# MERS Daily Report (Sept. 13)

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⋄ To strengthen the rapid and transparent sharing of information, the Korea Centers for Disease Control Central Incident Management System (KCDC Central IMS) will regularly release a daily report (once per day) on situation and operations updates in MERS control and prevention measures.

## I. Operations Status (As of 12:00, Sept. 13)

#### 1 Case Overview

#### 1 Confirmed Case

Name	Sex	Age	Isolation Facility	Date of Confirmation
°100	M	61	Seoul National University Hospital	9.8.

# Suspected Case Reports and Testing Status : No additional reports; all cases tested negative

(Unit: Persons)

Date	Suspected Case			MERS Testing			
	Total	Close Contacts	Casual Contacts	Total	Positive	Negative	Awaiting Pesults
As of 18:00, Sept. 12	11	1	10	11	0	11	0
As of 12:00, Sept. 13	0	0	0	0	0	0	0
Total	11	1	10	11	0	11	0

#### 2 Close and Casual Contacts

- o Close Contacts (Active Surveillance\*) : 21 individuals, no change as of yesterday
- \* Active Surveillance: Taking into consideration that these individuals had close contact with the confirmed case, self-isolation and daily monitoring for potential symptoms are being conducted.
- Seoul (10), Incheon (7), Gyeonggi (2), Busan (1), Gwangju (1)

- Casual Contacts (Active Monitoring\*): 431 individuals, an increase of 3 from 18:00 yesterday (+3, 428→431)
  - \* Active Monitoring: Taking into consideration that these individuals had low levels of contact with the confirmed case, daily monitoring for potential symptoms is being conducted.
  - \* Casual contacts with unconfirmed whereabouts: 4 foreign nationals (tracking underway in collaboration with the National Police Agency and the Ministry of Foreign Affairs)
  - Casual contacts from same plane increased by 2 (+2, 343→345)\*, and other casual contacts increased by 1 (+1, 85→86)\*\*
  - \* Numbers were adjusted to include two individuals who subsequently sat in the same and adjacent seat on the same airplane during the next flight
  - \*\* Numbers were adjusted to include customers who subsequently rode in the same taxi that the confirmed case had taken

#### II. Measures Taken

- □ MERS Confirmation Test Conducted on All Close Contacts
  - After the average incubation period (6 days) has passed, MERS confirmation testing was conducted for strict monitoring of close contacts
    - \* Test results will be available tomorrow
  - Confirmation tests are scheduled for Sept. 13th and Sept. 20th, the sixth (average incubation period) and thirteenth (before the end of the incubation period) day after suspected exposure, respectively
- □ Team of KCDC epidemiological officers and private experts dispatched to Kuwait (Sept. 13th)
- A team of 2 KCDC epidemiological officers and 1 private expert was dispatched to Kuwait to conduct investigations on the health status and management of on-site contacts of the confirmed case and to gather local epidemiological information
- Number of foreign nationals with unconfirmed whereabouts down to 4; number of taxi customers increased by 1 (successfully contacted)
- 23 of the 27 casual contacts of foreign nationality whose whereabouts had not been confirmed as of Sept. 12 have now been confirmed (-23, 27->4). 4 individuals remain unconfirmed.
- Records showed that the taxi taken by the confirmed case made 24 other stops, and 1 additional passenger was confirmed (+1, 27->28 total passengers). All passengers have been identified and contacted, and none of them show any symptoms.

\* 27 individuals are being managed as casual contacts (the remaining 1 individual is abroad and is undergoing constant monitoring)

## III. Message to the Public

- KCDC announced that it is collaborating closely with the Seoul Metropolitan Government and other local governments to conduct thorough contact tracing and management of the situation to prevent further spread of the disease.
  - When visiting the Middle East, the general public is advised to maintain proper personal hygiene, such as washing hands frequently, and to avoid visits to local farms, contact with camels, consumption of raw camel meat or 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. Should individuals experience such symptoms, they are advised to call the KCDC Call Center at 1339 or local public health centers to report their 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 the KCDC Call Center at 1339.
  - \* Additional information on the current situation will be provided upon further epidemiological investigation to ensure rapid, accurate, and transparent communication with the public.

