

June 5, 2015

LAC DPH Health Advisory:

South Korean Middle East Respiratory Syndrome (MERS) Outbreak – Los Angeles County Preparedness for Diseases that may be Internationally Transmitted

This message is intended for primary care, urgent care, emergency medicine, infectious disease providers, and infection control staff. Please distribute as appropriate.

Key messages

- **The largest MERS outbreak outside of the Middle East began in the Republic of Korea on May 20, 2015. Currently, MERS and this outbreak pose a low risk to the United States.**
- **This South Korean outbreak highlights how international travel can spread illness and create public health threats. Obtaining travel histories from patients, being aware of international outbreaks, and having a high index of suspicion that leads to appropriate infection control precautions are critical to prevent transmission of MERS and other travel-associated illnesses.**
- **Immediately report suspected cases of MERS to the Health Department.**

Situation

MERS is a viral respiratory illness caused by a coronavirus, MERS-CoV. It was first reported in 2012 from Saudi Arabia. As of June 3, 2015, 1,179 laboratory-confirmed cases of MERS have been reported to the World Health Organization, including 442 deaths. Overall, 66% of cases have been male, and the median age is 49 years (range 9 months-99 years). All cases have been linked with countries in the Middle East including Saudi Arabia, United Arab Emirates (UAE), Qatar, Oman, Jordan, Kuwait, Yemen, Lebanon, and Iran. Sixteen other countries have reported travel-associated MERS cases, including the United States where two cases were identified in May 2014.

On May 20, 2015 one case of MERS was reported from the Republic of Korea in a man who had recently traveled to multiple countries on the Arabian Peninsula. As of June 5, 2015, 36 laboratory confirmed cases have been identified and linked to the index patient; most are healthcare workers or hospital contacts. Among those cases, 3 have died. Another one of the cases traveled to Hong Kong while ill, however, as of yet no secondary Chinese cases have been identified. Appropriate control measures and precautions have been put into place in South Korea. This is the largest outbreak of MERS outside of the Middle East.

MERS is one of several serious diseases that may be spread via international travel. Other travel-related infectious diseases include Ebola in several West African countries, Chikungunya in Latin America, and more common tropical diseases such as malaria and dengue. Obtaining a travel history, including a history of contact with ill persons or disease vectors during travel, can be critical to early diagnosis and treatment. Moreover, for conditions such as MERS that spread between close contacts including healthcare personnel and other hospital patients, a high index of suspicion and appropriate infection control measures are critical.

Actions requested of providers

- ✓ Ask about international travel in patients with febrile illness, especially if severe or requiring hospitalization.
- ✓ Contact the Health Department for consultation regarding a suspect MERS case (or for other internationally spread communicable diseases).
- ✓ Immediately isolate a patient suspected of MERS in a single room with standard, contact and airborne precautions while seeking further guidance.

MERS Suspect Case Definition

Suspect cases of MERS are patients who meet one of the three following definitions:

1. Fever AND pneumonia OR acute respiratory distress syndrome; AND ONE OF THE FOLLOWING:
 - A history of travel from countries on or near the Arabian Peninsula¹ within 14 days before symptom onset, OR
 - Close contact with a symptomatic traveler who developed fever and acute respiratory illness (not necessarily pneumonia) within 14 days after traveling from countries in or near the Arabian Peninsula, OR
 - A member of a cluster of patients with severe acute respiratory illness (e.g. fever and pneumonia requiring hospitalization) of unknown etiology in which MERS is being evaluated, in consultation with state and local health departments.

OR

2. Fever AND symptoms of respiratory illness (not necessarily pneumonia; e.g. cough, shortness of breath) AND report of being in a health facility in Jordan, Saudi Arabia, or UAE within 14 days before symptom onset in a country or territory in or near the Arabian Peninsula or in which recent healthcare-associated cases of MERS have been identified.

OR

3. Fever OR symptoms of respiratory illness (not necessarily pneumonia; e.g. cough, shortness of breath) AND close contact² with a confirmed MERS case while the case was ill.

Infection Control

If a suspect MERS case is identified, immediately take infection control precautions including:

- ✓ Place surgical mask on the patient immediately
- ✓ Place the patient in an Airborne Infection Isolation Room (AIIR) or if not available a single room with the door closed.
- ✓ Implement standard, contact, and airborne infection control precautions
- ✓ Limit personnel entering the patient's room
- ✓ Notify the infection preventionists on call
- ✓ Ensure that all healthcare workers in contact with the patient wear Personal Protective Equipment (PPE):
 - N95 or higher respirators
 - Goggles or face shields (for high risk procedures such as intubation, etc.)
 - Gown and gloves

MERS Consultation and Diagnostic Testing

Contact the Los Angeles County Department of Public Health (LAC DPH) Acute Communicable Disease Control Program (ACDC) to report a suspect case or to obtain consultation. If diagnostic testing is indicated, LAC DPH will arrange for testing at the LAC DPH Public Health Laboratory. For persons residing in the Cities of Long Beach or Pasadena, contact the numbers listed below.

¹Countries considered on the Arabian Peninsula and neighboring include: Bahrain, Iraq, Iran, Israel, the West Bank, and Gaza; Jordan; Kuwait; Lebanon; Oman; Qatar; Saudi Arabia; Syria; the UAE; and Yemen

² Close contact is defined as a) being within approximately 6 feet (2 meters) or within the room or care area for a prolonged period of time while not wearing recommended PPE; or b) having direct contact with infectious secretions while not wearing recommended PPE.

Reporting

Immediately report suspected cases of MERS to the local Health Department

Los Angeles County:

- Weekdays 8:00 am-5:00 pm call 213-240-7941
- Non-business hours (before 8:00 am, after 5:00 pm, or weekends) call 213-974-1234

Long Beach Health and Human Services:

- Week days 8-5PM call 562-570-4302
- After hours call 562-435-6711 and ask for Communicable Disease Lead

Pasadena Health Department:

- 626-744-6043

Additional Resources on MERS

- Los Angeles County, Department of Public Health:
<http://www.ph.lacounty.gov/acd/MERS.htm>
- Centers for Disease Control and Prevention:
www.cdc.gov/coronavirus/mers/about/index.html?s_cid=cs_1344
- World Health Organization:
www.who.int/csr/disease/coronavirus_infections/en/

Additional Information on Other Severe Travel Related Communicable Diseases

- LAC DPH-Ebola
<http://www.publichealth.lacounty.gov/media/ebola-HealthCare.htm>
- CDC-Avian Flu
<http://www.cdc.gov/flu/avianflu/>

This Health Advisory was sent by Dr. Laurene Mascola, Chief, Acute Communicable Disease Control Program, Los Angeles County Department of Public Health