監測及流行病學處

衞生防護中心
Centre for Health Protection
保障市民健康
Protecting Hong Kong's health

Surveillance
And
Epidemiology
Branch

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Dear Doctors,

Vigilance against Middle East Respiratory Syndrome

In view of the recent outbreak of Middle East Respiratory Syndrome (MERS) in healthcare settings in the United Arab Emirates (UAE) and the identification of MERS cases in Malaysia and the Philippines, I would like to update you of the latest situation of MERS.

According to the World Health Organization (WHO), a laboratory-confirmed case of MERS was reported by the Ministry of Health of the UAE on 10 April 2014 (http://www.who.int/csr/don/2014_04_14_mers/en/). The case is a 45 year-old man from Abu Dhabi who became ill on 6 April, was hospitalized on 7 April and died on 10 April. The patient was not known to have any chronic disease. He did not have a recent history of travel or contact with animals or with a previously laboratory-confirmed case.

Through screening of contacts of this laboratory-confirmed case, the health authority of UAE identified a cluster of ten laboratory-confirmed cases of MERS among healthcare workers, which were reported to the WHO on 13 and 14 April 2014 (http://www.who.int/csr/don/2014_04_16_mers/en/). The cases involved 8 males and 2 females with ages ranging from 27 years to 48 years. Among them, five cases had mild symptoms, one case had pneumonia, one case had fever and the remaining three cases were asymptomatic. All the cases are in stable condition and their family and healthcare contacts are being followed up by the relevant health authority.

On top of that, the Ministry of Health of the Philippines reported a case of MERS affecting a male healthcare worker who had worked in UAE on 16 April 2014. His nasal swab was tested positive for MERS-Coronavirus (CoV) in UAE but he remained asymptomatic. He was reported to have contact with the above 45-year-old fatal MERS case in UAE. The patient arrived in the Philippines on 15 April and has been put under isolation upon arrival. According to the Ministry of Health of the Philippines, six overseas Filipino workers in UAE were tested positive for MERS-CoV by the health authority of UAE. At the present moment, it is not certain whether the above cases affecting overseas Filipino workers in UAE were part of the cluster of the ten infected

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healthcare workers in UAE reported to WHO.

Separately, on 16 April 2014, the Ministry of Health of Malaysia announced one confirmed fatal case of MERS involving a Malaysian man aged 54. Investigation revealed that he had recently returned to Malaysia from Mecca and arrived in Malaysia on March 29, 2014. During 8 to 9 April 2014, he presented with symptoms including fever, cough and shortness of breath. On 10 April 2014, he was admitted to a hospital for further treatment. His condition deteriorated and he died on 13 April 2014.

Excluding the cases in Malaysia and the Philippines, as of 16 April 2014, a total of 238 cases have been reported by the WHO, including 92 deaths. These included 181 from the Kingdom of Saudi Arabia (KSA), 29 from UAE, seven from Qatar, four from the United Kingdom, four from Jordan, three from Tunisia, three from Kuwait, two from France, two from Germany, two from Oman and one from Italy. So far, all MERS cases either occurred in the Middle East or had direct links to primary cases infected in the Middle East. According to WHO, MERS remains active in the Middle East.

People of all age groups were affected although males of middle and older ages were over-represented. The majority of the cases had reported co-morbidities. Patients usually presented with acute febrile respiratory symptoms but some immunocompromised individuals had atypical presentations. Co-infection was also observed in some cases. The case fatality rate remained high at around 45%.

MERS is an emerging infection whose animal source has yet to be identified. Some studies suggest that camels might be a potential source of human MERS-CoV infection. However, most primary human cases did not have a history of direct exposure to animals. Significant proportion of the cases was associated with outbreaks in households and healthcare facilities. Person-to-person transmission has occurred in many clusters, either in a household, work environments, or healthcare settings.

The continued occurrence of clusters in both households and healthcare facilities highlights the importance of infection control measures in both settings to prevent further spread of the virus. It is not always possible to identify patients with MERS-CoV early because some have mild or unusual symptoms. For this reason, it is important that healthcare workers apply standard precautions consistently with all patients regardless of their diagnosis in all work practices all the time. Droplet precautions should be added to the standard precautions when providing care to all patients with symptoms of acute respiratory infection. Contact precautions and eye protection should be added when caring for suspected or confirmed cases of MERS-CoV infection. Airborne precautions should be applied when performing aerosol generating procedures.

Patients should be managed as potentially infected when the clinical and epidemiological clues strongly suggest MERS-CoV, even if an initial test on a

nasopharyngeal swab is negative. Repeat testing should be done when the initial testing is negative, preferably on specimens from the lower respiratory tract.

Locally, the Scientific Committee on Emerging and Zoonotic Diseases (SCEZD) of the Centre for Health Protection (CHP) of the Department of Health (DH) has recently convened another meeting in March 2014 to discuss the prevention and control of MERS. You may wish to refer to the consensus statement from SCEZD at the following link: (http://www.chp.gov.hk/files/pdf/updated_consensus_summary_on_mers_by_scezd.pdf).

In addition, please find the infection control measures for MERS for health professionals from the CHP website (http://www.chp.gov.hk/files/pdf/interim_recommendations.pdf). Relevant health advice on travelling can also be found under "Current Travel Health News" on the website of the DH's Travel Health Service (http://www.travelhealth.gov.hk/english/outbreaknews/outbreaknews.html).

So far, no human cases of MERS have been detected in Hong Kong. Nevertheless, CHP is keeping a close watch over the latest situation and will inform you of any new development and updates. Medical practitioners are reminded to notify CHP of any suspected cases of MERS fulfilling the reporting criteria (Appendix) through the Central Notification Office (CENO) of CHP via fax (2477 2770), phone (2477 2772) or CENO On-line (http://ceno.chp.gov.hk/). Please also call our Medical Control Officer at 7116 3300 a/c 9179 outside office hours for prompt investigation.

Apart from the statutory notification of suspected MERS cases as mentioned above, please consider testing for MERS-CoV for severe pneumonia not responding to treatment after exclusion of common causative agents, regardless of the travel history. Laboratory testing of MERS-CoV is available in Public Health Laboratory Services Branch (PHLSB) of CHP. Please contact the Virology Division of PHLSB for necessary arrangement.

Thank you for your ongoing support in combating communicable diseases.

Yours faithfully,

(Dr. WAN Yuen-kong)
for Controller, Centre for Health Protection
Department of Health

Appendix

An individual fulfilling both the ***Clinical Criteria*** **AND** ***Epidemiological Criteria*** should be reported to CHP for further investigation.

Clinical Criteria:

A person with acute respiratory syndrome which may include fever (≥ 38°C , 100.4°F) and cough

- requiring hospitalization

OR

- with suspicion of lower airway involvement (clinical or radiological evidence of consolidation) not explained by any other infection or any other aetiology

AND

Epidemiological criteria:

One or more of the followings within 14 days before onset of illness

- close contact* with a confirmed or probable case of Middle East Respiratory Syndrome while the case was ill

OR

- Residence in or history of travel to the Arabian Peninsula or neighboring countries**

***Close contact is defined as:**

- Anyone who provided care for the patient, including a health care worker or family member, or who had other similarly close physical contact;
- Anyone who stayed at the same place (e.g. lived with, visited) as a probable or confirmed case while the case was ill.

**** These refer to areas/countries bounded by Iran, Turkey and Egypt (including Iran, but not Turkey and Egypt)**