

## SOUTH DAKOTA PUBLIC HEALTH LABORATORY

Environmental Health Testing | Forensic Chemistry | Medical Microbiology

# **Diseases Fact Sheet - Legionellosis**

## **South Dakota Department of Health**

## Office of Disease Prevention Services - 605-773-3737 -(1-800-592-1861 in South Dakota only)

This material is provided for informational purposes only and is not a substitute for medical care. We are not able to answer personal medical questions. Please see your health care provider concerning appropriate care, treatment or other medical advice.

#### What is it?

Legionellosis is a bacterial disease which may cause pneumonia. Most cases occur as single isolated events. Outbreaks are relatively rare. Legionella bacteria can cause Legionnaires' disease or Pontiac Fever.

## Why is it called legionellosis?

An outbreak of this disease in Philadelphia in 1976, largely among people attending a state convention of the American Legion, led to the name "Legionnaires' Disease." Subsequently, the bacterium causing the illness was named *Legionella pneumophila* and the name of the illness was changed to legionellosis.

## What are the symptoms of Pontiac fever?

Pontiac fever is a milder form of Legionellosis compared to Legionnaires' disease. It presents with flu-like symptoms, including fever, headache, muscle aches, and fatigue. Unlike Legionnaires' disease, Pontiac fever does not cause pneumonia. The symptoms usually resolve within a few days without specific treatment.

#### Is this a new disease?

No. While the bacterium was only recently identified, earlier cases have been confirmed as far back as 1947, and cases probably occurred before that date.

## How widespread is legionellosis?

It is estimated that about 8,000 to 18,000 people develop legionellosis in the United States each year. An additional unknown number are infected with the legionella bacterium and have mild symptoms or no illness at all. Cases occur sporadically and in outbreaks. Outbreaks occur most often in the summer but cases occur all year round.

#### How severe is the illness?



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Legionellosis can be a mild respiratory illness or it can be severe enough to cause death. From 10 to 40 percent of healthy adults have antibodies showing previous exposure to the organism, but only a small percentage have a history of previous pneumonia.

## Where are legionella found?

Legionella are found naturally in the environment, usually in water. They have been found in creeks and ponds, hot and cold water taps, hot water tanks, decorative fountains, and large plumbing systems.

## How is legionellosis spread?

People get Legionnaires' disease when they breathe contaminated mist. Legionnaire's is not spread person to person.

## Who gets legionellosis?

Patients have ranged in age from 10 months to 84 years. The disease most often affects middle-aged or older men, particularly those who smoke. People with underlying illnesses such as lung disease, cancer, or those with lowered immune system resistance to disease are also at higher risk.

## What are the usual symptoms of legionellosis?

The early symptoms of legionellosis may be flu-like with muscle aches, headaches, tiredness, shortness of breath, and dry cough followed by high fever, chills and occasionally diarrhea. Temperatures commonly reach 102-105 degrees F and chest X-rays often show pneumonia.

#### How soon do symptoms occur/appear?

The incubation period for legionellosis ranges from two to 10 days, but it is usually five to six days.

## What is the treatment for legionellosis?

Certain antibiotics appear to be effective in treating the disease.

## When does the health department investigate a case of legionellosis?

Because sporadic cases are common and presently not preventable, they are often investigated only to confirm the diagnosis and rule out an outbreak. If an outbreak occurs, an investigation to look for a possible environmental source is conducted.

#### **Related Sites:**



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- Centers for Disease Control & Prevention
  - o Legionellosis Resource Site
  - o Guidelines, Standards, and Laws