

Interim Results of Epidemiological Investigation on MERS-CoV Patient Movement and Contacts Tracing [10.Sep.2018]

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□ The Korea Centers for Disease Control and Prevention (KCDC, Director, Jeong Eun-kyung) announced the interim results of the epidemiological investigation on the confirmed MERS-CoV patient in ROK. The results follow interviews with the patient and persons accompanying him (family members and co-workers), as well as analysis on the movement of the patient and his contacts after reviewing CCTV records at Incheon International Airport and Samsung Medical Center.

○ Investigation results showed that the patient stayed at Incheon International Airport for 26 minutes upon arrival and then immediately moved by taxi to a negative pressure ward at Samsung Medical Center. He stayed at the hospital for 4 hours and 38 minutes, undergoing medical examinations and chest radiography and was classified as a suspected patient of MERS-CoV. He was then transferred to a nationally designated quarantine hospital (Seoul National University Hospital).

○ As of September 10, 21 closely contacts and 417 casual contacts have been identified. All close contacts have been isolated in facilities or at home, and local public health center staff are conducting active surveillance on these individuals. Casual contacts are undergoing active monitoring, led by designated local government health officials.

○ Among the contacts monitored by local governments, 4 contacts* showed suspected symptoms, and all of them tested negative for MERS-CoV in the first test. A second test is also scheduled to be carried out. * One close contact, three casual contacts

☐ (In Kuwait) The patient visited Kuwait from August 16 to September 6. From August 28, he experienced abdominal pain and diarrhea while staying at the company residence * and visited a local hospital on September 4 and September 6.

* 20 Korean employees living together in two or three residences

☐ Patient interviews revealed that the patient had no contact with camels or confirmed MERS patients while in Kuwait, so epidemiology investigation on the infection source and transmission route is ongoing, including the possibility of infection at local medical institutions.

* 20 Korean workers staying in Kuwait are under investigation as contacts

☐ While in Kuwait, the patient called a doctor at Samsung Medical Center (SMC) in Seoul complaining of general weakness and diarrhea, and the doctor advised him to go to a local hospital to treat his severe diarrhea.

* At the time of this call, the patient displayed no respiratory symptoms, such as cough.

* Follow-up investigations will be conducted on the medical records at the local hospital in Kuwait.

☐ (En route to ROK) The patient was seated in business class (seat no. 24B) with one co-worker *.

* Arrived in ROK from UAE on Emirates flight EK322 (3:47 to 16:51 on September 7) via layover on flight EK860 from Kuwait-Dubai (22: 35 on September 6 to 1:10 September 7)

* Close contacts in the aircraft: 8 passengers, 4 crew

☐ (At Incheon International Airport) The patient stayed at Incheon International Airport for a total of 26 minutes for the immigration process

○ Quarantine was carried out on the airport apron (the area where aircraft are parked, unloaded or loaded, refueled, or boarded), and the patient requested a wheelchair and received assistance to proceed through the immigration process.

○ The patient submitted a health status questionnaire stating symptoms of diarrhea and muscle pain. During an interview with a quarantine officer, he stated that he had diarrhea symptoms 10 days before and that he had not taken any medication. An in-ear thermometer showed a normal body temperature of 36.3 degree in Celsius (taken at 17:20 on September 7).

○ The quarantine officer provided post-entry educational leaflets, taking into consideration that the patient did not have a fever or respiratory symptoms and, therefore, did not fall under the definition of a suspected MERS-CoV patient.

○ After the immigration process, the patient met a family member, left the airport, and immediately took a limousine taxi. He stated that he did not use any facilities in the airport, such as restrooms, convenience stores, or pharmacies. (Refer to CCTV analysis)

* The patient's family member wore a mask recommended as by the doctor at SMC, who gave the patient a general guide for visitors to the Middle East.

* Close contacts in the airport: 1 quarantine station officer, 1 immigration officer, 1 wheelchair assistant, 1 family member

□ (Airport to SMC) The patient arrived at SMC by a limousine taxi, which was reserved in advance.

* The patient's family member traveled to the hospital separately by her own car

○ The patient called the doctor at SMC and provided his expected arrival time at the hospital. The patient went directly to the emergency room, which was equipped with negative pressure, and received medical treatment. He did not come in contact with other patients.

* Investigation is underway on taxi passengers who used the limousine taxi right after the confirmed patient.

○ The patient complained of diarrhea as the main symptom, and his body temperature was confirmed to be elevated after an initial body temperature test (37.6 degree in Celsius at 19:22 on September 7) and a second body temperature test (38.3 degree in Celsius at 20:37 on September 7). A chest X-ray showed pneumonia, and the medical doctor contacted the KCDC at 21:34 to report his status as a suspected MERS-CoV case.

* Close Contacts in SMC: 1 doctor, 2 nurses, 1 radiologist

□ (Epidemiological Investigation and Isolation) An epidemiological officer in Seoul classified the reported patient as a suspected patient at 22:40 after reviewing the case.

○ The Gangnam Public Health Center in Seoul transferred the suspected patient to Seoul National University Hospital, a nationally designated quarantine hospital, by an ambulance equipped with negative pressure at 0:33 on September 8.

□ The government has resolved to fulfill all the ministries' capabilities for the end of MERS at a ministerial meeting of ministers presided by the Prime Minister on September 9, actively promoting infectious disease management measures, such as contact tracing and protection of Korean residents in Kuwait.

○ The KCDC, together with local governments, announced that it will do its best to prevent further spread of the disease by thorough contact tracing and management,

○ Contacts should comply with public health authorities' monitoring and guidance. If individuals experience any suspected symptoms, such as fever, cough, or shortness of breath, they are advised not to visit hospitals directly. Instead, they should call the 1339 Call Center or the nearest public health center and follow their instructions.

* Contacts visiting hospitals might increase the risk of infecting other patients in the emergency room, doctor's office, etc.

○ When visiting the Middle East, the general public is advised to follow personal hygiene regulations, such as washing hands frequently, and to avoid visits to local farms, contact with camels, consumption of camel meat or raw camel milk, and unnecessary visits to local medical facilities.

- Individuals are asked to cooperate with quarantine procedures, such as honestly completing health status questionnaires at the time of entry and to report any symptoms of fever, cough, or shortness of breath within 2 weeks after returning home. In the instance of experiencing such symptoms, individuals are advised to call the KCDC Call Center at 1339 or local public health centers to report symptoms before visiting hospitals.

○ Healthcare providers should check the travel history of incoming patients with respiratory symptoms to see if they have recently traveled to the Middle East. The travel history of Korean nationals can be checked through the Drug Usage Review (DUR) system, while that of foreign nationals can be checked through direct interviews. Healthcare providers should report any patients suspected of MERS-CoV infection to local public health centers or call KCDC at 1339.

* This press release is intended to disclose information about relevant incidents in a timely, accurate, and transparent manner, and may be amended or supplemented following additional epidemiological investigations.