MENINGOCOCCAL DISEASE

CRUDE DATA	
Number of Cases	74
Annual Incidence ^a	
LA County California United States	0.82 1.24 1.24
Age at Onset	
Mean Median Range	26 22 21 days - 89 yrs
Case Fatality	
LA County United States	15% N/A



^aCases per 100,000 population.

ETIOLOGY

Neisseria meningitidis, a gram-negative diplococcus.

DISEASE ABSTRACT

The incidence of meningococcal disease remained low in 1997. No outbreaks, and only rare occurrences of secondary spread, were reported. No cases occurred in men's correctional facilities.

STRATIFIED DATA

Trends: The slight upward trend in meningococcal disease, which began in 1995, continued in 1997 (Figure 75). Cases were generally sporadic and unrelated.

Seasonality: The highest number of cases was reported in January (n=16). Seasonal occurrence was as expected, with the exception of May when cases approximated winter rates (Figure 76).



Age: In 1997 disease rates were highest, and more than double those in 1996, in infants less-than-one-year of age. A significant increase was also seen among Hispanic infants where the disease rate (13 per 100,000) and the number of cases (n=13)increased 200% from the previous year. No reason for the increase was identified. Rates in all other age groups remained relatively unchanged (Figure 77).

Sex: The male-to-female rate ratio was 1:1.1.

Race/Ethnicity: For the third year, ageadjusted meningococcal disease rates were highest among Blacks (1.0 per 100,000). Rates among Hispanics (0.8 per 100,000) and Asians (0.1 per 100.000) increased slightly, but decreased among Whites (0.7 per 100,000) (Figure 78).

Location: The highest rates of meningococcal disease occurred in the Compton (1.8 per 100,000), Bellflower (1.7 per 100,000), and Southeast (1.4 per 100,000) Health Districts (Map 10).

COMMENTS

For the first time in more than ten years no cases occurred in or associated with a men's correctional facility.

No outbreaks were reported in 1997. One secondary case occurred, six days following

onset of illness in the index case, in a patient who had not been identified as a contact or given prophylaxis. Serogroup C N. meningitidis was identified in both. In another case, a household contact who had not completed the prescribed prophylaxis developed meningococcemia six weeks after onset of illness in the index case. Serogroup B N. meningitidis was identified in both, suggesting that they were caused by the same strain.

Among all cases in 1997, N. meningitidis was isolated from blood in 46%, from cerebrospinal fluid in 27%, from both in 14%, and was the only organism isolated from sputum in a case of pneumonia (Figure 79). Isolates from 60% of LAC cases were submitted to the Public Health Laboratory (PHL) for serogroup identification. Serogroup Y remained the predominant serogroup (42%). The remainder were comprised of serogroup B (38%) and serogroup C (17%) (Figure 80). In 4% of the isolates received, the serogroup could not be determined. In conjunction with the



availability of vaccine against serogroups A,C,Y and W-135, data on serogroup prevalence can provide information useful in developing strategies for outbreak management when vaccine use is an option. All laboratories in LAC are encouraged to submit case isolates to the PHL for serogroup identification.





MAP 10. Meningococcal Disease (Age-Adjusted Rate) Rates by Health District, Los Angeles County, 1997*