

Legionnaires' disease

What is Legionnaires' disease?

Legionnaires' disease is caused by the family of bacterium known as *Legionella*. The bacterium was named after an outbreak in 1976, when many people who went to a Philadelphia convention of the American Legion suffered from this disease. Legionnaires' disease is a severe type of pneumonia (lung inflammation usually caused by infection) that can lead to further issues including Pontiac fever, a milder illness similar to the flu. Together, or separate, the two illnesses are known as legionellosis; while Pontiac fever usually clears on its own, untreated pneumonia infection can be fatal. Even after antibiotic treatment, some people continue to deal with issues related to the illness.

Where is Legionnaires' disease found?

The *Legionella* bacteria are found commonly in nature and usually in water or humid environments. The bacteria grow best in warm water, like the water found in hot tubs, [cooling towers](#), hot water tanks, and large plumbing systems. In the United States, the highest incidence rates occur in the Northeast followed by the Midwest. Further, the majority of cases occur between June and October. Between 2000-2009, 74% of the cases were in people aged 50 years or older, and 64% of them were male.

Is the disease incidence worsening?

From 2000—2009, the incidence rate in the United States increased from 0.39 cases per 100,000 to 1.15 cases. Between the infamous outbreak in 1976 and the next 30 years, there were no major outbreaks reported in the U.S. Since 2007, there have been 5 major outbreaks. A recent outbreak in New York City infected 110+ and claimed 12 lives. In 2012, an outbreak in a Chicago Marriott Hotel infected 10 and caused three deaths while in Pittsburgh, 22 were infected at a VA Hospital that left six dead.

How is Legionnaires' disease treated?

Legionnaires' disease requires treatment with antibiotics, and most cases can be treated successfully with them. Pontiac fever can go away without treatment. Antibiotics provide no benefit for a patient with Pontiac fever.

How can Legionnaires' disease be prevented?

The key to preventing legionellosis is maintenance of the water systems in which *Legionella* can grow (drinking water systems, hot tubs, decorative fountains, and cooling towers). There are no vaccines that can prevent legionellosis. Persons at increased risk of infection may choose to avoid high-risk exposures, such as avoiding hot tubs.

Sources: CDC, Mayo, NIH, New York City Department of Health and Mental Hygiene, Chicago Tribune, Pittsburgh Post Gazette