Yersiniosis

Background

Yersiniosis is caused by *Yersinia enterocolitica* and is a reportable condition in Michigan. The bacteria is transmitted via the fecal-oral route and can be found in soil, water, and animals. Symptoms of diarrhea and abdominal pain usually develop 4-7 days after exposure and may last 1 to 3 weeks. Yersiniosis is relatively rare – according to FoodNet, the incidence rate is about 0.28 per 100,000 people. Yersiniosis is less frequently caused by *Yersinia pseudotuberculosis*.

Clinical Symptoms

In young children symptoms include fever, abdominal pain, and diarrhea, which is often bloody. In older children and adults, symptoms include right-sided abdominal pain and fever which may be confused with appendicitis. In a small proportion of cases, particularly in those who are immunocompromised, complications such as skin rash, joint pains, or spread of bacteria to the bloodstream can occur.

Extraintestinal infections can also occur. *Y. enterocolitica* has been recovered from other sites including the throat, lymph nodes, joint fluid, urine, bile, and blood.

Risk Factors

- Eating contaminated food, especially raw or undercooked pork products, including raw pork intestines (chitterlings)
- Drinking contaminated unpasteurized milk or untreated water
- Contact with infected animals such as pigs, rodents, rabbits, sheep, cattle, horses, dogs, and cats
- Flies may also be a reservoir for the bacteria and may play a role in the transmission of the bacteria between animals and humans

Laboratory Testing

- Isolation of *Yersinia enterocolitica* from a clinical specimen
- Detection of *Yersinia enterocolitica* from a clinical specimen using a culture independent diagnostic test (CIDT)

Case Definition

*Note: The Centers for Disease Control and Prevention (CDC) has not developed a case definition. Case classification should be based on clinical symptoms and laboratory testing.*

**Confirmed:** A case that is laboratory confirmed by isolation of *Yersinia enterocolitica* from a clinical specimen

**Probable:** A clinically compatible case that is detected by a CIDT

Resources

- http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3335670/
- http://www.cdc.gov/foodnet

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