

Communicable Disease Advisory: Confirmed listeriosis cases in Alberta

From the office of the Medical Officer of Health (MOH)

Date: July 28, 2016

Context:

Alberta Health Services MOH-Edmonton Zone was notified of 2 cases of listeriosis the week of July 18, 2016. Investigation identified several epidemiological linkages between the cases. The cases both have onset dates after July 01, 2016 and are believed to be linked to a common source. Investigation is ongoing to identify the source for both cases and an outbreak has been declared. These are the first listeriosis cases reported in Alberta since January 2016. Additionally, there are several cases of listeriosis in BC and ON with onset dates after May 01, 2016 believed to be linked to a common source. Investigation is underway to identify if the Alberta cases are linked to the BC and ON cases. Please be aware of the possibility of listeriosis in patients presenting with a compatible clinical picture.

Listeria monocytogenes is ubiquitous and has been isolated in soil, dust, water and food. Human exposure to the bacteria is typically through ingestion of contaminated food including raw foods, unpasteurized milk and processed foods such as soft cheeses and cold cuts. The incubation period ranges from 3-70 days, with an average of 3 weeks. Milder infection (gastroenteritis with fever) typically has a short incubation period. Asymptomatic infection can occur.

Human to human transmission does not typically occur except from a pregnant woman to her fetus in utero or during passage through the infected birth canal. Infection during pregnancy may lead to premature delivery, infection of the newborn or stillbirth. Disease generally affects the elderly, pregnant women, newborns and immunocompromised individuals.

Clinical presentation:

- Clinical symptoms range from mild (e.g. gastroenteritis) to severe and typically include fever, muscle aches and occasionally nausea and vomiting.
- Clinical evidence of invasive disease usually manifests as meningitis or bacteremia. The onset of meningoencephalitis may be sudden with fever, intense headache, nausea and vomiting.
- Infected pregnant women may have minimal symptoms, typically characterized by mild flu-like illness. The case fatality rate in infected newborns is 50% if onset of illness occurs within the first 4 days of life.

Actions:

1. Please be on heightened surveillance for cases of listeriosis in symptomatic individuals who present for care.
2. Order appropriate clinical specimens prior to administration of antibiotics based on clinical presentation. See the current ProvLab Guide to Services recommendations: <http://www.provlab.ab.ca/guide-to-services.pdf>. If fetal or placental tissue is sent in the setting of stillbirth or miscarriage, *Listeria* culture must be specifically requested.
3. Treatment and Care: Immediate treatment with an appropriate antibiotic is essential. Consult an Infectious Disease Specialist. [Penicillin and ampicillin are the antibiotics of choice given alone or in conjunction with aminoglycosides. TMP-SMX or erythromycin may be used in cases of penicillin allergy.]
Pregnant women with confirmed listeriosis and their neonates should be assessed and referred as appropriate.
4. Recommend safe food handling and avoidance of high-risk foods to those most susceptible to severe illness.

Infection Control Recommendations:

Routine practices as human to human transmission rarely occurs.

Additional References:

- Alberta Health Notifiable Disease Guideline-Listeriosis: www.health.alberta.ca/documents/Guidelines-Listeriosis-2011.pdf
- For patients: see My Health Alberta <https://myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=ug2074>

If you have further questions, please contact your Zone Medical Officer of Health.

This letter has been posted on the AHS-MOH webpage www.albertahealthservices.ca/medstaff/Page7082.aspx