Buncombe County Health and Human Services
Aging and Veteran's Services ~ Social Work Services
Public Assistance & Work Support Strategies ~ Public Health
Amanda Stone, MSW
Health and Human Services Director

To: Buncombe County Medical Providers

From: Dr. Jennifer Mullendore, Medical Director

Date: April 14, 2014

RE: **Health Alert:** First case of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) infection in the United States

Please see the attached CDC Health Advisory (summarized below) regarding the **first case of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) infection in the United States**.

- This case was identified in Indiana in a person who had recently traveled to the Arabian Peninsula.
    - **No links to North Carolina have been identified at this time.** However, this incident serves as a reminder to **consider MERS-CoV infection in travelers from the Arabian Peninsula and neighboring countries**.

Clinicians caring for patients in whom MERS-CoV infection is being considered should immediately contact their health department (Buncombe County Disease Control 250-5109) or call the state Communicable Disease Branch at 919-733-3419 (both available 24/7) to discuss laboratory testing and control measures. Testing for MERS-CoV is available at the North Carolina State Laboratory of Public Health with consultation and pre-approval from the state Communicable Disease Branch.

Additional information for the public and for clinicians in North Carolina is available at http://epi.publichealth.nc.gov/cd/diseases/merscov.html. Updated information will be provided as the situation evolves.

Please contact me or the Buncombe County Disease Control staff (#250-5109) if you have any questions re: this or other communicable disease concerns.
Thanks,

Jenni

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MERS CoV

- 1st known cases occurred in Jordan in April 2012
- associated with severe and often fatal respiratory infections among persons who live in or have traveled to the Arabian Peninsula*
- small number of cases in person who were in close contact with infected travelers, but no evidence of sustained person-to-person spread
- different from all coronaviruses previously associated with human infections, including SARS
- no current vaccine

Case Investigation and Testing

- **Evaluate for MERS-CoV infection in persons who meet the following criteria:**
  - Those who develop severe acute lower respiratory illness within 14 days after travel from countries in or near the Arabian Peninsula (*excluding* those who only passed through airports); **OR**
  - are close contacts of a symptomatic recent traveler from this area who has fever and acute respiratory illness; **OR**
  - are close contacts of a confirmed case.
    - Close contact is defined as providing care for the patient (e.g., a healthcare worker or family member not adhering to recommended infection control precautions), or having similar close physical contact; or stayed at the same place (e.g. lived with, visited) as the patient while the patient was ill.
- **Clinicians evaluating patients meeting these criteria should immediately contact their local health department or the state Communicable Disease Branch (919-733-3419; available 24/7).**
- Testing for MERS-CoV and other respiratory pathogens can be done at the same time.
- Positive results for another respiratory pathogen should not preclude testing for MERS-CoV because co-infection can occur.
- **In addition, any clusters of patients with severe acute respiratory illness (fever and pneumonia requiring hospitalization) without recognized links to cases of MERS-CoV or to travelers from areas in or near the Arabian Peninsula should be evaluated for common respiratory pathogens.**
  - **If the illnesses remain unexplained, providers should consider testing for MERS-CoV *in consultation with local and state health departments*.**
- **Closely monitor for fever (T >100F) or respiratory symptoms in anyone who has had close contact with a confirmed or probable case or a person being evaluated for MERS-CoV while the person was ill.**
  - If fever or respiratory symptoms develop within the first 14 days following contact, the person should be evaluated for MERS-CoV infection.
- **The following specimens should be collected for suspected MERS-CoV cases:**
  - Nasopharyngeal swab
  - Oropharyngeal swab
  - Sputum

- Serum
- Stool/rectal swab

Infection Control

- Transmission of MERS CoV has been documented in healthcare settings.
- Healthcare providers should adhere to **standard, contact and airborne precautions** while managing symptomatic contacts and patients who are being evaluated for or who have probable or confirmed MERS-CoV infections.
  - **Use of:**
    - **Gloves**
    - **Gown**
    - **Eye protection (goggles or face shield)**
    - **Respiratory protection that is at least as protective as a fit-tested NIOSH-certified disposable N95 respirator**
    - **Negative-pressure airborne infection isolation room**
  - **Prior to placement in the airborne infection isolation room and whenever the patient must be moved from such a room, a facemask should be worn by the patient.**

Treatment

- **No specific treatment is currently available** for treatment of MERS-CoV.

Recommendations are likely to change as new information becomes available. Updated information and guidance are available from the CDC at **http://www.cdc.gov/coronavirus/mers/interim-guidance.html**

* 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.

