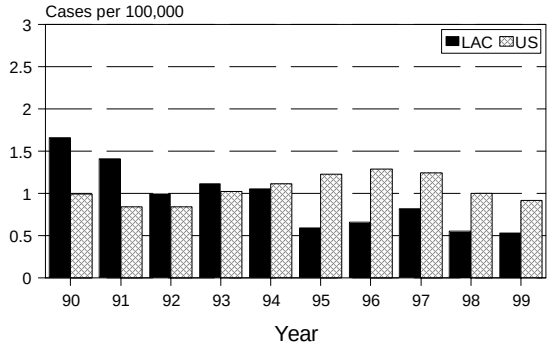
MENINGOCOCCAL DISEASE

CRUDE DATA	
Number of Cases	49
Annual Incidence[a]	
LA County	0.53
California	0.90
United States	0.92
Age at Onset	
Mean	36
Median	35
Range	3 weeks - 88 yrs
Case Fatality	
LA County	12%
United States	N/A

[a]Cases per 100,000 population.

Figure 65

Meningococcal Disease
Incidence Rates by Year of Onset
LAC and US, 1990-1999



ETIOLOGY

Neisseria meningitidis, a gram-negative diplococcus.

DISEASE ABSTRACT

The incidence of meningococcal disease reached a record low in 1999. The majority of cases (71%) occurred in adults. There were no outbreaks or secondary cases.

STRATIFIED DATA

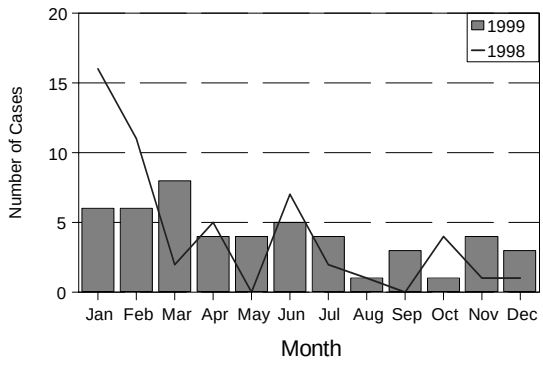
Trends: The number of cases continued to decrease in 1999. Serogroup Y continued to predominate. As in 1998, all fatalities were in adults.

Seasonality: Although seasonal differences in occurrence were not as marked as in the previous year, cases were highest during the late winter and early spring (Figure 66).

Age: In 1999, disease rates continued highest among the very young and the very old. As is typical, the highest rates were seen in infants less than one year of age (2.21 per 100,000 population). What appears to be a significant decrease in rates from the previous year (7.53

Figure 66

Meningococcal Disease
Cases by Month of Onset
Los Angeles County, 1998 - 1999

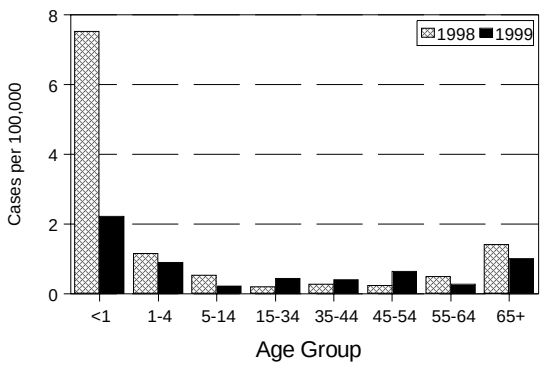


per 100,000) is exaggerated by the small number of cases (n=4) in this age group. As in 1998, the next highest rates were seen in those aged 65 and over (1.00 per 100,000) (Figure 67) and all fatalities in 1999 (n=6) occurred among adults.

Sex: The male-to-female rate ratio was 1:1.2.

