Legionnaires’ Disease (Legionellosis)

What is Legionnaires’ disease?
Legionnaires’ disease is a bacterial disease that may cause respiratory illness or pneumonia.

Why is it called Legionnaires’ disease or legionellosis?
The bacteria got its name in 1976, when many people who went to a Philadelphia convention of the American Legion suffered from an outbreak of this disease, a type of pneumonia (lung infection).

Subsequently, the bacterium causing the illness was named Legionella pneumophila and the name of the illness was changed to legionellosis.

Is this a new disease?
No. While the bacterium was only identified following the 1976 convention, earlier cases have been confirmed as early as 1947.

How widespread is Legionnaires’ disease?
It is estimated that each year between 8,000 and 18,000 people are hospitalized with Legionnaires’ disease in the U.S. However, many infections are not diagnosed or reported, so this number may be higher.

More illness is usually found in the summer and early fall, but it can happen any time of year.

How severe is the illness?
Legionnaires’ disease can be very serious and can even cause death. Most cases can be successfully treated with antibiotics, and healthy people usually recover from the infection.

Where are legionella found?
Legionella naturally exist in the environment, usually in water. The bacteria grows best in warm water, and are most commonly found in water sources such as hot and cold water taps, hot water tanks, and water in air conditioning systems. They have also been found in misting systems, decorative fountains and whirlpool spas.

How do people get Legionnaires’ disease?
People get Legionnaires’ disease when they breathe in a mist or vapor (small droplets of water in the air) that has been contaminated with the Legionella bacteria. The bacteria are NOT spread from one person to another person.

Outbreaks occur following the exposure of many individuals to a common source of the bacteria in the environment.

Who gets Legionnaires’ disease?
People most at risk of getting sick are older people, as well as people who smoke or drink heavily, or those who have chronic lung disease (like emphysema). People who have weak immune systems from diseases, such as cancer, diabetes or kidney failure are also likely to get sick from Legionella bacteria. People who take drugs to suppress (weaken) the immune system (like after a transplant operation or chemotherapy) are also at high risk.

What are the usual symptoms of Legionnaires’ disease?
Symptoms of Legionnaires’ disease are similar to those of pneumonia so it may be difficult to diagnose. Signs of the disease can include: a high fever, chills, cough and fatigue or weakness. Some people may also suffer from muscles aches and headaches.

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How soon do symptoms occur/appear?
Symptoms usually begin two to 14 days after exposure.

What is the treatment for Legionnaires’ disease?
Certain antibiotics are effective in treating the disease. Early diagnosis and treatment are important for recovery.

Why is Legionnaires’ disease so difficult to diagnose?
Legionnaires’ disease often causes symptoms similar to those caused by other organisms, including the influenza virus and other types of bacterial pneumonia. Since diagnosis depends on developing a culture of the organisms or comparison of blood tests taken during and several weeks after the illness, the diagnosis may not be confirmed until after the person is well.

When does the health district investigate a case of Legionnaires’ disease?
Because individual cases are common and presently not preventable, they are often investigated only to confirm the diagnosis and rule out an outbreak. When an outbreak occurs, an investigation is conducted to look for a possible environmental source so that additional illness can be prevented.

Where can I get more information?
Contact your doctor or the Southern Nevada Health District, Office of Epidemiology at (702) 759-1300.