



TO:	Primary care providers, ERs, pulmonologists, student health, urgent care, nursing homes, infection control, and public health.	
FROM:	Joseph Acierno, M.D. J.D.	Thomas J. Safranek, M.D.
	Chief Medical Officer	State Epidemiologist
	State of Nebraska	402-471-2937 PHONE
	402-471-8566 PHONE	402-471-3601 FAX
RE:	Updated Guidance for the Evaluation of Severe Respiratory Illness Associated with Middle East Respiratory Syndrome Coronavirus (MERS-CoV)	
DATE:	<u>August 19, 2013</u>	

Middle East Respiratory Syndrome Coronavirus (MERS-CoV) emerged in Saudi Arabia in September of 2012, and has raised public health concerns because of its similarities to the SARS virus (both are corona viruses), and because of its high case fatality ratio. Worldwide, _94__ cases have been reported, 46 of which were fatal. All case patients have been in Saudi Arabia or epidemiologically linked to Saudi Arabia. To date, no cases have been reported in the United States. To view the previous HAN regarding MERS-CoV that was sent out June 7th go to http://dhhs.ne.gov/publichealth/Pages/han_messages.aspx#Alerts.

Key facts:

Person-to person transmission/nosocomial transmission: YES Diagnostic test: real time reverse transcription polymerase chain reaction (RT-PCR). Nebraska Public Health Lab can run this test. Treatment: No specific treatment; care is supportive

- **NEW FACT:** Incubation period has been extended from 10 days to 14 days following an exposure
- **NEW FACT:** In patients who meet certain clinical and epidemiologic criteria, testing for MERS CoV and other respiratory pathogens can be done simultaneously and that positive results for another respiratory pathogen should not necessarily preclude testing for MERS-CoV.
- **NEW FACT:** Clusters of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) should be evaluated for common respiratory pathogens and reported to local and state health departments. If the illnesses remain unexplained, testing for MERS-CoV should be considered, in consultation with state and local health departments.

This is an official CDC HEALTH UPDATE

Distributed via the CDC Health Alert Network August 12, 2013, (12:00 PM ET) CDCHAN-00352

Notice to Healthcare Providers and Public Health Officials: Updated Guidance for the Evaluation of Severe Respiratory Illness Associated with Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

Summary

The Centers for Disease Control and Prevention (CDC) continues to work closely with the World Health Organization (WHO) and other partners to better understand the public health risks posed by Middle East Respiratory Syndrome Coronavirus (MERS-CoV). To date, no cases have been reported in the United States. The purpose of this health update is 1) to provide updated guidance to healthcare providers and state and local health departments regarding who should be tested for MERS-CoV infection, 2) to make them aware of changes to CDC's "probable case" definition, and 3) to clarify what specimens should be obtained when testing for MERS-CoV. Please disseminate this information to infectious disease specialists, intensive care physicians, primary care physicians, and infection preventionists, as well as to emergency departments and microbiology laboratories.

Background

MERS-CoV, formerly called novel coronavirus, is a beta coronavirus that was first described in September 2012. As of August 12, 2013, 94 laboratory-confirmed cases have been reported to WHO. Of those cases, 49% (46) were fatal. All diagnosed cases were among people who resided in or traveled from four countries (Kingdom of Saudi Arabia, United Arab Emirates, Qatar, or Jordan) within 14 days of their symptom onset, or who had close contact with people who resided in or traveled from those countries. Cases with a history of travel from these countries or contact with travelers from these countries have been identified in residents of France, the United Kingdom, Tunisia, and Italy. **To date, no cases have been reported in the United States.** The most up-to-date details about the number of MERS-CoV cases and deaths by country of residence are on CDC's MERS website (http://www.cdc.gov/coronavirus/mers/index.html).

Updates to Interim Guidance and Case Definitions

Interim Guidance for Health Professionals: Patients in the U.S. Who Should Be Evaluated

CDC has changed its criteria for who should be evaluated for MERS-CoV. In the previous guidance (<u>HAN</u> <u>348</u>, dated June 7, 2013), CDC did not recommend MERS-CoV testing for people whose illness could be explained by another etiology. The new guidance states that, in patients who meet certain clinical and epidemiologic criteria, testing for MERS-CoV and other respiratory pathogens can be done simultaneously and that positive results for another respiratory pathogen should not necessarily preclude testing for MERS-CoV.

The new guidance also clarifies recommendations for investigating clusters of severe acute respiratory illness when there is not an apparent link to a MERS-CoV case. Clusters of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) should be evaluated for common respiratory pathogens and reported to local and state health departments. If the illnesses remain unexplained, testing for MERS-CoV should be considered, in consultation with state and local health departments.

For CDC's updated interim guidance for healthcare professionals, see (http://www.cdc.gov/coronavirus/mers/interim-guidance.html).

Case Definitions

CDC has not changed the case definition of a confirmed case, but the criteria for laboratory confirmation have been clarified. CDC has changed its definition of a probable case so that identification of another etiology does not exclude someone from being classified as a "probable case."

For CDC's updated case definitions, see (http://www.cdc.gov/coronavirus/mers/case-def.html).

CDC may change its guidance about who should be evaluated and considered a case as we learn more about the epidemiology of MERS-CoV infection and risk of transmission.

Interim Guidance about Testing of Clinical Specimens

CDC recommends collecting multiple specimens from different sites at different times after symptom onset. Lower respiratory specimens are preferred, but collecting nasopharyngeal and oropharyngeal (NP/OP) specimens, as well as stool and serum, are strongly recommended. This will increase the likelihood of detecting MERS-CoV infection. For more information, see CDC's Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens (<u>http://www.cdc.gov/coronavirus/mers/guidelines-clinical-specimens.html</u>). Many state health department laboratories are approved for MERS-CoV testing using the CDC rRT-PCR assay. Contact your state health department to notify them of people who should be evaluated for MERS-CoV and to request MERS-CoV testing. If your state health department is not able to test, contact CDC's EOC at 770-488-7100.

^{*}In accordance with the WHO's guidance for MERS-CoV, 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. See WHO's Interim Surveillance Recommendations for Human Infection with Middle East Respiratory Syndrome Coronavirus

(http://www.who.int/csr/disease/coronavirus_infections/InterimRevisedSurveillanceRecommendations_nC oVinfection_27Jun13.pdf).

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.