

LISTERIOSIS

Clinical Features: Manifestations are host dependent. In elderly and immunocompromised persons, sepsis and meningitis are the main presentations. Pregnant women experience a mild, flu-like illness followed by fetal loss or bacteremia and meningitis in their newborns. Immunocompetent persons may experience acute febrile gastroenteritis.

Etiologic Agent *Listeria monocytogenes*, a gram-positive rod-shaped bacterium.

Incidence Approximately 1600 illnesses occur annually in the United States.

Sequelae An average of 260 fatalities occur each year.

Transmission Contaminated food. Rare cases of nosocomial transmission have been reported.

Risk Groups: For invasive disease: immunocompromised individuals, pregnant women and their fetuses and neonates, and the elderly.

Surveillance: Active laboratory- and population-based surveillance in FoodNet. In addition, passive surveillance data for many other areas of the nation has recently become available through the National Electronic Telecommunications System for Surveillance (NETSS). To improve surveillance, the Council of State and Territorial Epidemiologists has recommended that all *L. monocytogenes* isolates be forwarded to state public laboratories for subtyping through the National Molecular Subtyping Network for Foodborne Disease Surveillance (PulseNet). At least 33 states have regulations requiring health care providers to report cases of listeriosis.

Trends: Although the annual incidence of listeriosis decreased by 42% by 2012. In 2013, the average incidence of listeriosis in the United States was 0.26 cases per 100,000 people. The largest listeriosis outbreak in U.S. history occurred in 2011, when 147 illnesses, 33 deaths, and 1 miscarriage occurred among residents of 28 states; the outbreak was associated with consumption of cantaloupe from a single farm.

Challenges: Improving the safety of processed meats through meticulous in-plant sanitation and post-packaging pasteurization; intensify education efforts for high-risk consumers to reduce their risk of listeriosis.

References:

1. Scallan E, Hoekstra RM, Angulo FJ, Tauxe RV, Widdowson MA, Roy SL, Jones JL, Griffin PM. [Foodborne illness acquired in the United States--major pathogens](#) [PDF - 9 pages]. Emerging infectious diseases. 2011;17(1):7-15.
2. Centers for Disease Control and Prevention. Vital signs: listeria illnesses, deaths, and outbreaks - United States, 2009-2011. MMWR Morbidity and mortality weekly report. 2013;62(22):448-52.
3. CDC. [Incidence and Trends of Infection with Pathogens Transmitted Commonly Through Food — Foodborne Diseases Active Surveillance Network, 10 U.S. Sites, 2006–2013](#). MMWR Morb Mortal Wkly Rep. 2014;63(15):328-332
4. CDC. [Multistate outbreak of listeriosis associated with Jensen Farms cantaloupe--United States, August-September 2011](#). MMWR Morb Mortal Wkly Rep. 2011; 60(39):1357-8.
5. <http://www.cdc.gov/listeria/statistics.html>

