vaccines against EVD are not registered pharmaceutical products. However, in accordance with



the above Ordinance, doctors can apply to the DH through the established mechanism for the import of unregistered pharmaceutical products for the treatment of their patients when clinically indicated. In such circumstances, doctors should inform and get consent from their patients in using the products, and are required to report adverse drug reactions to the DH related to the use of the unregistered pharmaceutical products.

### ***Patient Management***

- (bb) The HA has reviewed and promulgated the guidelines on management of patients with suspected viral haemorrhagic fever and recommendation on clinical management specific to EVD to all staff on 31 July 2014 and 22 September 2014 respectively.
- (cc) Currently, there is no specific treatment for EVD and if there is a confirmed case the patient will be managed by supportive treatment. The HA will keep referring to WHO's latest guideline on any possible treatment.
- (dd) To facilitate communication with patients from different ethnicities, the HA has made available 24-hour interpretation service covering 17 languages.

### ***Contingency Plan and Drills for Concerted Interdepartmental Actions***

- (ee) The DH will continue to update contingency plans on major outbreaks of infectious diseases (including the EVD Plan), as well as to conduct interdepartmental exercises and drills with concerned parties and stakeholders in close partnership. HA's designated contingency plans are also in place.
- (ff) The CHP has organised 15 ground movement exercises to test the preparedness and responsiveness of relevant departments on public health actions since it was established in 2004. The CHP will organise a series of interdepartmental drills and exercises testing and practising the relevant departments' and organisations' response for prevention and control of EVD. The first phase was a household disinfection exercise held on 29 October 2014 and an investigation and disinfection exercise conducted in a guesthouse setting held on 6 November 2014. It will be followed by a table

top exercise, other drills and a quarantine centre ground movement exercise.

- (gg) An inter-hospital infectious exercise entitled “Exercise ICON” was organised on 2 September 2014 to test HA’s preparedness on communication, coordination, conveyance arrangement and management of a suspected EVD case. In this exercise, ground movement session simulating a suspected EVD case was conveyed by FSD ambulance to A&E Department at the North District Hospital for assessment, and then transferred to HAIDC for a series of scenario-based high risk procedures.

## **WAY FORWARD**

8. The Government will continue to maintain vigilance, enhance surveillance and keep itself abreast of the latest developments concerning EVD. Risk assessment will be carried out on an ongoing basis, the effectiveness of the response 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 to adopt appropriate preventive and response measures as necessary.

## **ADVICE SOUGHT**

9. Members are invited to note the contents of this paper.

**Food and Health Bureau  
Department of Health  
Hospital Authority  
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