

# Guidance for six-month retrospective surveillance during the investigation of a single, definite healthcare-associated case of Legionnaires' disease in a long-term care facility

Legionnaires' disease is characterized by fever, myalgia, cough, and clinical or radiographic pneumonia. A definite healthcare-associated case of Legionnaires' disease is a laboratory-confirmed case in a person who had been present in the healthcare facility continuously for  $\geq 10$  days before illness onset. A possible healthcare-associated case of Legionnaires' disease is a laboratory-confirmed case with illness onset occurring 2–9 days after facility admission.

If a single, definite healthcare-associated case of Legionnaire's disease is recognized, the healthcare facility should perform surveillance for additional cases, including retrospective and prospective surveillance. The following information provides guidance for six-month retrospective surveillance during the investigation of a single, definite healthcare-associated case of Legionnaires' disease.

1. Identify patients who were present in your facility from (-----) to (-----) (*6 months prior to date of illness onset in index patient*).
2. Of that group, identify patients who had a clinical diagnosis of pneumonia and/or radiographic evidence of pneumonia with onset occurring during the designated time period *and* at least two days after admission. Add each of these patients to a line list. Patients who had illness manifestations other than pneumonia, patients who had pneumonia with onset before the designated time period, and patients who had onset before admission or less than two days after admission should not routinely be included.
3. For each patient added to the line list in step 2, determine the following and add the information to the line list:
  - a. Date of illness onset.
  - b. Results of any *Legionella* urine antigen tests performed as part of the evaluation for the episode of pneumonia that occurred during the specified time period. This may require reviewing medical records from an acute care facility if the illness involved hospital admission. Document the *Legionella* urine antigen test results/date and acute care facility admission/discharge dates, if applicable.

4. If the patient did have a *Legionella* urine antigen test performed as part of the evaluation for the episode of pneumonia that occurred during the specified time period, additional urine antigen testing should not routinely be requested.
5. If the patient did not have a *Legionella* urine antigen test performed as part of the evaluation for the episode of pneumonia that occurred during the specified time period, order a *Legionella* urine antigen test now. Document on the line list that a urine antigen test is pending.
  - a. If the patient has been discharged from your facility, discuss with the local health department communicable disease nurse whether they should be contacted to arrange for *Legionella* testing. Document on the line list if a urine antigen test is pending.
6. For patients identified in step 2 who have a positive *Legionella* urine antigen test:
  - a. Indicate the positive urine antigen test result in the line list.
  - b. Complete the remaining information in the line list for these patients.
  - c. Review the medical record to determine classification as a definite or possible healthcare-associated case.
7. For patients identified in step 2 who have a negative *Legionella* urine antigen test:
  - a. Indicate the negative urine antigen test result in the line list.
  - b. No further action is required for these patients.