LISTERIOSIS FACT SHEET

Agent: *Listeria monocytogenes*

Brief Description: Infection caused by *Listeria monocytogenes*, which may produce any of several clinical syndromes including stillbirths, listeriosis of the newborn, meningitis, bacteremia, or localized infections. Asymptomatic infections are common.

Reservoir: Soil, foliage, water, mud, and silage are the primary reservoirs. Others include infected domestic and wild mammals, fowl, and humans. Up to 10% of humans may be asymptomatic intestinal carriers. The ability of *Listeria monocytogenes* to grow at temperatures as low as 3°C permits multiplication in contaminated refrigerated foods.

Mode of Transmission: Foodborne transmission may occur through consumption of contaminated unpasteurized cheeses (especially soft-ripened cheese), raw milk, ice cream, raw vegetables, fermented raw-meat sausages, raw and cooked poultry, raw meats, and raw & smoked fish. *Listeria* can be transmitted from mother to fetus in the uterus or during passage through the birth canal.

Incubation Period: Median is approximately 3 weeks, but the incubation period varies. Outbreak cases have occurred 3-70 days following exposure to an implicated product.

Laboratory Criteria for Diagnosis:

- Isolation of *L. monocytogenes* from blood, cerebrospinal fluid, or other normally sterile site, or from placenta or products of conception in conjunction with fetal death or newborn illness.

Diagnostic Testing:

1. Specimen: Pure culture
2. Outfit: Culture referral
3. Lab Form: Form 3410
4. Laboratory Testing Performed: *Listeria* identification and confirmation
5. Lab: Georgia Public Health Laboratory, Bacteriology

Case Classification

- ***Confirmed:*** A clinically compatible illness that is laboratory confirmed.

Period of Communicability: Infected individuals may shed *Listeria* in stools for several months. Mothers of infected newborns may shed *Listeria* in vaginal discharges and urine for 7-10 days after delivery, rarely longer.

Treatment: Penicillin or ampicillin alone or together with aminoglycosides. Trimethoprim-sulfamethoxazole or erythromycin is preferred for penicillin-allergic patients. If a gram-stained smear of meconium appears positive for a newborn, administer prophylactic antibiotics as a precaution.

Investigation: Analyze case surveillance data frequently to identify potential clusters. All suspected clusters should be investigated for common-source exposures and to determine whether an outbreak is occurring. Processed foods that are found to be contaminated by *Listeria monocytogenes* should be recalled. If applicable, complete CDC Form 52.13, "Investigation of a Foodborne Outbreak" and forward to the Epidemiology Branch as soon as the investigation is complete.

Reporting: Report single, confirmed cases **WITHIN 7 DAYS** electronically through the State Electronic Notifiable Disease Surveillance System (SENDSS) at http://sendss.state.ga.us, or complete and mail a GA Notifiable Disease Report Form (#3095). Report any cluster of cases **IMMEDIATELY** to the local health department, District Health Office, or the Epidemiology Branch at 404-657-2588. If calling after regular business hours, it is very important to report any cluster of cases to the Epidemiology Branch answering service. If applicable, complete CDC form

52.13, “Investigation of A Foodborne Outbreak,” and fax to the Epidemiology Branch at 404-657-7517 as soon as possible.

Reported Cases of Listeriosis in Georgia, 1993-2001

Year	Number of Cases
1993	13
1994	22
1995	14
1996	10
1997	26
1998	32
1999	31
2000	21
2001	16

References and Further Reading:

1. Centers for Disease Control and Prevention. Case Definitions for Infectious Conditions under Public Health Surveillance. *MMWR* 1997; 46(RR10): 1-55.
2. Centers for Disease Control and Prevention. Multistate Outbreak of Listeriosis — United States, 1998. *MMWR* 1998; 47(50): 1085-1086.
3. Centers for Disease Control and Prevention. Update: Multistate Outbreak of Listeriosis – United States, 1998-1999. *MMWR* 1999; 47(51): 1117-1118.
4. Chin J, ed. Listeriosis. In: Control of Communicable Diseases Manual. 17th ed. Washington, DC: American Public Health Association, 2000: pp. 296-299.
5. U.S. Food & Drug Administration, Center for Food Safety & Applied Nutrition. *Listeria monocytogenes*. In: Foodborne Pathogenic Microorganisms and Natural Toxins Handbook.

Links:

- CDC Listeriosis Fact Sheet – http://www.cdc.gov/ncidod/dbmd/diseaseinfo/listeriosis_g.htm
- FDA Bad Bug Book – http://vm.cfsan.fda.gov/~mow/chap6.html
- Food Safety and Inspection Service – http://www.fsis.usda.gov/