Legionellosis

Legionellosis is usually an acute respiratory tract infection that begins two to 14 days after exposure to Legionella spp. Signs of the disease can include a high fever, chills and cough, in addition to head and muscle aches. Since symptoms are similar to those seen in other forms of pneumonia, the diagnosis is rarely obvious and can be difficult to make. Available diagnostic tests include direct fluorescent antibody staining, culture, polymerase chain reaction on sputum, and urine antigen detection.

“Pontiac Fever,” a milder illness associated with Legionella bacteria, is characterized by fever and myalgias without pneumonia. It typically occurs a few hours to two days after exposure.

Legionella bacteria are found naturally in the environment, usually in water, and grow best in warm conditions such as hot tubs, cooling towers, hot water tanks, large plumbing systems, or the air-conditioning systems of large buildings. Person-to-person transmission does not occur.

Risks for infection include older age, smoking, chronic lung disease (like emphysema), renal insufficiency, diabetes and immune deficiency. Death occurs in 10% to 15% of cases: a substantially higher proportion of fatal cases occur during nosocomial outbreaks.

Legionellosis became officially reportable in Oregon in 2001. In 2007, 14 cases of legionellosis were reported among Oregonians. All 14 cases were hospitalized and one died.
Legionellosis by year: Oregon, 1988–2007

Incidences of legionellosis: Oregon vs. nationwide, 1998–2007