



COUNTY OF ERIE

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DEPARTMENT OF HEALTH

HEALTH ADVISORY # 333

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Information and Guidelines for Evaluation of Patients for Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Infection

Please distribute to Health Care Providers, Infectious Disease Department, Emergency Department, Infection Control Department, Medical Director, Laboratory Department, and all patient care areas.

SUMMARY

The Centers for Disease Control and Prevention (CDC) continues to work with the World Health Organization (WHO) and other partners to closely monitor Middle East Respiratory Syndrome Coronavirus (MERS-CoV) to better understand the risks to public health. The purpose of this Advisory is to provide guidance to healthcare providers in the evaluation of patients for MERS-CoV infection. Healthcare providers and public health officials should maintain awareness of the need to consider MERS-CoV infection in ill persons who have recently traveled from countries in or near the Arabian Peninsula¹ or in the Republic of Korea as outlined in the guidance below.

First identified and reported to cause severe acute respiratory illness in September 2012, MERS-CoV has caused infections worldwide, with 25 countries reporting cases to date. As of June 10, 2015, 1,219 laboratory-confirmed² cases of MERS-CoV infection have been reported to and confirmed by WHO, including at least 449 (37%) deaths. The majority of cases (~85%) have been reported from Kingdom of Saudi Arabia (KSA). All reported cases have been directly or indirectly linked through travel or residence to nine countries: KSA, United Arab Emirates (UAE), Qatar, Jordan, Oman, Kuwait, Yemen, Lebanon, and Iran. **In the United States (US), nationwide surveillance for MERS-CoV has been ongoing since 2012. As of June 5, 2015, 584 total persons have been tested in the US. Two patients tested positive for MERS-CoV in May 2014 and were determined to be imported cases from KSA; the remaining 582 patients tested negative.**

RECOMMENDATIONS

CDC continues to recommend that healthcare providers throughout the US be prepared to detect and manage cases of MERS. Healthcare providers should continue to routinely ask their patients about their travel history and healthcare facility exposure and to consider a diagnosis of MERS-CoV infection in persons who meet the criteria for patient under investigation (PUI), which has been revised to include considerations of recently being in a Korean healthcare facility and is available at <http://www.cdc.gov/coronavirus/mers/case-def.html>. Specifically, persons who meet

the following updated criteria for PUI should be evaluated for MERS-CoV infection in addition to other common respiratory pathogens³ and reported immediately to the Erie County Department of Health:

- A. Fever **AND** pneumonia or acute respiratory distress syndrome (based on clinical or radiologic evidence) **AND** one of the following:
- A history of travel from countries in or near the Arabian Peninsula¹ within 14 days before symptom onset, **OR** close contact⁴ 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 history of being in a healthcare facility (as a patient, worker, or visitor) in the Republic of Korea within 14 days before symptom onset, **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 in the US,

OR

- B. Fever **AND** symptoms of respiratory illness (not necessarily pneumonia; e.g., cough, shortness of breath) **AND** a history of 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 Peninsula¹ in which recent healthcare-associated cases of MERS have been identified,

OR

- C. Fever **OR** symptoms of respiratory illness (not necessarily pneumonia; e.g., cough, shortness of breath) **AND** close contact⁴ with a confirmed MERS case while the case was ill.

The above criteria serve as guidance for testing; however, patients should be evaluated and discussed with the Erie County Department of Health on a case-by-case basis if their clinical presentation or exposure history is equivocal (e.g., uncertain history of health care exposure).

REPORTING

Please report all PUI's to the Erie County Department of Health at (716) 858-7697 from 8:00am to 4:00pm and (716) 961-7898 after hours, weekends and holidays.

ADDITIONAL INFORMATION:

Guidance on the evaluation of patients for MERS-CoV infection, clinical specimen collection and testing, infection control, and home care and isolation measures is available on the CDC MERS website at <http://www.cdc.gov/coronavirus/mers/index.html>.

Guidance on MERS-CoV infection control in healthcare settings is available at <http://www.cdc.gov/coronavirus/mers/infection-prevention-control.html>.

Guidance on collecting multiple specimens from different sites after symptom onset for testing with the CDC MERS-CoV rRT-PCR assay, including a lower respiratory specimen (e.g., sputum, bronchoalveolar lavage fluid, or tracheal aspirate), a nasopharyngeal/oropharyngeal

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swab, and serum is available on the CDC website at <http://www.cdc.gov/coronavirus/mers/guidelines-clinical-specimens.html>.

Guidance to prevent MERS-CoV from spreading in homes and communities in the US is available at <http://www.cdc.gov/coronavirus/mers/hcp/home-care.html>.

Guidance for clinical management of MERS patients is available at http://www.who.int/csr/disease/coronavirus_infections/InterimGuidance_ClinicalManagement_NovelCoronavirus_11Feb13u.pdf?ua=1.

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; and Yemen.

² Confirmatory laboratory testing requires a positive polymerase chain reaction test result on at least two specific genomic targets for MERS-CoV or a single positive target with sequencing on a second.

³ Examples of respiratory pathogens causing community-acquired pneumonia include influenza A and B, respiratory syncytial virus, *Streptococcus pneumoniae*, and *Legionella pneumophila*.

⁴ Close contact is defined as: a) being within approximately 6 feet (2 meters) 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—see <http://www.cdc.gov/coronavirus/mers/infection-prevention-control.html>); 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—see <http://www.cdc.gov/coronavirus/mers/infection-prevention-control.html>). 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.

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Health Category Definitions:

Health Alert FLASH: conveys the highest level of importance due to a large-scale, catastrophic public health emergency; warrants immediate action or attention

Health Alert Priority: conveys the highest level of importance; warrants immediate action or attention to a health problem or situation

Health Advisory: provides important information for a specific incident or situation; may not require immediate action

Health Update: provides updated information regarding an incident or situation; no immediate action necessary

The ECDOH Health Alert & Advisory System is an e-mail notification system designed to alert community partners about important health related information. You can sign up to receive alerts & advisories at <http://www2.erie.gov/health/index.php?q=node/59>.

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