

PUBLIC HEALTH FACT SHEET

Legionellosis (Legionnaires' Disease)

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What is Legionnaires' disease?

Legionnaires' disease is a pneumonia caused by *Legionella* bacteria. An outbreak of this disease among persons attending a state convention of the American Legion in Philadelphia in 1976 led to its name. It is not a new disease; the earliest documented case was in 1947. Although cases occur all year long, both single cases and outbreaks occur more frequently in the summer and fall.

What are the symptoms of Legionnaires' disease?

People with Legionnaires' disease often have flu-like symptoms with muscle aches, headache, loss of appetite, and dry cough. Fevers are often between 102°-105°F and some people have stomach cramps and diarrhea. Chest X-ray usually shows pneumonia. Symptoms usually begin 2-10 days after a person is infected with the bacteria. Another illness caused by *Legionella* bacteria is called Pontiac Fever. It consists of fever, headache, weakness and muscle ache, usually lasts for 2-5 days, and there is no pneumonia.

Where are *Legionella* bacteria found?

The bacteria are found normally in many places in the environment. A common source is water. Outbreaks have been related to contaminated air-conditioning cooling towers, NOT window air conditioners. The bacteria also have been found in hot and cold-water taps, showers, whirlpool baths, creeks, ponds and wet soil.

How is Legionnaires' disease spread?

People get Legionnaires' disease by breathing in the *Legionella* bacteria, usually carried by mist. It is NOT spread from one person to another.

How is Legionnaires' disease diagnosed?

Because Legionnaires' disease can cause symptoms similar to the "flu" and other kinds of pneumonia, it can take longer to diagnose. A number of different laboratory tests to identify *Legionella* can be done on blood, urine, respiratory secretions (sputum) and lung tissue. Your doctor can order these tests.

Who gets Legionnaires' disease?

Anyone can get Legionnaires' disease but it is more common among the elderly and those with impaired immune systems or underlying diseases.

Is Legionnaires' disease a serious illness?

It can be for people over 50 years of age or smokers, or those who have impaired immune systems due to underlying diseases (e.g., cancer, kidney failure, diabetes, HIV infection, chronic lung disease or heart failure) or medications (e.g., steroids, chemotherapy). Studies have shown that 5-30% of people diagnosed with Legionnaires' disease die.

How is Legionnaires' disease treated?

Legionnaires' disease is usually treated with antibiotics.

Can Legionnaires' disease be prevented?

Measures can be taken to reduce the likelihood of exposure. For example, large air conditioning systems with cooling towers and evaporative condensers should be operated and maintained according to manufacturers' recommendations. Because *Legionella* bacteria are found throughout the environment, testing potential sources is not recommended when individual cases occur.

Where can I get more information?

- Your doctor, nurse or clinic
- The Centers for Disease Control and Prevention (CDC) website at: <http://www.bt.cdc.gov/>
- Your local board of health (listed in the telephone directory under "government")
- The Massachusetts Department of Public Health (MDPH), Division of Epidemiology and Immunization at (617) 983-6800 or toll-free at (888) 658-2850 or on the MDPH website at <http://www.mass.gov/dph>

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