

Health Advisory

Evaluation of Returning Travelers

for Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

September 6, 2018

The Hajj, an annual religious pilgrimage to Mecca in Saudi Arabia, recently occurred from August 19–24, 2018. Over 2 million Muslims, including >10,000 Americans, make the pilgrimage each year. Providers are reminded to consider MERS-CoV when evaluating patients who present with severe acute respiratory illness with a recent history of travel to the Arabian Peninsula or exposure to a recent symptomatic traveler returning from that region.

MERS-CoV is a novel coronavirus that can cause severe acute respiratory illness with fever, cough, and shortness of breath. Symptoms typically develop 5 days (range 2–14 days) after exposure, and the case fatality rate is ~35%. Since MERS-CoV was first identified in Saudi Arabia in 2012, all reported cases have been traceable to countries in or neighboring the Arabian Peninsula.

SUMMARY POINTS

- Evaluate patients with severe acute respiratory illness and reported travel to the Arabian Peninsula within 2 weeks of symptom onset for MERS-CoV.
- For patients meeting the MERS-CoV Patient Under Investigation criteria:
 - Isolate the patient and implement standard, contact, and airborne precautions.
 - Report to PDPH at 215-685-6742 (215-686-4514 after hours).
 - Collect respiratory specimens and serum.

Identification of MERS-CoV Patients Under Investigation (PUI):

A patient who meets one of the following criteria is considered to be a Patient Under Investigation (PUI):

A. Fever AND pneumonia or acute respiratory distress syndrome AND EITHER:

- history of travel to countries in or near the Arabian Peninsula within 14 days before symptom onset, OR
- close contact with a symptomatic traveler who developed fever and acute respiratory illness 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-CoV is being evaluated, in consultation with state and local health departments.

B. Fever AND symptoms of respiratory illness (e.g., cough, shortness of breath) AND being in a healthcare facility (as a patient, worker or visitor) within 14 days before symptom onset in a country in or near the Arabian Peninsula in which recent healthcare-associated cases of MERS-CoV have been identified.

C. Fever OR symptoms of respiratory illness (e.g., cough, shortness of breath) AND close contact with a confirmed MERS-CoV case while the case was ill.

MERS-CoV PUI Management:

If a patient meets the above MERS-CoV PUI criteria, providers should **immediately**:

- Isolate the patient and implement standard, contact, and airborne precautions.
- Notify the Philadelphia Department of Public Health's (PDPH) Division of Disease Control who will provide approval and coordinate MERS-CoV testing. Details regarding the patient's clinical course and travel/exposure history will be needed for testing approval. Call 215-685-6742 during regular business hours or 215-686-4514 after-hours.
- Collect the following 3 specimens for MERS-CoV rRT-PCR testing: 1) lower respiratory specimen (i.e., sputum, bronchoalveolar lavage, bronchial wash or tracheal aspirate), 2) nasopharyngeal or oropharyngeal swab, and 3) serum. Specimens should be refrigerated if testing will be performed within 72 hours of collection or frozen at -70°C if being stored for more than 72 hours.