

Middle East Respiratory Syndrome Corona Virus (MERS-CoV) Health Advisory May 8, 2014

Situation:

The first case of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) infection in the United States, identified in a traveler, was reported to CDC by the Indiana State Department of Health (ISDH) on May 1, 2014, and confirmed by CDC on May 2. The traveler is a healthcare provider who was working and residing in Saudi Arabia.

The patient is currently in stable condition and being cared for in a special air-handling and ventilation isolation room in a hospital in Indiana. The hospital is using full precautions (standard, contact, and airborne) to avoid exposure to MERS-CoV within the hospital among healthcare providers and other people interacting with the patient, as recommended by CDC. The first U.S. case of MERS represents a very low risk to the general public in this country.

In other countries affected by MERS, from September 2012 to date, 495 laboratory confirmed cases and 126 deaths have been reported.

- Limited human-to-human spread has been reported, usually after close and prolonged contact, such as caring for or living with an infected person.
- There is no definitive evidence of sustained spreading in community settings.
- Clusters of human-to-human spread have been seen most frequently in healthcare workers caring for MERS patients. A cluster is defined as two or more persons with onset of symptoms within the same 14 day 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.

No travel restrictions are in effect for the Arabian Peninsula or neighboring countries at this time. However, travelers should be advised to take enhanced precautions and to monitor their health during and after their trip. If fever and symptoms of lower respiratory illness develops within 14 days after travel, instruct them to contact their health care provider.

Actions Requested of Clinicians:

Remain alert for and evaluate potential cases of MERS-CoV using the criteria listed on the next page.

Evaluation Criteria:

Individuals who should be evaluated for MERS-CoV infection:

- Develop severe acute lower respiratory illness within 14 days after traveling from countries in or near the Arabian Peninsula, excluding those who only transited at airports in the region.
- Close contacts of a symptomatic recent traveler from this area who has fever and acute respiratory illness.
- Close contacts of a confirmed case. For these patients, testing for MERS-CoV and other respiratory pathogens can be done simultaneously.
- Positive results for another respiratory pathogen (e.g. H1N1 Influenza should not necessarily preclude testing for MERS-CoV because co-infection can occur).

The following persons may be considered for evaluation for MERS-CoV infection:

- Persons with severe acute lower respiratory illness of known etiology with symptom onset within 14 days of travel from the Arabian Peninsula¹ but do not respond to appropriate therapy; OR
- Persons with severe acute lower respiratory illness who are close contacts of a symptomatic traveler who developed fever and acute respiratory illness within 14 days after travel from the Arabian Peninsula or neighboring countries. Close contact is defined as providing care for the ill traveler without wearing appropriate personal protective equipment or having similar close physical contact; or having stayed at the same place (e.g. lived with, visited) as the traveler while the traveler was ill.

Reporting:

- Report suspected cases of MERS-CoV immediately to Disease Control at (951) 358-5107; after hours (951) 782-2974, request to speak to the Public Health second call Duty Officer.
- Notify your Infection Control Practitioner immediately, and implement Airborne, Contact, and Standard infection control precautions when caring for patients with known or suspected MERS-CoV.

Laboratory Submission:

Contact Disease Control BEFORE submitting specimens (951) 358-5107; after hours (951) 782-2974, request to speak to the Public Health second call Duty Officer.

Specimens from medical providers should be sent through the County of Riverside Public Health Laboratory in order to facilitate testing. Do not send specimens directly to the state lab.

To increase likelihood of detection it is recommended to collect multiple specimens from different sites at different times after symptom onset, if possible. Lower respiratory tract and stool specimens are considered a priority for collection and testing. Recommended infection control precautions should be used when collecting specimens. Full instructions for specimen collection and processing are available at: <http://www.rivco-diseasecontrol.org/>.

Infection Control:

For patients with known or suspected MERS-CoV infection, CDC recommends implementing the infection control measures listed below:

- Standard, Contact and Airborne Precautions.
- The Infection Control Practitioner should be notified immediately.

With the absence of a vaccine, effective drugs, or natural immunity to MERS-CoV, the only means available to limit the spread of MERS-CoV are public health measures to rapidly identify infected persons and activate transmission control methods. These measures include:

- Surveillance for cases or suspicious clusters of disease, with appropriate diagnostic testing;
- Rapid isolation and strict adherence to infection control precautions;
- Prompt identification and careful monitoring of contacts; and
- Consideration of quarantine, in some instances, to minimize movement of exposed persons.

MERS-CoV Resources:

CDC's Interim Recommendations for hospitalized patients with MERS-CoV are located at:

<http://www.cdc.gov/coronavirus/mers/interim-guidance.html>

County of Riverside Department of Public Health: <http://www.rivco-diseasecontrol.org/>

California Department of Public Health: <http://www.cdph.ca.gov/programs/cder/Pages/MERS-CoV.aspx>

Centers for Disease Control & Prevention: <http://www.cdc.gov/CORONAVIRUS/MERS/INDEX.HTML>

World Health Organization: http://www.who.int/csr/disease/coronavirus_infections/en/

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