

<p><b>IN THIS ISSUE:</b></p> <ul style="list-style-type: none"> <li>▪ Increase in Legionellosis in Peel</li> <li>▪ Listeriosis update</li> </ul>	<p><b>FROM:</b> David L. Mowat, MBChB MPH FRCPC Medical Officer of Health</p>
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**Increase in Legionellosis in Peel**

Since June 2008, there has been an increase in legionellosis cases noted in Peel and in other jurisdictions around the Golden Horseshoe.

Legionellosis is an acute infection caused by the bacterium, *Legionella pneumophila*. The disease has two distinct syndromic presentations:

- Legionnaire’s Disease (the more severe pneumonic form) and
- Pontiac fever, a milder, non-pneumonic illness.

Legionnaires’ disease is a type of pneumonia that varies in severity from relatively mild to fatal. Symptoms can include: high fever, chills, cough, fatigue, headache, myalgia, chest pain and loss of appetite. Sometimes there is also nausea, diarrhea, or a change in mental status, including confusion or memory loss. The incubation period is usually two to ten days.

Pontiac fever presents as a flu-like illness. The symptoms include: fever, loss of appetite, headache and myalgia. Pontiac fever is not associated with pneumonia. In most cases, no treatment is required and people recover within two to five days.

*Legionella* bacteria are found naturally in the environment, usually in water. The bacteria grow best in warm water, such as is found in hot tubs, hot water tanks or parts of the air conditioning systems of large buildings.

Legionellosis is acquired through inhalation of contaminated aerosols or water from devices such as cooling towers, showers and faucets. It is not spread from person to person.

Those most at risk for legionellosis are older people (usually 65 years of age and older), smokers, patients with COPD and immunocompromised patients.

**Diagnosis**

The optimal approach to diagnosis of legionellosis includes:

1. collection of a urine sample for a urinary antigen test

AND

2. collection of an appropriate respiratory sample for culture for *Legionella*, ideally obtained from bronchoalveolar lavage (BAL)

Note: Upper respiratory tract samples (i.e. sputum) can also be collected for culture from patients not requiring bronchoscopy, but the sensitivity is lower.

Genotyping, which can only be done on isolates obtained from culture, is necessary in order to link cases to each other or to an environmental source.

**Legionellosis is a reportable disease. All suspect and confirmed cases should be reported immediately to Peel Public Health at (905) 799-7700.**

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## Listeriosis Update

As of September 3, 2008, the Ministry of Health and Long Term Care (MOHLTC) is reporting 37 cases of listeriosis in the province, 29 of which are confirmed and 8 of which are under investigation. In response to the current listeriosis outbreak the MOHLTC, in collaboration with the Ontario Agency for Health Protection and Promotion (OAHPP) has produced a clinical practice guideline to assist physicians.

For your reference, we have excerpted key points from the guideline.

### **For asymptomatic persons, whether or not they are in a high-risk group:**

- No testing is recommended, even if there is a history of ingestion of foods known to be contaminated with *L. monocytogenes*
- Those with a history of consumption of recalled meat should be cautioned about the signs of invasive disease and be given the Listeria fact sheet (available at <http://www.inspection.gc.ca/english/fssa/concern/cause/listeriae.shtml>)

### **For low-risk persons who present with gastroenteritis with or without fever:**

- Illness is generally self-limiting and requires only supportive therapy.

### **For high-risk individuals who present with symptoms consistent with listeriosis (i.e. pregnant women, neonates, the immunocompromised and the elderly):**

- Seek consultation with an infectious diseases specialist
- Blood cultures should be considered in high risk individuals who present with febrile gastroenteritis

- Stool cultures may be useful in pregnant women, immunocompromised patients, and neonates who present with gastroenteritis without fever.

### **Management of invasive clinical syndromes (in high-risk and low-risk patients) should be undertaken in consultation with an infectious diseases specialist.**

Invasive clinical syndromes include:

- Infection during pregnancy (which presents as acute febrile illness, often with myalgia, arthralgia, headache and backache)
- Neonatal infection
- Bacteremia
- Central Nervous System infections (i.e. meningitis, meningoencephalitis, etc.)

The full clinical practice guideline is available on the "Health Bulletins" section of the OAHPP website at [www.oahpp.ca](http://www.oahpp.ca)

**Listeriosis is a reportable disease. Please report all suspected and confirmed cases immediately to Peel Public Health at (905) 799-7700.**