

Legionellosis (Legionnaires' disease, Pontiac fever)

Legionellosis

Legionellosis is a respiratory disease that occurs in two forms: "Legionnaires' disease" (a more severe illness) and "Pontiac fever" (a milder illness).

Legionellosis occurs most often in people over 50 years of age, especially those who smoke heavily, have chronic lung disease or have underlying medical conditions (such as diabetes, cancer or kidney dysfunction) that lower their immune system resistance to diseases.

Legionellosis is caused by *Legionella* bacteria, which thrive in warm stagnant water such as that found in most plumbing systems, hot water tanks, cooling towers, fountains, sprinkler systems, evaporative condensers of large air conditioning systems and hot tubs. Home and automobile air conditioners are **not** a source of Legionella bacteria.

Outbreaks of legionellosis have been linked to aerosols from whirlpool spas, cooling towers (air-conditioning units from large buildings) in hospitals, and water used for drinking and bathing.

Symptoms of legionellosis

The symptoms of legionellosis may be flu-like with muscle aches, headache, tiredness, loss of appetite and coughing followed by high fever, chills and occasionally diarrhea.

In Legionnaires' disease, chest X-rays often show pneumonia. Legionnaires' disease can be very serious and can cause death. The period between exposure and onset of illness for Legionnaires' disease is two to ten days, but most often is five to six days.

Pontiac fever has the same initial symptoms as Legionnaires' disease but is not associated with pneumonia or death. The period between exposure and onset of illness for Pontiac fever is five to 66 hours, but most often between 24 and 48 hours.

How legionellosis spreads

The disease cannot be spread from person-to-person. It is acquired after inhaling mists from a water source that contains *Legionella* bacteria.

For further information, please call: York Region Health Connection 1-800-361-5653 TTY 1-866-252-9933 or visit www.york.ca

Preventing legionellosis

In your home, you can minimize risks through proper maintenance of all mist-producing devices such as shower heads, hot tubs, whirlpools and humidifiers. Ensure you clean and disinfect these devices regularly according to the manufacturers' directions.

In business and health care settings, the following precautions should be taken to prevent *Legionella* bacteria from growing and becoming aerosolized:

- Cooling towers, humidifiers, air handling units, floor drains and other sources of stagnant water should be inspected, cleaned and disinfected. Appropriate chemical substances should be used to limit the growth of slime-forming organisms
- Cooling towers should be drained when not in use, and should be mechanically cleaned periodically to remove scale and sediment
- Shower heads and all equipment that generates water droplets should be regularly removed, cleaned and disinfected
- Ventilation intakes should be checked to ensure proper sealing of filters
- Only distilled water should be used in respiratory devices; the devices should be clean on regular basis
- Hot water systems should be maintained at temperatures of 50 degrees C or higher, as this may help to reduce the risk of transmission.

Treating legionellosis

Legionnaire's disease can be treated with antibiotics. People with Pontiac fever generally recover in two to five days without treatment.

