



NC DEPARTMENT OF  
**HEALTH AND  
HUMAN SERVICES**

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## **Legionella Pneumonia (Legionnaires' Disease)**

### **Background on Legionella Pneumonia (Legionnaires' Disease):**

*Legionella* is a bacterium commonly found in the environment, particularly in warm water. *Legionella* bacteria can cause two different illnesses: A kind of pneumonia (lung disease) called Legionnaire's disease, and a milder infection without pneumonia, known as Pontiac fever. People can come in contact with *Legionella* when they breathe in a mist or vapor (small droplets of water in the air) containing the bacteria. Most people who come in contact with the bacteria do not become ill.

### **Key points:**

- Legionnaires' disease is a form of pneumonia caused by the *Legionella* bacteria.
- Symptoms include high fever, chills, cough, body aches, headache and fatigue. Individuals with Legionnaires' disease may need to be hospitalized. The disease typically begins 2–10 days after exposure to the bacteria. It can be treated effectively with antibiotics.
- *Legionella* bacteria are found naturally in the environment, usually in warm water, such as in hot tubs, cooling towers, hot water tanks, large plumbing systems and decorative fountains. They do not seem to grow in car or window air-conditioners.
- People can get infected when they breathe in a mist or vapor (small droplets of water in the air) that has been contaminated with *Legionella* bacteria.
- *Legionella* does **not** spread from person-to-person.
- Most people who are exposed to *Legionella* bacteria do not become ill.
- People at higher risk of getting sick are:
  - Older people (usually 50 years of age or older)
  - Current or former smokers
  - Those with a chronic lung disease (like chronic obstructive pulmonary disease [COPD] or emphysema)
  - Those with a weak immune system from diseases like cancer, diabetes, or kidney failure
  - People who take drugs that suppress (weaken) the immune system (like after a transplant operation or chemotherapy)

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- Environmental testing for *Legionella* is not routinely done, as these bacteria are commonly found in the environment. However, environmental testing may be performed, under certain circumstances, as part of a legionellosis outbreak investigation. Clinical isolates are necessary to interpret the investigational findings.
- About 6,100 cases were reported to CDC in 2016. However, this is likely an underestimate of the true number of cases because Legionnaires' disease is likely underdiagnosed.
- From 2013 – 2017, an average of 181 Legionnaires' disease cases were reported annually in North Carolina.
- Physicians and laboratories are required by law to report cases of *Legionella* infections to public health officials so they can rapidly assess risk and institute control measures to prevent additional cases from occurring.