

## COUNTY OF SAN LUIS OBISPO HEALTH AGENCY PUBLIC HEALTH DEPARTMENT

## **PROVIDER HEALTH ADVISORY**

**Date:** January 27, 2023

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## Request to Collect Clinical Samples to Aid Local Investigation of Legionella

The County of San Luis Obispo Public Health Department is requesting that clinicians collect patient specimens to further characterize legionellosis when indicated—not only to support patient care, but also to aid Public Health investigations in identifying environmental sources and halting transmission.

**Background**: The City of San Luis Obispo (SLO City) had zero resident cases of Legionnaires' disease between 2011-2020. Since October 2021, a total of 18 SLO County residents have been diagnosed with Legionnaires' disease, of which 12 have been SLO City residents. A legionellosis outbreak in November 2021 in SLO City was brought to a close through the matching of whole genome sequences between clinical and environmental samples. This outbreak involved six SLO City residents, two SLO County residents, and three travelers. Without clinical samples, a link between an environmental source and resident cases would likely never have been made and the environmental source may have continued to expose others to infection.

## Request to collect clinical samples to aid investigations:

The Public Health Department continues to see cases of legionellosis, especially in SLO City, which highlights the necessity of obtaining clinical samples early.

The Public Health Department is asking providers to do the following for hospital inpatients with pneumonia of unknown etiology:

- Include a urine antigen (UA) test for Legionella.
- If the UA is positive, promptly collect sputum or bronchial wash specimens before treatment is started, and send specimens to the SLO Public Health Lab. Sputum or bronchial wash specimens should be stored and transported under refrigerated conditions (2-8°C) within 4 days and frozen thereafter.

Sputum or bronchial wash samples are essential for attempting to isolate *Legionella*. If recovery is successful, the *Legionella* isolates can undergo whole genome sequencing. In the case of the 2021 outbreak, whole genome sequencing allowed diverse environmental samples to be compared to clinical samples, ultimately leading to the identification and remediation of the suspected source.

While the Public Health Department believes a source for the November 2021 outbreak was identified, there have been recent Legionnaires' cases without common exposures and without clinical specimens. Since *Legionella* is naturally occurring and found in many water systems, environmental samples alone cannot be used to identify sources of exposure. Without clinical samples, the Public Health Department has limited ability to identify patterns or sources of infection.

Thank you for your collaboration to reduce the spread of legionellosis.