# Management of Close and Casual Contacts

#### 1 Close Contacts

- Taking into consideration that close contacts had high levels of contact with the confirmed case, they are undergoing isolation and daily monitoring for symptoms
  - (Active Surveillance) During the incubation period, close contacts are contacted twice per day by a local government representative to check for fever or respiratory symptoms
  - (Self-isolation or Isolation at a Facility) During the incubation period, close contacts are isolated to restrict movement and prevent contact with others while symptoms are monitored

#### 2 Casual Contacts

- Taking into consideration that casual contacts had low levels of contact with the confirmed case, they are undergoing daily monitoring for symptoms
  - (Active Monitoring) Although passive surveillance is the standard procedure for casual contacts, active monitoring is being implemented in order to strengthen prevention and control measures. As part of active monitoring, a local government representative contacts casual contacts by phone once per day during the incubation period to check for fever or respiratory symptoms
    - \* Casual contacts are informed to contact their local public health center representative if they experience fever or respiratory symptoms during the incubation period

#### 3 Suspected Cases

- O Individuals under monitoring who experience fever or respiratory symptoms and meet the criteria are classified as suspected cases and undergo further testing
  - (Isolation and Testing) Suspected cases are isolated and samples are taken for MERS confirmation testing
    - \* Should tests return negative, individuals return to standard monitoring procedures according to their contact classification (i.e., close or casual)

# Middle East Respiratory Syndrome (MERS) Overview

	Details					
Cases and Outbreaks	<ul> <li>MERS cases have been identified in the Middle East around the Arabian Peninsula, with approximately 2,229 confirmed cases around the world from 2012 to June 30, 2018 (according to WHO)</li> <li>Since January 2018, there have been 116 confirmed MERS cases (as of September 8, 2018) in the Middle East (114 in Saudi Arabia*, 1 in UAE, 1 in Oman)</li> <li>* One case was infected in Saudi Arabia and imported the virus to the UK</li> </ul>					
Pathogen	<sup>a</sup> Middle East Respiratory Syndrome coronavirus ; MERS-CoV					
Mode of Transmission	<sup>o</sup> Although the mode of transmission is uncertain, animal-to-human transmission has been observed through contact with infected camels and consumption of camel meat and milk, and limited direct and indirect human-to-human transmission has been observed through droplet infection following close contact with infected individuals					
Incubation Period	∘Approximately 2-14 days					
Symptoms and Clinical Course	<ul> <li>MERS patients usually experience fever, cough, sputum, shortness of breath, and other respiratory symptoms. They may also suffer from diarrhea, vomiting, and other gastrointestinal symptoms.</li> <li>Many patients have low lymphocyte or platelet counts</li> <li>Case Fatality Rate: The prognosis for those with pre-existing conditions or weakened immune systems is rather poor, with a fatality rate of approximately 30%</li> </ul>					
Diagnosis	Routing confirmation is conducted by RT-PCR testing of unique sequences of viral RNA; confirmation by nucleic sequencing can be conducted when necessary					
Treatment	∘There is no cure for MERS, but individuals can be treated for their symptoms					
Case Management	□ Cases: Isolation of suspected or confirmed cases □ Close Contacts: Passive surveillance of contacts of suspected cases, isolation and active surveillance of contacts of confirmed cases					
Prevention	<ul> <li>Hand washing, cough etiquette, and maintaining proper personal hygiene</li> <li>For travelers to the Middle East</li> <li>Avoid contact with camels and crowded areas; wear a mask if you experience respiratory symptoms; avoid contact with those who have respiratory symptoms</li> </ul>					

# **MERS Educational Content**





## **MERS Fact Sheet**

#### What is MERS?



#### **▲ Symptoms**



Fever





Shortness of breath



Sore throat



Diarrhea

▲ Incubation Period

MERS is an acute respiratory disease caused by a new Coronavirus(MERS-CoV)

