PUBLIC HEALTH FACT SHEET
Boston Public Health Commission
Communicable Disease Control Division
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Legionellosis

What is Legionellosis?
Legionellosis is an infection caused by the bacterium *Legionella pneumophila*. The disease has two distinct forms: Legionnaires' Disease, the more severe form of infection which includes pneumonia, and Pontiac fever, a milder illness.

Legionnaires' Disease acquired its name in 1976 when an outbreak of pneumonia occurred among people attending a convention of the American Legion in Philadelphia. Later, the bacteria that caused the illness was named *Legionella*.

What are the symptoms of Legionellosis?
Symptoms of Legionnaires' Disease usually include fever, chills, and a cough. Some people also have muscle aches, headache, tiredness, loss of appetite, and, occasionally, diarrhea. People may also experience kidney problems and develop pneumonia.

People with Pontiac fever experience fever and muscle aches but do not have pneumonia. They generally recover in 2 to 5 days without treatment.

How long does it take for symptoms to develop?
The time between the patient's exposure to the bacteria and the onset of illness for Legionnaires' Disease is 2 to 10 days; for Pontiac fever, it is shorter, generally a few hours to 2 days.

How is legionellosis spread?
Legionellosis is spread when *Legionella* bacteria are breathed in. Outbreaks of legionellosis have occurred after people breathed in mists that come from a water source (e.g., air conditioning cooling towers, whirlpool spas, showers) contaminated with *Legionella* bacteria. People may be exposed to these mists in homes, workplaces, hospitals, or public places.

Legionellosis is not spread from person to person. There is no evidence of people becoming infected from automobile air conditioners or household window air-conditioning units.

How is it diagnosed?
Diagnosis of legionellosis requires special tests that are not routinely performed on people with fever or pneumonia. Therefore, a physician must suspect the possibility of legionellosis in order to order the right tests. In Massachusetts, all cases of legionellosis are required to be reported immediately to local health departments. In Boston, suspect cases should be reported to Boston Public Health Commission at 617-534-5611.

How is legionellosis treated?
Antibiotics are used to treat people diagnosed with Legionnaires' Disease. Pontiac fever requires no specific treatment.

Over

Who is at risk for developing legionellosis?
People of any age may get Legionnaires' Disease, but the illness most often affects middle-aged and older persons, particularly those who smoke cigarettes or have chronic lung disease. People with compromised immune systems are also at increased risk. Pontiac fever most commonly occurs in people who are otherwise healthy.

What can be done to prevent legionellosis?
Improved design and maintenance of cooling towers and plumbing systems to limit the growth and spread of *Legionella* organisms are essential to legionellosis prevention.

During outbreaks, the Boston Public Health Commission seeks to identify the source of the bacteria and recommends appropriate prevention and control measures, such as decontamination of the water source. Current research will likely identify additional prevention strategies.

For more information, please contact
Boston Public Health Commission
Communicable Disease Control
(617) 534-5611 or www.bphc.org