June 20, 2018

MEDICAL ADVISORY: RECENTLY REPORTED PERSONS WITH LEGIONNAIRES’ DISEASE

Dear Healthcare Provider,

The Hawaii Department of Health (HDOH) has confirmed 4 reported legionellosis cases in Oahu residents. Two may have had similar exposure, and two appear to be completely unrelated. All are well over age 50 years and had serious underlying medical conditions. One has recovered; one succumbed; two are hospitalized and still being treating for both legionellosis and their underlying conditions. Investigations are ongoing. HDOH is considering both community and healthcare exposures and have been working with partners to better assess the situation as well as provide recommendations for immediate prevention measures. HDOH reminds all healthcare providers that legionellosis is URGENTLY REPORTABLE—i.e., report by telephone as soon as you have made a provisional diagnosis and provide a written report within 3 days.

Legionella bacteria can cause two forms of disease. Legionnaires’ disease is a serious illness, resulting in fever, myalgia, and cough as well as clinical or radiographical signs of pneumonia, while Pontiac fever is a mild flu-like, usually self-limited illness. Transmission is via breathing aerosolized bacteria from contaminated water sources (e.g., showers, hot tubs, fountains, cooling towers). Drinking water is not considered a risk, and the disease is not transmitted person to person. The incubation period for Legionnaires’ disease can range from 2–10 days. However, for those with immunocompromising conditions, incubation tends to be shorter (i.e., ~2 days).

Clinicians should be aware any of the following factors increase risk for Legionnaires’ disease:
- Age 50 years or older
- Current or former smokers
- Chronic lung disease (e.g., chronic obstructive pulmonary disease or emphysema)
- Immune system disorders caused by disease processes, medical treatment, or medication (e.g., after transplant operation, chemotherapy, or immunomodulating therapy)
- Underlying illnesses such as cancer, diabetes, renal failure, or hepatic failure.

Preliminary diagnosis of Legionnaires’ disease is achieved by physical exam with chest imaging findings, especially in the background of appropriate clinical and past medical history. Diagnosis may be confirmed by testing urine for presence of *Legionella pneumophila* serogroup 1 antigen AND obtaining a respiratory specimen (i.e., at least sputum) for culture to detect other *Legionella spp.* not identifiable by the urine antigen test. Please request testing specifically for *Legionella* when ordering a culture, as cultivating this bacterium requires special medium.

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Timely identification and reporting to HDOH is critical to determine potential exposures and implement prevention measures. Clinicians should advise their at-risk patients about minimizing risk through limiting or avoiding exposure to sources of aerosolized water (e.g., fountains, hot tubs), adhering to established recommendations for cleaning and disinfecting any medical devices (e.g., avoid the use of tap water), and assuring their home water systems are maintained (e.g., maintaining appropriate temperature of one’s water heater).

If you have any questions or need to report a case, please contact us at one of the following numbers below.

- Oahu (Disease Reporting Line) ................................(808) 586-4586
- Maui District Health Office ......................................(808) 984-8213
- Kauai District Health Office .....................................(808) 241-3563
- Big Island District Health Office (Hilo) .................(808) 933-0912
- Big Island District Health Office (Kona) ...............(808) 322-4877
- After hours on Oahu............................................(808) 600-3625
- After hours on neighbor islands .........................(800) 360-2575 (toll free)

Additional information on legionellosis may be found at http://health.hawaii.gov/docd/disease_listing/legionellosis-legionnaires-disease/ and at https://cdc.gov/legionella/clinicians.html or https://cdc.gov/legionella/clinicians/diagnostic-testing.html.

We appreciate your vigilance and assistance in protecting our community, especially those at highest risk for this disease.

Sincerely,

Sarah Y. Park, MD, FAAP  
State Epidemiologist  
Hawaii Department of Health

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