



## Official Utah Department of Health and Human Services Health Alert and update

### HAN Title

HAN #: 04142023

**Intended audience:** The public health and healthcare community

**Title:** *Legionella* in Utah

### Summary:

Recently, *Legionella* bacteria was detected in the potable water distribution system in a hotel located in Central Utah. An out-of-state traveler passing through Utah likely contracted Legionnaires's disease in mid to late January 2023 from this location.

- Providers should consider *Legionella* infections when evaluating patients for community-acquired pneumonia. *Legionella* is known to be endemic in water systems in neighboring states and people can be exposed during travel to these regions.
- Diagnostic testing for *Legionella* infection should include both urine antigen and culture of respiratory specimens.
- Patients with confirmed or suspected *Legionella* infections should be reported to DHHS at 1-888-EPI-UTAH (374-8824 or appropriate electronic reporting channels).

### Background:

Legionnaires' disease, primarily caused by the bacterium *Legionella pneumophila*, is a respiratory illness characterized by fever, cough, shortness of breath, muscle aches, headaches, and pneumonia. Illness typically results in hospitalization and has a 10% fatality rate. Symptoms develop 2–14 days following exposure to an environmental source, primarily through inhalation of contaminated aerosolized water. Common risk factors for illness include age  $\geq 50$  years, cigarette smoking, underlying lung disease, diabetes, kidney disease, and immune-suppressing conditions. Patients should also be asked about travel in the 14 days prior to symptom onset as an estimated 20% of Legionnaires' disease cases are thought to

be associated with recent travel.

**Laboratory diagnosis and treatment:**

- Diagnostic tests include urine antigen testing (although this test only detects *L. pneumophila* serogroup 1, which accounts for 70-80% of infections) and culture of sputum or bronchoalveolar lavage fluid for *Legionella*. Culture is the optimal test and requires special culture media (buffered charcoal yeast extract medium). Respiratory specimens should be collected prior to giving antibiotics, if possible. Those facilities with limited capabilities for *Legionella* testing should work with an appropriate regional hospital or lab with capability to process clinical samples for testing. UPHL can support providers with submission of clinical specimens for *Legionella* culture, serotyping, and molecular testing (call 801-965-2598). Paired serologic testing is not a recommended diagnostic test and serologic results should not be used to determine treatment recommendations. For individuals with compatible illness, empiric treatment with a macrolide or fluoroquinolone is recommended.

**For more information:**

For more information, including guidelines for patient evaluation, diagnosis, and management, visit: <https://www.cdc.gov/legionella/index.html>

**Contact:**

Legionellosis is a reportable disease in Utah. To report a case to the Utah Department of Health and Human Services, call 1-888-EPI-UTAH (374-8824).

For questions, call 801-538-6191 or 1-888-EPI-UTAH (374-8824) or email [epi@utah.gov](mailto:epi@utah.gov) or Jeff Rogers—epidemiologist at [jcrogers@utah.gov](mailto:jcrogers@utah.gov)