



Legionellosis (Legionnaires' Disease and Pontiac Fever)

Definition:

Legionellosis is caused by the *Legionella* bacteria. Legionellosis can present as a serious type of pneumonia called Legionnaires' disease, a less serious illness called Pontiac fever, or wound infections. *Legionella* bacteria are found naturally in the environment, usually in water, and become a health concern when they spread and grow in human-made building water systems like showerheads and sink faucets, cooling towers, hot tubs, decorative fountains, and hot water tanks and heaters.

Signs and symptoms:

Symptoms of Legionnaires' disease begin 2-14 days after being exposed to the bacteria and are similar to other forms of pneumonia, including cough, shortness of breath, high fever, muscle aches, and headaches. Pontiac fever is a milder infection that does not result in pneumonia. Symptoms of Pontiac fever are primarily fever and muscle aches that begin a few hours to 3 days after being exposed.

Transmission:

People get legionellosis when they breathe in a mist or vapor containing bacteria. The bacteria are not spread from person to person.

Diagnosis:

Pneumonia caused by Legionnaires' disease presents similarly to pneumonia due to other causes and can only be diagnosed with laboratory testing. The most common laboratory tests for Legionnaires' disease include culture and urinary antigen test. Pontiac fever cannot be diagnosed by culture.

Role of the School Nurse:

Prevention

- The key to preventing legionellosis is maintenance of the water systems in which *Legionella* grow, including human-made building water systems like showerheads and sink faucets, cooling towers, hot tubs, decorative fountains, and hot water tanks and heaters.
 - Check with school maintenance team to ensure upkeep of water systems.

Treatment Recommendations

- Legionnaires' disease usually requires antibiotic treatment. Pontiac fever is self-limited and antibiotic treatment should not be prescribed.

Exclusions

- There is no need to exclude students from school for legionellosis.
- Education modifications may be warranted in children with a positive diagnosis.

Reporting Requirements

- Legionellosis is a reportable disease.

Resources:

- Maine CDC legionellosis website (including fact sheet) <http://www.maine.gov/dhhs/legionellosis>
- Federal CDC legionellosis website <http://www.cdc.gov/legionella/index.html>

Reviewed 4/11/2024