



To: CAHAN San Diego Participants
Date: May 15, 2014

Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

This health alert provides an update on recent MERS-CoV detections in the United States and the Middle East and contains resource links and recommendations for local healthcare providers.

Update on Cases

On May 2, 2014, the Centers for Disease Control and Prevention (CDC) confirmed the [first U.S. case of MERS-CoV](#) infection in a healthcare worker who resides and works in the Kingdom of Saudi Arabia (KSA) and had traveled to Indiana. CDC confirmed a [second MERS-CoV case](#) on May 11 in a healthcare worker who resides and works in KSA and had traveled to Florida. The two U.S. cases are not linked and no San Diego resident has been identified as a travel contact of either case.

CDC released an [MMWR report](#) yesterday on MERS-CoV. Since March 2014, increased numbers of MERS-CoV cases have been reported from KSA and the United Arab Emirates (UAE). As of May 12, 2014, 536 laboratory-confirmed cases have been reported worldwide, including 145 deaths. Most reported cases have been from KSA (450 confirmed cases; 118 deaths).

Updated MERS-CoV information may be found at dedicated websites maintained by [CDC](#) and the [World Health Organization \(WHO\)](#). Additional imported cases of MERS-CoV may occur in the United States.

Disease Management

Common symptoms in patients with MERS-CoV include fever, cough, shortness of breath, and breathing difficulties. Most patients have had pneumonia. Many cases have had pre-existing health conditions that could have put them at increased risk for acquiring the infection or having greater morbidity.

There is currently no specific treatment for MERS-CoV. Case fatality has been 27%. Transmission has occurred primarily in household and healthcare settings, with 19% of cases in healthcare personnel.

Recommendations to Healthcare Providers

Actions requested of clinicians regarding MERS-CoV are as follows:

- Obtain a recent travel history as early as possible in the evaluation of every patient presenting with severe acute lower respiratory illness.
- Evaluate for MERS-CoV in any patient who has fever ($\geq 38^{\circ}\text{C}$, 100.4°F) and pneumonia or acute respiratory distress syndrome (based on clinical or radiological evidence); AND EITHER
 - History of travel from countries in or near the Arabian Peninsula, including Bahrain, Iraq, Iran, Israel, Jordan, KSA, Kuwait, Lebanon, Oman, Palestinian Territories, Qatar, Syria, UAE, and Yemen within 14 days before symptom onset; OR
 - [Close contact](#) 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 Peninsula; OR
 - Is 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.
- Utilize appropriate infection prevention and control with any [person under investigation \(PUI\) for MERS-CoV](#). A PUI for MERS-CoV should be immediately placed in a private room with the door closed until an isolation room can be arranged. Standard, contact, and airborne precautions (including eye protection) are recommended for [management of hospitalized known or suspected MERS-CoV patients](#). WHO has also posted guidance on the [clinical management of](#)

[MERS-CoV patients](#). Two [CDC-developed checklists](#) are available to healthcare providers and healthcare facilities to enhance preparedness for MERS-CoV infection control.

- **Immediately report any person under investigation for MERS-CoV** to the Epidemiology Program by phone at 619-692-8499 (Mon-Fri 8-5) or 858-565-5255 (after hours).
- Obtain patient specimens for MERS-CoV in consultation with the Epidemiology Program and the Public Health Laboratory (619-692-8500). [CDC guidelines for collecting, handling, and testing clinical specimens](#) should be followed. CDC recommends collecting multiple specimens from different sites to increase the likelihood of detecting MERS-CoV infection. Of highest priority are specimens from the lower respiratory tract (e.g., bronchoalveolar lavage, tracheal aspirate, and sputum) followed by specimens from the upper respiratory tract (e.g., nasopharyngeal or oropharyngeal swabs, nasopharyngeal wash and nasopharyngeal aspirates) and sera (5-10 cc). Stool can also be tested, but delivery of respiratory tract and serum specimens should not be delayed while awaiting stool specimens.
- Evaluate persons with severe acute lower respiratory illness for common causes of community-acquired pneumonia, such as influenza A and B, respiratory syncytial virus, *Streptococcus pneumoniae*, and *Legionella pneumophila* at the same time as obtaining laboratory specimens for MERS-CoV. Positive results for another respiratory pathogen should not necessarily preclude testing for MERS-CoV, since co-infection can occur.
- Advise patients that there are no travel restrictions in effect for the Arabian Peninsula or neighboring countries at this time. [CDC has recommended that travelers](#) to countries in or near the Arabian Peninsula who plan to work in healthcare settings take enhanced precautions and monitor their health during and after the trip.
- Instruct all travelers from the region that if fever with cough or shortness of breath develops within 14 days after travel, they should seek care promptly, but they should contact their healthcare provider prior to arrival so that appropriate infection control precautions may be taken.

Additional information on MERS-CoV for healthcare providers is available on the [CDC MERS-CoV website](#). Another useful resource for clinicians is the California Department of Public Health (CDPH) MERS-CoV Quicksheet, recently updated on the [CDPH MERS-CoV website](#).

Thank you for your continued participation.

CAHAN San Diego

County of San Diego, Health & Human Services Agency
Epidemiology and Immunization Services Branch
Phone: (619) 692-8499, Fax: (858) 715-6458
Urgent Phone for pm/weekends/holidays: (858) 565-5255
E-mail: cahan@sdcounty.ca.gov
Secure Website: <http://cahan.ca.gov>
Public-Access Website: <http://www.cahansandiego.com>