



NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
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Commissioner

2015 ALERT # 24

UPDATE: Clinical Management of Respiratory Illness in the South Bronx

Please Share this Alert with All Emergency Medicine, Family Medicine, Primary Care, HIV Specialists, Infectious Disease, and Internal Medicine Staff in Your Facility

- The Health Department is investigating an outbreak of Legionnaires' Disease in the South Bronx.
- Health providers should have a high index of suspicion for *Legionella* when evaluating patients with respiratory illness or sepsis who live in, work in, or recently visited the South Bronx.
- In patients with suspected pneumonia, test for *Legionella* infection. Testing should be done using urine antigen and, whenever possible, by culture of sputum or other respiratory secretions.
 - When ordering culture, specify the intent to identify *Legionella*, as laboratory procedures for identifying this organism are different from standard respiratory specimen cultures.
- Empiric treatment of pneumonia should include a macrolide or quinolone that has activity against *Legionella*.

August 2, 2015

Dear Colleagues,

The Health Department is investigating an outbreak of Legionnaires' Disease in the South Bronx, primarily affecting persons who live in High Bridge, Morrisania, Hunts Point, and Mott Haven. Since July 8, 2015, 71 cases of *Legionella* infection, including four related deaths, have been reported among people who live in, work in, or visit this area. The median age of cases is 54 years (range 30-80), and 59% are male. Common comorbid health conditions among cases include chronic obstructive lung disease, other lung diseases, diabetes, and chronic use of alcohol, cigarettes, and/or illicit substances. At least 7 (10%) cases are HIV-infected. Five cooling towers in the outbreak zone have been identified as possible sources for these infections and have been remediated. Because the incubation period for this infection can be as long as 10 days, persons may have been infected before remediation and could develop illness within the next week.

Physicians should maintain a high index of suspicion for *Legionella* infection among people who live in, work in, or visit the South Bronx and have respiratory illness or sepsis. Patients are at highest risk for infection and severe disease if they have an immune-compromising condition, chronic lung disease, or diabetes, if they are past or current smokers, and if they are elderly.

Legionella infection is best diagnosed by urine antigen test or culture of a respiratory tract specimen (sputum, tracheal aspirate, or bronchoalveolar lavage). Respiratory tract specimens should ideally be

obtained before initiation of antibiotics, although antibiotics should not be delayed to obtain a specimen. When ordering cultures, physicians must specify that the culture is for *Legionella*, because the laboratory must use special culture media. We do not recommend serology as a method of diagnosis. Legionnaires' Disease cannot be distinguished from other causes of pneumonia on clinical or radiologic grounds.

Empiric treatment of community-acquired pneumonia should include adequate coverage for *Legionella* with either a macrolide (e.g., azithromycin) or a fluoroquinolone (e.g., levofloxacin). Full detail on treatment regimens is available on the Infectious Diseases Society of America website: http://cid.oxfordjournals.org/content/44/Supplement_2/S27.full.pdf+html.

Please immediately report laboratory-confirmed cases of *Legionella* infection to the Health Department by telephone. To report a case and for information about *Legionella*, please call 866-NYC-DOH1 (1-866-692-3641). You may also report via NYC MED at <http://www.nyc.gov/html/doh/html/hcp/hcp-urf1.shtml>.

We greatly appreciate your assistance.

Sincerely,

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