# LISTERIOSIS, NONPERINATAL

CRUDE DATA				
Number of Cases	14			
Annual Incidence <sup>a</sup>				
LA County	0.15			
United States	N/A			
Age at Onset				
Mean	64			
Median	72			
Range	21-89 yrs			
Case Fatality				
LA County	7.1 %			
United States	N/A			



<sup>a</sup>Cases per 100,000 population.

N/A - not available.

# ETIOLOGY

Listeria monocytogenes, a gram-positive bacterium.

# DISEASE ABSTRACT

The incidence of nonperinatal listeriosis declined as compared to the previous few years. This disease affects elderly and immunocompromised persons, such as those afflicted with cancer or HIV, and those on immunosuppressive therapy.

# STRATIFIED DATA

**Trends:** Nonperinatal listeriosis rates declined since 1992, from 0.30 cases per 100,000 in 1996 to 0.15 in 1997 (Figure 56).

**Seasonality:** Consistent with prior years, more reported cases occurred in summer than in any other season (Figure 57).

**Age:** Sixty-four percent of cases were older than 65 years of age. Individuals aged 65 and older had the highest risk of nonperinatal listeriosis (0.97 per 100,000 population) followed by persons aged 55 to 64 years (0.30 per 100,000) (Figure 58).



Sex: The male-to-female rate ratio was 1:0.7.

**Race/Ethnicity:** Whites had the highest incidence rate of nonperinatal listeriosis (0.17 per 100,000 population). Blacks had the second highest rate (0.12 per 100,000), followed by Hispanics (0.05 per 100,000). No Asian cases were reported (Figure 59).

**Location:** Whittier and Hollywood-Wilshire had the highest rates (0.61 per 100,000), followed by Harbor and Compton (0.5 and 0.36 per 100,000, respectively).

**Predisposing Conditions:** Five patients (36%) had received antibiotics prior to the onset of listeriosis.



**Culture Sites:** The most common sites of *Listeria monocytogenes* isolation were blood (79.5%) and cerebrospinal fluid (14%).

# COMMENTS

Table 2 describes the underlying medical conditions of nonperinatal listeriosis cases in 1997. Half of the cases were on steroid therapy before the onset of listeriosis. Cancer, diabetes, and kidney diseases were the most prevalent conditions among cases (71.4%, 28.6%, and 14.3%, respectively).

# Table 2. Underlying Medical Conditions in<br/>Cases of Nonperinatal Listeriosis,<br/>Los Angeles County, 1997

Medical Condition <sup>a</sup>	Number (N=14)	Percent
Steroid use	7	50.0
Cancer	10	71.4
Diabetes	4	28.6
Kidney disease	2	14.3

<sup>a</sup>Each case may have more than one underlying medical condition.

# LISTERIOSIS, PERINATAL

CRUDE DATA				
Number of Cases	8			
Annual Incidence <sup>a</sup>				
LA County	5.0			
United States	N/A			
Age at Onset (Maternal)				
Mean	32			
Median	31			
Range	23-46 yrs			
(Infant Gestational)				
Mean	31.4			
Median	32.0			
Range	14-36 wks			
Case Fatality				
LA County <sup>b</sup>	20%			
United States	N/A			



<sup>a</sup>Cases per 100,000 live births.

Includes 1 fetal death.

# ETIOLOGY

*Listeria monocytogenes* is a gram-positive bacterium.

### **DISEASE ABSTRACT**

A perinatal listeriosis case is defined as a pregnant woman or her fetus or neonate with infection of a sterile site with *Listeria monocytogenes* before or at the time of delivery or whose infant was diagnosed with *L. monocytogenes* infection between the ages of 0 and 6 days.

The overall perinatal listeriosis incidence rates have continued to decline since the epidemic peak in 1989 although the 1997 rate was higher than 1996.



### STRATIFIED DATA

**Trends:** The annual incidence of perinatal listeriosis had been decreasing since 1989; however, the rate increased 56% between 1996 and 1997, from 3.2 per 100,000 live births in 1996 to 5.0 cases per 100,000 live births (Figure 60).

**Seasonality:** None (Figure 61).

**Age:** Perinatal listeriosis incidence was greatest among women aged 35 and older (8.7 per 100,000 live births) followed by women aged 30 to 34 (7.9 per 100,000 live births) (Figure 62).

**Sex:** The male-to-female rate ratio among fetuses/infants was 1:1.

**Race/Ethnicity:** Among all races, Black women had the highest disease rate (6.9 per 100,000 live births). Hispanics and Whites had similar rates (2.0 and 1.6 per 100,000 live births). No Asian women had perinatal listeriosis (Figure 63).

**Location:** Incidence rates were greatest in South, West, and Hollywood-Wilshire Health Districts (2.7, 2.1, and 1.9 per 100,000 live births, respectively).

**Type of Delivery:** Three of the deliveries were vaginal, and three were by caesarean section. Spontaneous abortion occurred in two cases.

Culture Sites: Sites of Listeria monocytogenes isolation were blood (100%

and 63% for mother and infant/fetus, respectively) and placenta (38% in mother) (Table 3).

Multiple Gestation: None.

Late Onset: In 1997, there was no cases classified as late-onset.





Culture Site	Mother (n=8) Number Percent			Infant (n=8) Number Percent
Blood Placenta	8 3	100 38	5	63

# Table 3: Frequency (%)<sup>a</sup> of Listeria monocytogenes Isolatesfrom Mothers and Infants, Los Angeles County, 1997

<sup>a</sup> Percentages may exceed 100% as cultures were obtained from more than one site in some cases.

#### PREVENTION

Studies have implicated soft cheeses (Mexican-style, Brie, Feta), food from store deli counters, undercooked chicken, paté, and pork tongue in jelly. These foods, as well as raw dairy products, other undercooked meats, and unwashed fruits and vegetables should be avoided by pregnant women. Cheese sold by street vendors or obtained from relatives or friends in other countries where food processing quality assurance is unknown especially should be avoided by pregnant women.