



Philadelphia Department of Public Health
Division of Disease Control

DONALD F. SCHWARZ, MD, MPH
Deputy Mayor, Health & Opportunity
Health Commissioner

NAN FEYLER, JD, MPH
Chief of Staff

CAROLINE C. JOHNSON, MD
Director, Division of Disease Control

Health Advisory

Recent Increase in Legionnaire's Disease – Philadelphia

July 9, 2009

Over the last 5 weeks, there has been an increase in cases of *Legionella* pneumonia reported to the Philadelphia Department of Public Health. A total of 15 cases have been reported to the Division of Disease Control since June 1st 2009. This is 2-3 times the number of cases that were reported during these same weeks in previous years.

Investigation of these cases is ongoing, but no links have been identified to suggest a common source. The cases reside in different areas of the city, and have had different occupational and exposure histories. The majority have underlying medical conditions that likely predisposed them to infection. We are continuing to investigate all reported cases to identify possible connections, but increases of sporadic cases of Legionnaire's Disease are not uncommon during summer months, and have also been correlated with periods of heavy rainfall (Fisman DM et al. JID 2005;192: 2066-2073). Public health agencies in the state of Delaware and in New York City have also reported recent increases in sporadic cases of legionellosis, although neighboring counties in the Philadelphia suburbs have not observed a similar increase.

The Philadelphia Department of Public Health makes the following recommendations:

- Healthcare professionals should consider the diagnosis of Legionnaire's Disease in patients who present with community-acquired pneumonia, particularly among individuals with underlying medical illness and/or tobacco use.
- Obtain appropriate diagnostic tests from patients in whom the diagnosis of *Legionella* pneumonia is considered:
 - Urine antigen testing is widely available and provides rapid results, although only detects disease due to *L. pneumophila* serogroup 1 (which accounts for between 70-80% of *Legionella* infections).
 - Sputum and bronchial washings can be submitted for culture, which allows for molecular typing, comparison with isolates from other cases and environmental sources, and recognition of legionellosis due to strains other than *L. pneumophila* serogroup 1. Special media is required to culture *Legionella* bacteria; this culture must be requested specifically.
 - Serologic diagnosis can be made by detecting a four-fold rise in IgG antibody to *Legionella* between an acute and convalescent phase serum specimens drawn 3 to 6 weeks apart.
- Report all suspected or confirmed cases to the Division of Disease Control, 215-685-6748. After hours, for urgent case reports, call 215-686-1776 and ask to speak with the person on-call for the division. Callers from within Philadelphia can dial 311.