

Low level HAN (email only)
May 22, 2013

Update on Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

Since April 2012, at least 43 people in seven countries have been confirmed to have respiratory illness caused by a novel coronavirus, now known as Middle East Respiratory Syndrome Coronavirus (MERS-CoV). More than half of these cases have occurred in the last two months. At least 20 of the 43 people have died. The age range of 34 cases (for whom information is available) is 24-94 years, with a median age of 56 years. Cases have had a history of recent travel to the Middle East or were a close contact of a traveler to the area who was ill with acute respiratory illness. No confirmed cases have yet been identified in the United States.

This update includes the following new information:

- Human cases of MERS-CoV have now been detected in Tunisia, Saudi Arabia, Qatar, Jordan, the UK, the United Arab Emirates, and France
- Clusters of cases in Tunisia, Saudi Arabia, Jordan, the United Kingdom (UK), and France are now under investigation
- There is clear evidence of human-to-human transmission, possibly involving droplet and contact transmission
- CDC infection control recommendations for probable or confirmed MERS-CoV cases include the placement of hospitalized patients in airborne isolation and use of personal protective equipment by healthcare personnel, including gown, gloves, eye shield and N-95 respirator. Additional information is available at:
<http://www.cdc.gov/coronavirus/ncv/downloads/Isolation2007.pdf>
- Michigan (MDCH Bureau of Laboratories) is one of 15 states to have received CDC-developed PCR assay testing kits for MERS-CoV

Current CDC case definitions

- A person with an acute respiratory infection, which may include fever ($\geq 38^{\circ}\text{C}$, 100.4°F) and cough; AND
 - Suspicion of pulmonary parenchymal disease (e.g., pneumonia or acute respiratory distress syndrome based on clinical or radiological evidence of consolidation); AND
 - History of travel from the Arabian Peninsula or neighboring countries* within 10 days; AND
 - Not already explained by any other infection or etiology, including all clinically indicated tests for community-acquired pneumonia according to local management guidelines

In addition, the following persons may be considered for evaluation for MERS-CoV infection:

- Persons who develop severe acute lower respiratory illness of known etiology within 10 days after travel from the Arabian Peninsula or neighboring countries* but do not respond to appropriate therapy; OR
- Persons who develop severe acute lower respiratory illness who are close contacts of a symptomatic traveler who developed fever and acute respiratory illness within 10 days after travel from the Arabian Peninsula or neighboring countries.* Close contact is

defined as providing care for the ill traveler (e.g., a healthcare worker or family member), or having similar close physical contact; or stayed at the same place (e.g., lived with, visited) as the traveler while the traveler was ill.

Further information on MERS-CoV can be found in the attached *ECDC Updated Rapid Risk Assessment on Severe Respiratory Disease Associated with Middle East Respiratory Syndrome Coronavirus (MERS-CoV)* and also at the CDC website: <http://www.cdc.gov/coronavirus/ncv/>

Patients who meet the above criteria for investigation of MERS-CoV infection should be reported to your local health department and to MDCH, Communicable Disease Division at 517-335-8165.

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