LISTERIOSIS, PERINATAL

CRUDE DATA		Figure 53		
Number of Cases	7	Perinatal Listeriosis		
Annual Incidence ^a		Incidence Rates by Year		
LA County	4.2	Los Angeles County, 1988-1998		
United States	N/A			
Age at Onset (Maternal)		Cases per 100,000 Live Births		
Mean	25	20		
Median	26			
Range	16-33 yrs			
(Infant Gestational)				
Mean	25			
Median	26	5+		
Range	12-38 wks			
Case Fatality ^b (n=4)		88 89 90 91 92 93 94 95 96 97		
LA County	25%	Year		
United States	N/A			

^aCases per 100,000 live birth

^bDenominator= babies with known outcome; stillborn fetuses are removed from the numerator and denominator.

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*. Neonatal listeriosis is divided into early onset (0-6 days after birth) and late onset (more than 6 days to 42 days after birth). The fetus may be stillborn, born with septicemia, or develop meningitis in the neonatal period, even if the mother is asymptomatic.

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STRATIFIED DATA

Trends: The 1998 perinatal listeriosis incidence rate (4.19 per 100,000 live births) is about the same compared to 1997, and stayed relatively low since 1994. It still is approximately half as high compared to the higher incidence years between 1987 and 1993 (13 per 100,000; Figure 53).

Seasonality: There were too few cases to look for seasonality.

Age: Perinatal listeriosis incidence was greatest among women aged less than 20 years old (17.1 per 100,000 live births), followed by the 30- to 34-year-old women (7.8 per 100,000 live births; Figure 54).

Sex: The gender of four infants were known; three were female, and one was male.

Race/Ethnicity: Among all races, Whites had the highest disease rate (9.8 per 100,000 live births), followed by Hispanics (4.1 per 100,000 live births). No perinatal listeriosis was reported for Black and Asian women (Figure 55).

Location: The seven perinatal cases came from six different health districts.

Type of Delivery: In four of the perinatal cases where the method of delivery was known, all were vaginal.

Outcome: One fetus was stillborn, one infant died after delivery, and three survived. Two had an unknown outcome.

Culture Sites: Sites of *Listeria monocytogenes* isolation were blood (80% for both mother and infant/fetus), placenta (20% in mother) and trachea (20% in infant; Table 5).

Late Onset: In 1998, there was no case classified as a late-onset case.

COMMENTS

Perinatal listeriosis continues to decline in LAC. This may be attributed to both reduced risk behavior of mothers due to successful prevention strategies (information leaflets to prenatal clinics) and reduced exposure due to the zero-tolerance rule for meat products since 1990.

PREVENTION

Listeria monocytogenes is found in soil and water. Animals can carry Listeria without appearing ill, which can result in contaminated foods of animal origin, such as meats and dairy products. In particular, studies have implicated unpasteurized milk or products made from unpasteurized milk, such as soft cheeses (Mexican-style, Brie, Feta), cold cuts from deli counters, undercooked meat, e.g. chicken, paté, and pork tongue in jelly. These foods should be avoided by pregnant women; fruits and vegetables should be thoroughly washed. 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.





Culture Site	Mother (n=7) Number Percent		Infant (n=7) Number Percent	
Blood	4	80	4	80
Placenta	1	20	0	0
Trachea	0	0	1	20
Unknown	2	-	2	-

Table 5: Frequency (%)^a of Listeria monocytogenes Isolatesfrom Mothers and Infants, Los Angeles County, 1998

^a Percentages may exceed 100% as cultures were obtained from more than one site in some cases.