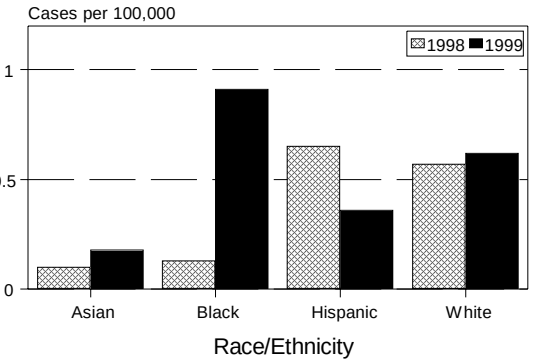
Race/Ethnicity: As has been typical except for 1998, age-adjusted meningococcal disease rates were highest in Blacks and lowest in Asians (0.91 and 0.18 per 100,000 population, respectively) (Figure 68). The number of cases traditionally is higher among Whites and Latinos (n= 21 and 16 respectively, in 1999).

Figure 67
Meningococcal Disease
Incidence Rates by Age Group
Los Angeles County, 1998 -1999



Location: The highest rates of meningococcal disease occurred in the Foothill (1.64 per 100,000 population), West (1.56 per 100,000), and Southwest (1.36 per 100,000) Health Districts (Map 8). The number of cases was highest in the West (n=9), West Valley (n=7) and Foothill, Inglewood, and Southwest Health Districts (n=5).

Figure 68
Meningococcal Disease
Age-adjusted Rates by Race/Ethnicity
Los Angeles County, 1998 -1999



COMMENTS

In 1999, *N. meningitidis* was isolated from 40 (82%) of the cases reported, 31 (78%) from blood, 6 (15%) from cerebrospinal fluid, 2 (5%) from both, and 1 (3%) from sputum (Figure 69). Serogroup identification was made in 67% of the cases. Serogroup Y increased to 49% from 44% in 1998 and continued to predominate. Serogroup B declined to 33% from 41% in 1998, and serogroup C increased slightly to 18% from 15% (Figure 70).

In 1999, the American College Health Association recommended that college students receive information about, and have access to, meningococcal vaccine. Since CDC studies indicate that freshman college students, especially those who live in dormitories, are at modestly increased risk for meningococcal disease, Los Angeles County began collecting additional information on young adult (17-30) cases.

There were seven cases among persons aged 17-30 who were not college sudents. Three case isolates were available for serogroup identification; two were serogroup B and one was serogroup C. There were two cases in college students attending different universities. One had serogroup B meningococcal disease and lived in an apartment on campus. The other, whose isolate was not available, lived off campus. In 1999, serogroup B meningococcal disease, which is not vaccine-

preventable, represented 1/3 of all cases, ½ of cases in college students, and 2/3 of young adult cases in which a serogroup was identified.

