

Listeriosis

Epidemiology

Source:

- Animal/human/environment

Anatomical source

Transmission

- Ingestion of contaminated food
- Mother-to-fetus

Infectious dose

- unknown

Incubation
2-3 weeks
(range: 3-70 days)

Contagious –only documented person-to-person spread is from mother-to-fetus

Clinical case definition

- **Non pregnant people:** fever, headache, nausea, vomiting, muscle ache, weakness, stiff neck, confusion, altered mental status, loss of balance, and convulsions
- **Pregnant women:** fever, headache, myalgia, gastrointestinal symptoms, stillbirth, preterm delivery, neonatal infection

Complications: infection in pregnant women can result in still birth, preterm delivery, neonatal infection

Death in non pregnant adults: 18%
Death in newborns: 20-30%

Outbreaks
• Foodborne

Estimated 1600 Listeria illnesses in the U.S.

In healthy individuals, Listeria infection is often asymptomatic

Send culture to OPH

Diagnosis

Listeria monocytogenes is a Gram-positive rod-shaped bacterium. 95% of human infections are caused by serotypes 1/2a, 1/2b, and 4b.

Lab Diagnosis

Culture: Isolation of *Listeria* from a normally sterile site, blood, CSF or amniotic fluid/placenta (in pregnancy).

Stool culture has not been evaluated as a screening tool. It may have low sensitivity unless enrichment procedures are performed, and may not be routinely available.

Confirmed: Clinically compatible case that is laboratory confirmed

Treatment

- Intravenous penicillin and an aminoglycoside, usually gentamicin, is recommended for severe infections.
- In immunocompetent patients with mild infections, ampicillin alone can be given.
- Treatment failures with vancomycin have been reported. Cephalosporins are not active against *L. monocytogenes*.

Standard Precautions

Control

Report case to OPH

Case Management

- Prompt case investigation is important to obtain food histories.
- Ensure bacterial isolates are sent to the State Public Health Laboratory for confirmation and PFGE.

Prevention

- Thoroughly wash and dry produce
- Keep refrigerator $\leq 40^{\circ}\text{F}$ or lower and freezer $\leq 0^{\circ}\text{F}$
- Avoid cross contamination in the kitchen
- Keep refrigerator clean of spills
- For high risk individuals avoid eating foods associated with Listeria illness such as:
 - under cooked hot dogs and lunch meat, refrigerated meat spreads and paté, refrigerated smoked seafood, soft cheeses, unpasteurized milk products