

About..... *Legionellosis*

What is Legionellosis?

Legionellosis is an infection caused by *Legionella pneumophila* bacteria. The disease has two forms:

- Legionnaire's disease –severe respiratory infection (pneumonia) that can be fatal. Legionnaire's disease most often affects middle-aged and older persons who smoke tobacco containing products or who have weakened immune systems.
- Pontiac Fever--mild respiratory infection that is not fatal. Pontiac Fever is much less severe than Legionnaire's disease and can occur in persons of any age, including those who have healthy immune systems.

What are the symptoms of Legionellosis?

The early symptoms of Legionnaire's disease include:

- fever
- chills
- lack of energy
- cough
- muscle aches
- headache
- loss of appetite
- sometimes diarrhea

Symptoms of Legionnaire's disease usually start about 2-10 days after exposure. Pneumonia develops after these symptoms start.

Symptoms of Pontiac fever are the same as the early symptoms of Legionnaire's disease, but Pontiac fever does not progress to pneumonia. Symptoms of Pontiac fever usually start about 24-48 hours after exposure.

How can you get Legionellosis?

Legionnaire's disease is transmitted by breathing in water droplets contaminated with *Legionella* bacteria. ~~The source of contamination may come from water contaminated in the patient's home or workplace.~~ Outbreaks have been associated with exposures to contaminated water towers, evaporative condensers, potable water systems, whirlpool spas, water faucets, showers, humidifiers, and respiratory therapy equipment. Outbreaks have occurred in hospitals, cruise ships, hotels, and other large buildings. *Legionella* bacteria have also been found worldwide in creeks and ponds and soil along their banks.

Legionella bacteria reproduce in high numbers in warm, stagnant water (90F-105F). When someone inhales water droplets contaminated with *Legionella* bacteria, the bacteria can infect the lungs and cause illness.

How is Legionellosis diagnosed?

See your health care provider. Laboratory testing is usually needed to confirm a diagnosis of legionellosis. Your health care provider may take a sample of respiratory secretions, lung tissue, urine, or fluid from the lungs to test for *Legionella* bacteria. Almost all people have been exposed to the bacteria in their lifetime. Therefore, it is important that laboratory results are examined carefully to identify a recent infection and not a past exposure to the bacteria.

How is Legionellosis treated?

Antibiotics are usually required to treat Legionnaire's Disease. Sometimes supportive therapy is needed to help people with Legionnaire's Disease breathe easier. Pontiac Fever generally requires no specific treatment.

How can Legionellosis be prevented?

Improved design and maintenance of cooling towers, plumbing systems to limit the growth and spread of *Legionella* bacteria are important. Other prevention measures include:

- Properly maintain whirlpool tubs, hot tubs and spas, humidifiers, and decorative fountains in the home. Clean and run them frequently to prevent growth of *Legionella* bacteria.
- Avoid inhaling water or dunking your head underwater when using hot tubs and spas.
- Avoid using hot tubs, spas, or whirlpool tubs in public places if the water looks dirty or cloudy.

For additional information on legionellosis, please visit the Centers for Diseases and Control Prevention (CDC) Web site at:

http://www.cdc.gov/ncidod/dbmd/diseaseinfo/legionellosis_g.htm

Last reviewed by ISDH October 27, 2009



**Indiana State
Department of Health**