Figure 69

Meningococcal Disease
Clinical Manifestations
Los Angeles County, 1998 -1999

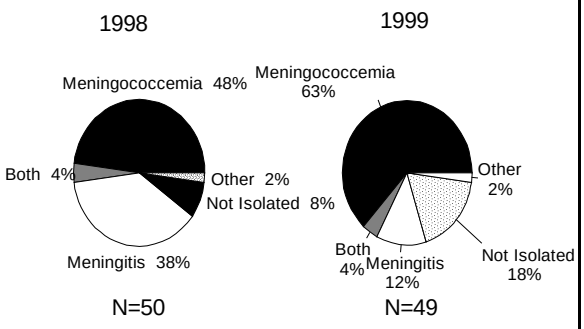
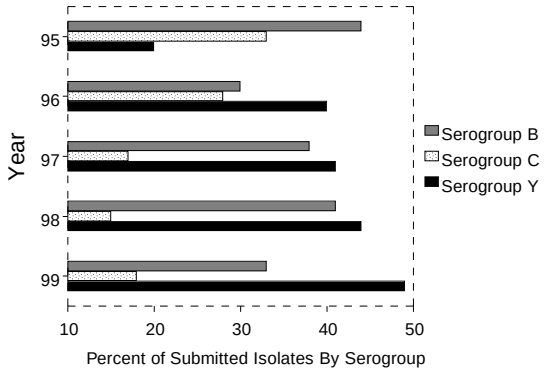
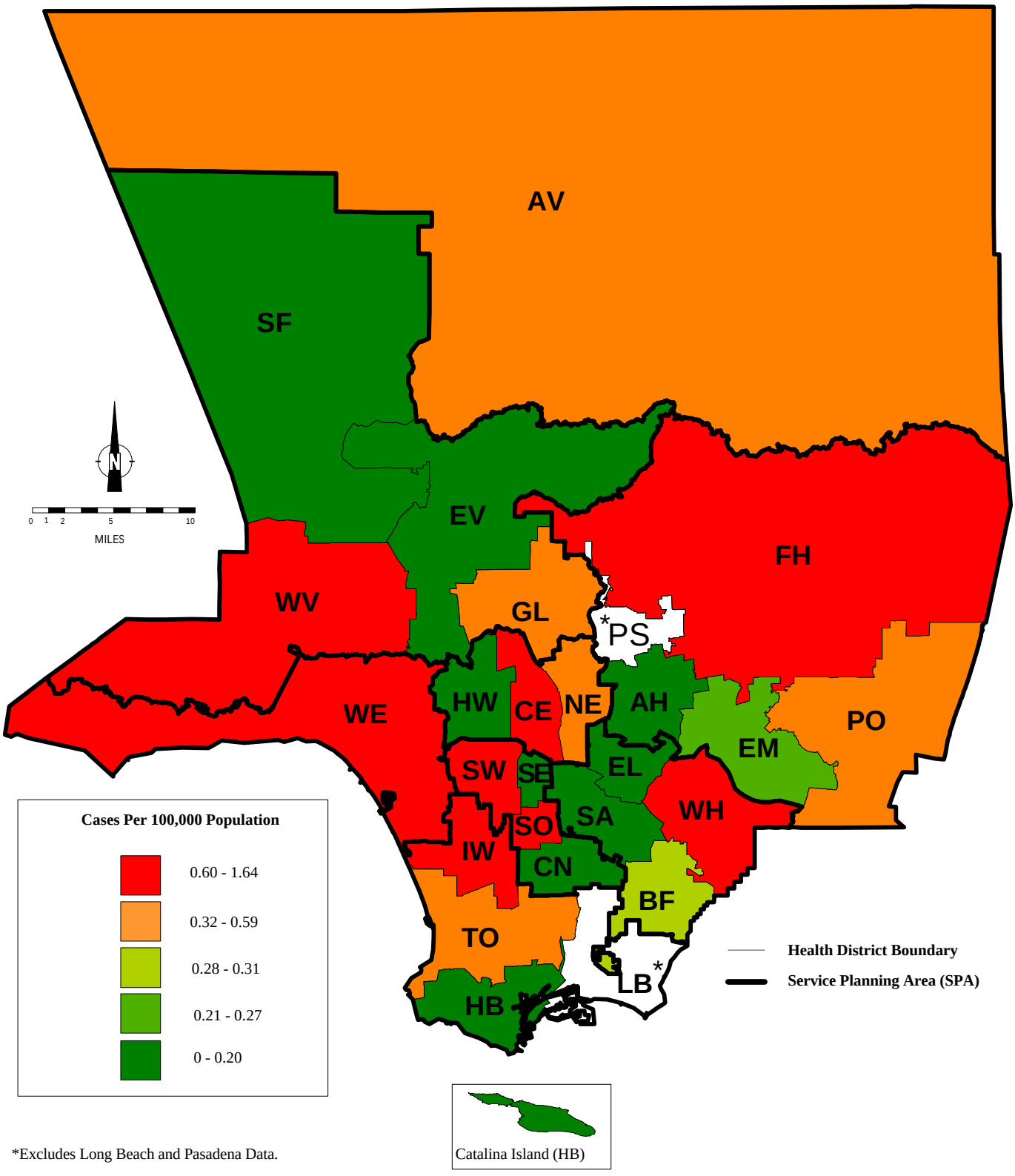


Figure 70

Neisseria Meningitidis
Serogroups B, C, and Y
Los Angeles County, 1995 -1999



MAP 8. Meningococcal Disease
Rates by Health District, Los Angeles County, 1999*



*Excludes Long Beach and Pasadena Data.