# 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)

### 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 stillbirth, preterm delivery, neonatal infection.
- Death in non pregnant adults: 18%
- Death in newborns: 20-30%

### Estimated 1600 Listeria illnesses in the U.S.

### Outbreaks
- Foodborne

## 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*.

## Prevention

- Thoroughly wash and dry produce
- Keep refrigerator ≤ 40°F or lower and freezer ≤ 0°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

## Control

### Standard Precautions

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

### Report case to OPH

## Case Management

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[http://www.infectiousdisease.dhh.louisiana.gov](http://www.infectiousdisease.dhh.louisiana.gov) (800)256-2748