



Philadelphia Department of Public Health
Division of Disease Control

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Health Advisory

Legionnaires Disease Trends & Clinical Management

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SUMMARY POINTS

- A typical summer increase in Legionnaires disease is being observed in Philadelphia. All cases are sporadic. Providers should consider *Legionella* infection when evaluating patients for community acquired pneumonia
- Diagnostic tests for *Legionella* infection include urine antigen and culture of respiratory specimens.
- Cases should be reported to PDPH.

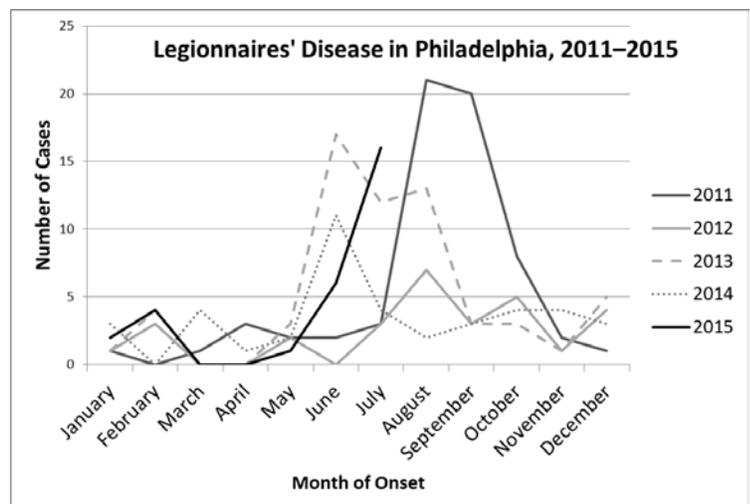
The Philadelphia Department of Public Health (PDPH) has received 24 laboratory-confirmed reports of Legionnaires' disease among Philadelphia residents this summer which is consistent with historical trends (Figure). Providers should consider *Legionella* infection when evaluating patients with community-acquired pneumonia, particularly those with underlying medical conditions or who are smokers.

Increases in Legionnaires' disease during summer months are well documented and have been associated with increased humidity and rainfall. In 2015, PDPH has investigated 31 confirmed Legionnaires' disease cases, 24 (77%) of which have been reported since June 14th 2015. Cases are predominately male and have a median age of 62 years (range 43–92 years). Seven (23%) individuals have diabetes, five (16%) have immunosuppressing conditions, and eight (26%) are current smokers. Thus far, all cases have resided in different areas of the city and have no epidemiological association with one another. The 2015 cases do not differ significantly in their demographics from cases reported in the previous five years.

Healthcare providers should consider *Legionella* infection when evaluating patients with community-acquired pneumonia or those with febrile respiratory illness. Common risk factors for illness include 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 acquired in association with recent travel.

Diagnostic tests include urine antigen testing (although this test only detects *L. pneumophila* serogroup 1 which accounts for 70-80% of infections) or culture of sputum or bronchial washings. Culture is the optimal test and requires special culture media. Paired serology testing is *not* a recommended test for clinical purposes. Empiric treatment of Legionnaires' disease should include a macrolide or fluoroquinolone effective against the bacteria.

Providers are reminded to report Legionnaires' disease cases to PDPH at 215-685-6748.



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Philadelphia Department of Public Health

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