



## **Legionnaires' Disease Frequently Asked Questions**

### **What is Legionnaires' disease?**

Legionnaires' disease is caused by the *Legionella* bacteria. *Legionella* bacteria can be found in both natural and manmade water systems. Natural water sources including streams, rivers, freshwater ponds and lakes, and mud can contain the organism in low levels.

### **Is Legionnaires' disease reportable in Illinois?**

Yes. Suspect and confirmed cases of Legionnaires' disease should be reported to the local health authority within 7 days.

Each year from 200-550 Legionellosis cases are reported in the state.

### **How is Legionnaires' disease spread?**

The *Legionella* bacterium grows in areas of warm water. In order to be infected with the bacteria, a person must breathe in a mist or vapor that contains the bacteria.

To date, there is no evidence in the literature that the *Legionella* bacteria are spread from person-to-person.

### **How soon after being exposed will a person develop symptoms of the disease?**

If infection occurs, disease symptoms usually appear within 2 to 10 days. Persons should watch for symptoms up to 14 days (2 weeks) after exposure.

### **Who is at risk of Legionnaires disease?**

Most healthy individuals do not become infected with *Legionella* bacteria after exposure. However, some people have lower resistance to disease and are more likely to develop Legionnaires' disease. Factors that can increase a persons' risk of developing the

disease are:

- Older people (usually 50 years of age or older)
- Current or former smokers
- Those with a chronic lung disease (like COPD or emphysema)
- Those with a weak immune system from diseases like cancer, diabetes, HIV-infection, or kidney failure
- People who take drugs that suppress (weaken) the immune system (like after a transplant operation or chemotherapy)

### **What are the symptoms of Legionnaires' disease?**

Symptoms resemble other types of pneumonia, which can make it hard to diagnose. Some persons may also develop headaches, fatigue, loss of appetite, and confusion or diarrhea.

Early symptoms of the illness are similar to the flu, and other common causes of respiratory illness. After a short time, more severe pneumonia-like symptoms may appear. Not all individuals with Legionnaires' disease experience the same symptoms. Some may have only flu-like symptoms, but to others the disease can be fatal.

Early flu-like symptoms:

- Slight fever
- Headache
- Aching joints and muscles
- Lack of energy, tiredness
- Loss of appetite

Common pneumonia-like symptoms:

- High fever (102° to 105°F, or 39° to 41°C)
- Cough (dry at first, later producing phlegm)
- Difficulty in breathing or shortness of breath
- Chills
- Chest pains
- Headache
- Muscle Aches

### **What should I do if I think I have Legionnaires' disease?**

Persons that have symptoms of pneumonia, especially if these symptoms are in combination with a chronic respiratory condition and/or smoking, should seek medical

attention right away.

### **What is the treatment for Legionnaires' disease?**

Legionnaires' disease is treated with antibiotics. Most persons improve with early treatment, but some persons may need to be hospitalized. Early treatment reduces the severity and improves chances for recovery. The drugs of choice belong to a class of antibiotics called macrolides. They include azithromycin, erythromycin, and clarithromycin. In many instances, physicians may prescribe antibiotics before determining that the illness is Legionnaires' disease because macrolides are effective in treating a number of types of pneumonia.

### **Can Legionnaires' disease be prevented?**

Yes. Avoiding water conditions that allow the organism to grow to high levels is the best means of prevention. Specific preventive steps include:

- Regularly maintain and clean cooling towers and evaporative condensers to prevent growth of LDB. This should include twice-yearly cleaning and periodic use of chlorine or other effective biocide.
- Maintain domestic water heaters at 60°C (140°F). The temperature of the water should be 50°C (122°F) or higher at the faucet.
- Avoid conditions that allow water to stagnate. Large water-storage tanks exposed to sunlight can produce warm conditions favorable to high levels of *Legionella* bacteria. Frequent flushing of unused water lines will help alleviate stagnation.

### **Can *Legionella* bacteria cause other diseases?**

Yes. The same bacteria that cause Legionnaires' disease can also cause a flu-like disease called Pontiac fever.

### **How does Pontiac fever differ from Legionnaires' disease?**

Unlike Legionnaires' disease, which can be a serious and deadly form of pneumonia, Pontiac fever produces flu-like symptoms that may include fever, headache, tiredness, loss of appetite, muscle and joint pain, chills, nausea, and a dry cough. Usually, complete recovery occurs in 2 to 5 days without antibiotics. To date, no deaths have been reported from Pontiac fever.

**Are there other differences between Legionnaires' disease and Pontiac fever?**

Yes. Unlike Legionnaires' disease, which occurs in only a small percentage of people who are exposed, Pontiac fever usually occurs in approximately 90 percent of those exposed. Additionally, the time between exposure to the organism and appearance of the disease is generally shorter for Pontiac fever than for Legionnaires' disease. Symptoms of Pontiac fever can appear within one to three days after exposure.