Approximately 2 to 14 days

## Who are possible suspected MERS cases?

- 1. Those experiencing fever and respiratory symptoms (cough, shortness of breath, etc.) and:
- Have traveled to the Middle East\* within 14 days from the onset of symptoms - Have had close contact with a symptomatic suspected MERS case
  - 2. Those experiencing fever and respiratory symptoms (cough, shortness of breath, etc.) and also had close contact with a symptomatic confirmed MERS case
- \* The Arabian Peninsula and nearby countries (regions): Bahrain, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, UAE, Yemen

#### **Infection Route**

## General Response Protocol

(In Korea) contact with confirmed MERS case (Outside Korea) contact with infected camels, consumption of camel meat or camel milk, or contact with confirmed MERS case

If you experience any MERS-like symptoms (fever, cough, etc.) please call the KCDC Call Center at 1339

Published on Sept. 10th 2018





# **Preventing MERS Infection**

#### In Korea

#### **How to Prevent**



Check MERS related information on the KCDC website at (cdc.go.kr)



Should you experience symptoms and suspect MERS infection, report to the KCDC 1339 Call Center or your local public health center



Maintain proper personal hygiene (frequent hand washing and covering your mouth and nose with your sleeves when coughing)

#### If MERS Infection is Suspected



If you experience fever and respiratory symptoms within 14 days of traveling to the Middle East, report to the KCDC 1339 Call Center or your local public health center



If you do not experience any symptoms, feel free to carry out your daily activities as usual

# **Outside Korea (the Middle East)**

#### Prevention guidelines when traveling to the Middle East



When traveling to the Middle East, avoid visiting local farms, direct contact with camels, and consumption of raw camel meat or milk



Avoid visiting crowded areas and local healthcare facilities unless absolutely necessary (if you must visit, wear a mask)



Avoid direct contact with anyone showing MERS-like symptoms, such as cough or fever



Maintain proper personal hygiene (frequent hand washing, covering your mouth and nose with your sleeves when coughing, etc.)



When entering Korea after traveling to the Middle East, submit the provided health questionnaire. If you experience symptoms within 14 days after returning home, call the KCDC Call Center at 1339 or your local public health center

Published on Sept. 10th 2018

# Steps to Prevent MERS

#### Before Traveling

- \* Confirm the local MERS risk status of your destination
- X Visit the KCDC website for more information (cdc.go.kr)
- \* Young children, those 65 years and older, pregnant women, cancer patients, and other individuals with weakened immune systems should are advised not to travel to such areas

# While Traveling

- \* Maintain proper personal hygiene and wash your hands frequently
- \* Avoid visiting local farms or contact with animals (especially camels)
- \* Do not consume raw camel meat or milk
- \* Do not visit local healthcare facilities or heavily crowded areas unless absolutely necessary (if you must, wear a mask)
- \* Avoid contact with individuals who have fever or respiratory symptoms
- \* Wear a mask if you experience any respiratory symptoms
- \* Cover your mouth and nose with your sleeve when coughing or sneezing

#### After Traveling

- \* If you have any MERS-like symptoms at the time of arrival in ROK, report to a quarantine officer immediately after deboarding the plane
- \* If you experience any MERS-like symptoms (fever, cough, shortness of breath) call the KCDC 1339 Call Center or your local public health center first before visiting a healthcare facility

# **2018 MERS Report Sources**

□ Reports of Suspected Domestic Cases (as of 12:00 on Sept. 12)

(Units: Cases, Persons)

Туре		Source				
	Number	1339/		Quarantine Station	Other (119, 112)	
		Public Health	Healthcare Facility			
		Center	•			
Suspected Case	1,079	840	164	68	7	
Report	1,073					
Suspected Case	201*	109	77	15	0	

<sup>\*</sup> Of the suspected cases, 11 had contact with the confirmed case