

Communicable Disease Branch

2014 Program Alert # 4

“Middle East Respiratory Syndrome Coronavirus”

Date: June 24, 2014



To: Communicable Disease Staff in Local Health Departments

From: Zack Moore, MD, MPH, Medical Epidemiologist

Middle East Respiratory Syndrome Coronavirus (MERS-CoV) has been made immediately reportable in North Carolina effective June 23, 2014, under Temporary Order of the N.C. State Health Director. The following resources are included for your use:

1. MERS-CoV memo to N.C. Health Care Providers, updated 24 Jun 2014. Please distribute this information to physicians in your jurisdiction.
2. CDC MERS Person Under Investigation (PUI) reporting form. This form should be used for data collection until a part II disease reporting form for MERS-CoV is available in NCEDSS.

Overview

MERS-CoV is a novel coronavirus that was first identified in September of 2012 and has been associated with severe respiratory infections among persons who live in or have traveled to the Middle East and persons (including health care providers) exposed to MERS cases outside of the Middle East. The first travel-associated cases in the United States were confirmed in May, 2014. There has been clear evidence of person-to-person transmission both in household and healthcare settings, but no evidence of sustained person-to-person transmission in the community.

Surveillance and Case Investigation

A person with the following characteristics should be considered a patient under investigation:

- A. Fever AND pneumonia or acute respiratory distress syndrome (based on clinical or radiological evidence) AND EITHER:
- a history of travel from countries in or near the Arabian Peninsula¹ within 14 days before symptom onset, OR
 - close contact² 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 Peninsula¹ 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.

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 in which recent healthcare-associated cases of MERS have been identified.³

Please use the attached CDC MERS Person Under Investigation (PUI) reporting form and advise DPH of all cases being investigated. You may fax the case investigation report form to (919) 733-0490.

¹ Countries considered in the Arabian Peninsula and neighboring include: Bahrain; Iraq; Iran; Israel, the West Bank, and Gaza; Jordan; Kuwait; Lebanon; Oman; Qatar; Saudi Arabia; Syria; the United Arab Emirates (UAE); and Yemen (map on CDC site)

² Close contact is defined as: a) being within approximately 6 feet or within the room or care area for a prolonged period of time (e.g., healthcare personnel, household members) while not wearing recommended personal protective equipment (i.e., gowns, gloves, respirator, eye protection); or b) having direct contact with infectious secretions (e.g., being coughed on) while not wearing recommended personal protective equipment (i.e., gowns, gloves, respirator, eye protection). Data to inform the definition of close contact are limited. At this time, brief interactions, such as walking by a person, are considered low risk and do not constitute close contact.

³ As of June 1, 2014, Jordan, Saudi Arabia, UAE; this may change as more information becomes available.

Diagnosis and Prevention Measures

Testing for MERS-CoV is available at the North Carolina State Laboratory of Public Health. Testing requires consultation and pre-approval from the state Communicable Disease Branch. Detailed information about specimen collection and transport is available at <http://slph.ncpublichealth.com/doc/NCSLPH-MERS-CoV-Guidelines.pdf>.

Standard, contact, and airborne precautions are recommended for management of hospitalized patients with known or suspected MERS-CoV infection. These include:

- Use of fit-tested NIOSH-approved N95 or higher level respirators
- Use of gowns, gloves and eye protection
- Use of negative-pressure airborne infection isolation rooms if available

A facemask should be placed on the patient if an airborne infection isolation room is not available or if the patient must be moved from his/her room. Additional guidance is available at <http://www.cdc.gov/coronavirus/mers/infection-prevention-control.html>.

Resources

CDC information and updates: <http://www.cdc.gov/coronavirus/mers/index.html>.

NC DPH information and updates: <http://epi.publichealth.nc.gov/cd/diseases/merscov.html>.

Please contact the CDB Epidemiologist On-Call at (919) 733-3419 with any questions.