This is an official

CDC HEALTH ADVISORY

Distributed via the CDC Health Alert Network
May 3, 2014, 16:30 (4:30 PM ET)
CDCHAN-00361

Confirmed Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Case in Indiana, 2014

Summary:
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 patient is in a hospital in Indiana after having flown from Saudi Arabia to Chicago via London. The purpose of this HAN is to alert clinicians, health officials, and others to increase their index of suspicion to consider MERS-CoV infection in travelers from the Arabian Peninsula and neighboring countries. 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:
The first known cases of MERS-CoV occurred in Jordan in April 2012. The virus is associated with respiratory illness and high death rates, although mild and asymptomatic infections have been reported too. All reported cases to date have been linked to six countries in the Arabian Peninsula: Saudi Arabia, Qatar, Jordan, the United Arab Emirates (UAE), Oman, and Kuwait. Cases in the United Kingdom, France, Italy, Greece, Tunisia, Egypt, and Malaysia have also been reported in persons who traveled from the Arabian Peninsula. In addition, there have been a small number of cases in persons who were in close contact with those infected travelers. Since mid-March 2014, there has been an increase in cases reported from Saudi Arabia and UAE. Public health investigations are ongoing to determine the reason for the increased cases. There is no vaccine yet available and no specific treatment recommended for the virus. In some cases, the virus has spread from infected people to others through close contact. However, there is currently no evidence of sustained spread of MERS-CoV in community settings. Additional information is available at (http://www.cdc.gov/coronavirus/mers/index.html).

Recommendations:
Healthcare providers should be alert for and evaluate patients for MERS-CoV infection who 1) 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; or 2) are close contacts of a symptomatic recent traveler from this area who has fever and acute respiratory illness; or 3) are 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.

Clusters of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) without recognized links to cases of MERS-CoV or to travelers from countries in or near the Arabian peninsula should be evaluated for common respiratory pathogens. If the illnesses remain unexplained, providers should consider testing for MERS-CoV, in consultation with state and local health

departments. Healthcare professionals should immediately report to their state or local health department any person being evaluated for MERS-CoV infection as a patient under investigation (PUI). Additional information, including criteria for PUI are at http://www.cdc.gov/coronavirus/mers/interim-guidance.html. Healthcare providers should contact their state or local health department if they have any questions.

Persons at highest risk of developing infection are those with close contact to a case, defined as any person who provided care for a patient, including a healthcare provider or family member not adhering to recommended infection control precautions (i.e., not wearing recommended personal protective equipment), or had similarly close physical contact; or any person who stayed at the same place (e.g. lived with, visited) as the patient while the patient was ill.

Healthcare professionals should carefully monitor for the appearance of fever (T> 100F) or respiratory symptoms in any person who has had close contact with a confirmed case, probable case, or a PUI while the person was ill. If fever or respiratory symptoms develop within the first 14 days following the contact, the individual should be evaluated for MERS-CoV infection. Ill people who are being evaluated for MERS-CoV infection and do not require hospitalization for medical reasons may be cared for and isolated in their home. (Isolation is defined as the separation or restriction of activities of an ill person with a contagious disease from those who are well.). Providers should contact their state or local health department to determine whether home isolation, home quarantine or additional guidance is indicated since recommendations may be modified as more data becomes available. Additional information on home care and isolation guidance is available at http://www.cdc.gov/coronavirus/mers/hcp/home-care.html.

Healthcare providers should adhere to recommended infection-control measures, including standard, contact, and airborne precautions, while managing symptomatic contacts and patients who are persons under investigation or who have probable or confirmed MERS-CoV infections. For CDC guidance on MERS-CoV infection control in healthcare settings, see Interim Infection Prevention and Control Recommendations for Hospitalized Patients with MERS-CoV at http://www.cdc.gov/coronavirus/mers/infection-prevention-control.html.

For suspected MERS-CoV cases, healthcare providers should collect the following specimens for submission to CDC or the appropriate state public health laboratory: nasopharyngeal swab, oropharyngeal swab (which can be placed in the same tube of viral transport medium), sputum, serum, and stool/rectal swab. Recommended infection control precautions should be utilized when collecting specimens. Specimens can be sent using category B shipping containers. Providers should notify their state or local health departments if they suspect MERS-CoV infection in a person. State or local health departments should notify CDC if MERS-CoV infection in a person is suspected. Additional information is available at http://www.cdc.gov/coronavirus/mers/guidelines-clinical-specimens.html.

Additional or modified recommendations may be forthcoming as the investigation proceeds.

For more Information:
For more information, for consultation, or to report possible cases, please contact the CDC Emergency Operations Center at (770) 488-7100.

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.

Categories of Health Alert Network messages:
Health Alert Requires immediate action or attention; highest level of importance
Health Advisory May not require immediate action; provides important information for a specific incident or situation
Health Update Unlikely to require immediate action; provides updated information regarding an incident or situation
HAN Info Service Does not require immediate action; provides general public health information
##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##