2008 Georgia Data Summary

LISTERIOSIS



Listeria Quick Fact: *Listeria* can grow in refrigerated foods, under conditions that usually prevent bacterial multiplication.

OVERVIEW

Listeriosis is a serious infection caused by eating food contaminated with the bacterium Listeria monocytogenes. Most people do not develop listeriosis, even when exposed to the bacteria. L. monocytogenes is present in soil and water, and Listeria infections may be transmitted through contact with contaminated food items such as dairy products (especially unpasteurized), deli meats, prepared salads, and raw fruits and vegetables. Symptoms can include diarrhea and vomiting. People who are pregnant or have immunocompromising conditions are more susceptible to severe Listeria infections such as meningitis. Listeriosis is 20 times more common in pregnant women than in the general population, and fetal loss or neonatal sepsis are complications its complications (1).

SURVEILLANCE

- All Georgia physicians, laboratories and other health care providers are required by law to report both lab-confirmed and clinical diagnoses of cases of Listeriosis.
- Laboratories submit isolates of positive Listeria cultures for additional testing—serotyping and Pulsed Field Gel Electrophoresis.
- Outbreaks of listeriosis among Hispanic women and their newborns associated with consumption of traditionally unpasteurized cheese products have been reported in Georgia and other states.
- Public health staff interviews every Listeriosis case with a standardized CDC form to facilitate centralized data collection in the event of an outbreak.
- Active Surveillance for Listeriosis is conducted through FoodNet, a component of the Emerging Infections Program (EIP). For more information, please visit:

<u>http://health.state.ga.us/eip/</u>
<u>http://www.cdc.gov/foodnet/</u>

INCIDENCE

In 2008, 26 *Listeria* cases were reported in Georgia, for a rate of less than 0.3 cases/100,000 population (Figure 1).

Figure 1. Reported Listeriosis Cases in Georgia



DEMOGRAPHICS

- In 2008, most reported cases of listeriosis occurred in non-Hispanic whites (12 or 46%) closely followed by Hispanics (Figure 2),
- Evaluation of gender and age group demonstrates that the populations that suffer from more severe illness (neonates, elderly with immunocompromising conditions) are dis-proportiaonately affected. In young adults, women are affected much more than men (100%) due to clinical presentations related to pregnancy (Figure 3).

Figure 2





IMPACT OF LISTERIA

- Although Listeriosis is one of the least commonly reported types of foodborne illness, it has the highest mortality rate of FoodNet pathogens. In 2008, 22/26 cases were hospitalized.
- In 2008, there were 3 Listeriosis deaths reported—one was a newborn and 2 were over age 60. In addition, there was one fetal loss.
- In 2008, ADES investigated 1 outbreak of Listeriosis among Hispanic women who consumed traditional Mexican-style cheeses.

UNDERLYING CONDITIONS AND TYPES OF INFECTION

- Most patients had invasive disease (Listeria cultured from a normally sterile body site) (figure 4). Other category includes pneumonia, abscess, osteomyelitis and vaginal infections.
- All patients had a specific pre-disposing health condition (figure 5) except for one elderly individual, and pregnancy was most common.



PREVENTION

Figure 5

Consumers should take general precautions when preparing food to wash raw vegetables, keep raw meats and seafood separate from produce and other ready to eat foods, and avoid unpasteurized dairy products. Persons with underlying illnesses like conditions requiring steroids or chemotherapy, HIV, or other illness affecting the immune system should avoid eating certain foods. Deli meats and hot dogs should be heated until steaming. Pregnant women should follow the same food safety precautions. These patients should not eat certain soft cheeses such as feta, brie, or Mexican-style cheeses unless they are clearly labeled as "pasteurized". Other foods to avoid are refrigerated smoked seafood and meat spreads such as pate. Physicians should consider Listeria testing when treating a pregnant patient with a "flulike" illnesses or gastroenteritis even if mildly ill (1). ADES and other agencies have developed educational prevention messages for patients at risk for Listeriosis (2-3).

Figure 4



Data sources:

1. Janakiraman V. Reviews in Obstetrics and Gynecology 2008;1:179-185. 2.<u>http://www.fsis.usda.gov/Fact_Sheets/Protect_Your_Baby/index.a</u>sp

3.<u>http://health.state.ga.us/pdfs/epi/notifiable/EnglishVer_6_28_04.p</u>

For more information: http://health.state.ga.us/epi/foodborne

