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SUBJECT: DHSS Health Advisory for Legionella

The St. Louis Marriott West hotel in St. Louis County, Missouri is under investigation following two Legionnaire’s disease case reports of individuals that stayed at the hotel. Public information released on December 14th and 18th, 2018 directs individuals with symptoms of Legionnaire’s disease that have stayed at the hotel within 14 days of illness onset to seek medical care. This health alert provides general guidance for healthcare providers that may see patients who fit these criteria.

Most people with Legionnaires’ disease will have pneumonia since the Legionella bacteria grow and thrive in the lungs. Legionellosis is not spread from person to person. Legionella grow best in warm water sources, such as hot tubs or hot water tanks. The infection is primarily acquired through inhalation of mist or vapor containing the bacteria, or by aspiration of contaminated water into the lungs. Environmental risk factors associated with legionellosis outbreaks are travel, residence in a health care facility, and proximity to cooling towers, whirlpool spas, decorative fountains, and grocery produce misters.

Though most individuals exposed to Legionella will not get sick, some persons have an elevated risk of acquiring legionellosis. Such individuals include those with the following risk factors:

- Age of 50 years or older
- Diabetes
- Current or former smoker
- Chronic lung disease
- Weakened immune system, including recipients of a transplant or chemotherapy

The most commonly used laboratory test for diagnosis of Legionnaires’ disease is the urinary antigen test, which detects a molecule of the L. pneumophila serogroup 1 in urine. L. pneumophila serogroup 1 is the serogroup that most commonly causes disease. Along with the urinary antigen test, isolation of the bacteria via culture of respiratory secretions, lung tissue, pleural fluid, or a normally sterile site is highly recommended since culture is a preferred diagnostic modality. Sputum should ideally be obtained prior to antibiotic administration, but antibiotic treatment should not be delayed.

The Infectious Disease Society of America (IDSA) guidelines recommend fluoroquinolone or azithromycin, as preferred, and doxycycline as an alternative treatment.

Legionellosis is a reportable disease in Missouri. All known or suspected cases should be reported to the local public health agency, or to DHSS at 573/751-6113 or 800/392-0272 (24/7). Questions should be directed to DHSS’ Bureau of Communicable Disease Control and Prevention at 573/751-6113. To view the press releases regarding this current investigation, please see the following links: