Legionellosis (Legionella pneumophila) (Legionnaire’s Disease)

2005 CDC Case Definition

Clinical description
Legionellosis is associated with two clinically and epidemiologically distinct illnesses: Legionnaires’ disease, which is characterized by fever, myalgia, cough, and clinical or radiographic pneumonia; and Pontiac Fever, a milder illness without pneumonia.

Laboratory criteria for diagnosis:

**Suspect:**
- By seroconversion: fourfold or greater rise in antibody titer to specific species or serogroups of Legionella other than L. pneumophila serogroup 1 (e.g., L. micdadei, L. pneumophila serogroup 6).
- By seroconversion: fourfold or greater rise in antibody titer to multiple species of Legionella using pooled antigen and validated reagents.
- By the detection of specific Legionella antigen or staining of the organism in respiratory secretions, lung tissue, or pleural fluid by direct fluorescent antibody (DFA) staining, immunohistochemistry (IHC), or other similar method, using validated reagents.
- By detection of Legionella species by a validated nucleic acid assay.

**Confirmed:**
- By culture: isolation of any Legionella organism from respiratory secretions, lung tissue, pleural fluid, or other normally sterile fluid.
- By detection of Legionella pneumophila serogroup 1 antigen in urine using validated reagents.
- By seroconversion: fourfold or greater rise in specific serum antibody titer to Legionella pneumophila serogroup 1 using validated reagents.

Case classification

**Suspected:** a clinically compatible case that meets at least one of the presumptive (suspect) laboratory criteria.
- Travel-associated: a case that has a history of spending at least one night away from home, either in the same country of residence or abroad, in the ten days before onset of illness.

**Confirmed:** a clinically compatible case that meets at least one of the confirmatory laboratory criteria.
- Travel-associated: a case that has a history of spending at least one night away from home, either in the same country of residence or abroad, in the ten days before onset of illness.