DATE: 08/22/2017
TO: Health Alert Network
FROM: Dr. Rachel Levine, Acting Secretary of Health and Physician General
SUBJECT: Evaluation of Returning Travelers for Severe Acute Respiratory Illness Caused by the Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

DISTRIBUTION: Statewide
LOCATION: Statewide
STREET ADDRESS: Statewide
COUNTY: Statewide
MUNICIPALITY: Statewide
ZIP CODE: Statewide

This transmission is a “Health Advisory”: provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING, AND LABORATORY STAFF IN YOUR HOSPITAL

EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE

FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE

LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE

PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP

Background

The Middle East Respiratory Syndrome coronavirus (MERS-CoV) can cause a severe acute respiratory illness with fever, cough and shortness of breath. Additional clinical features may include diarrhea, nausea, vomiting, renal failure, coagulopathy or pericarditis. As of July 21, 2017, 2,040 laboratory-confirmed cases of MERS-CoV infections were reported to the World Health Organization (WHO) from 27 countries including two cases reported from the United States. All reported cases have been traceable to the Arabian Peninsula. Clusters of illness reported to WHO from several countries provide clear evidence of human-to-human transmission of MERS-CoV. Most of these clusters were in healthcare personnel who acquired the infection while caring for patients with confirmed MERS-CoV infection.

Travel to and from the Arabian Peninsula is expected to increase in the coming weeks due to the Hajj. This annual religious pilgrimage to Mecca in Saudi Arabia will occur from August 30 to September 4, 2017. Over two million Muslims, including over 10,000 Americans, make the
pilgrimage each year. Providers are reminded to consider MERS-CoV when evaluating patients who present with acute respiratory infection (fever and cough) with a recent history of travel to the Arabian peninsula, or exposure to a recent symptomatic traveler.

**Recommendations**

Obtain a thorough travel history from all patients presenting with acute respiratory infection. Patients who meet the following criteria are considered to be "Patients Under Investigation (PUI)" by CDC

A. Fever AND pneumonia or acute respiratory distress syndrome (based on clinical or radiologic evidence) AND EITHER:
   - History of travel to countries in or near the Arabian Peninsula\(^1\) within 14 days before symptom onset; OR
   - Close contact\(^2\) 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\(^1\); OR
   - A member of a cluster\(^3\) of patients with severe acute respiratory illness (e.g., fever\(^1\) and pneumonia requiring hospitalization) of unknown etiology in which MERS-CoV is being evaluated, in consultation with state and local health departments.

   OR

B. Fever AND symptoms of respiratory illness (not necessarily pneumonia; 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 or territory in or near the Arabian Peninsula\(^1\) in which recent healthcare-associated cases of MERS have been identified.

   OR

C. Fever OR symptoms of respiratory illness (not necessarily pneumonia; e.g. cough, shortness of breath) AND close contact\(^2\) with a confirmed MERS case while the case was ill.

If a patient is identified who meets the above criteria, do the following:

1) Place the patient under airborne precautions;

2) Immediately report the patient to Pennsylvania Department of Health (877-PA-HEALTH or 877-724-3258) and your local health department; and

3) Collect specimens to be submitted to the Bureau of Laboratories (BOL). Testing will need to be approved by PADOH before specimens are submitted to BOL. Appropriate specimens for MERS-CoV testing include lower respiratory specimens such as sputum, bronchoalveolar lavage, bronchial wash, or tracheal aspirate as well as nasopharyngeal swabs, stool specimens (lower priority), and serum. To increase the likelihood of detection, multiple specimens from different sites, collected at different times after symptom onset, should be obtained. Respiratory specimens should be collected as soon as possible after symptoms begin. Ideally, respiratory specimens should be collected within 7 days of onset and before antiviral medications are administered. More information about MERS-CoV clinical specimen handling and testing can be found at: https://www.cdc.gov/coronavirus/mers/downloads/guidelines-clinical-specimens.pdf.
For further information see:

1- Countries considered in or near the Arabian Peninsula: Bahrain, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian territories, Qatar, Saudi Arabia, Syria, the United Arab Emirates (UAE) and Yemen.

2- Close contact is defined as a) any person who provided care for the patient, including a healthcare worker or family member, or had similarly close physical contact; or b) any person who stayed at the same place (e.g. lived with, visited) as the patient while the patient was ill.

3- In accordance with the World Health Organization’s guidance for MERS-CoV, a cluster is defined as two or more persons with onset of symptoms within the same 14 days period, and who are associated with a specific setting such as a classroom, workplace, household, extended family, hospital, other residential institution, military barracks, or recreational camp. See WHO’s Interim Surveillance Recommendations for Human Infection with Middle East Respiratory Syndrome Coronavirus

Categories of Health Alert messages:

**Health Alert**: conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory**: provides important information for a specific incident or situation; may not require immediate action.

**Health Update**: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of August 23, 2017, but may be modified in the future.