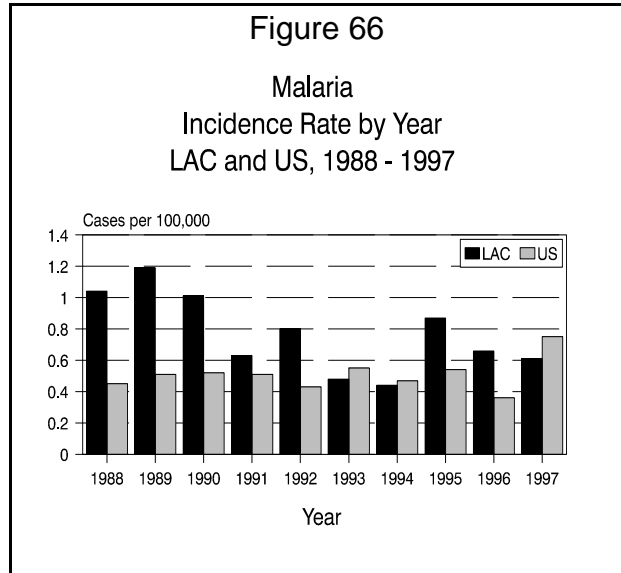


MALARIA

CRUDE DATA	
Number of Cases	55
Annual Incidence ^a	
LA County	0.61
California	1.26
United States	0.75
Age at Onset	
Mean	29
Median	28
Range	0-74 yrs
Case Fatality	
LA County	0.0%
United States	N/A

^aCases per 100,000 population.



ETIOLOGY

Human malaria is caused by four species of the genus *Plasmodium*: *P. vivax*; *P. falciparum*; *P. malariae*; and *P. ovale*. Malaria is acquired from the bite of an infective female *Anopheles* mosquito.

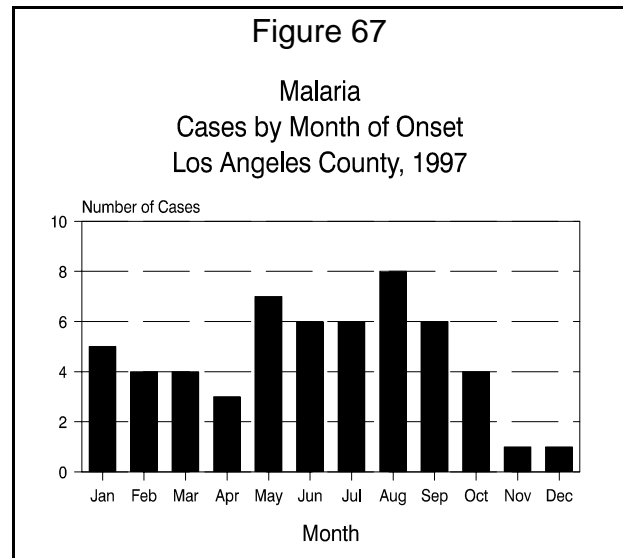
DISEASE ABSTRACT

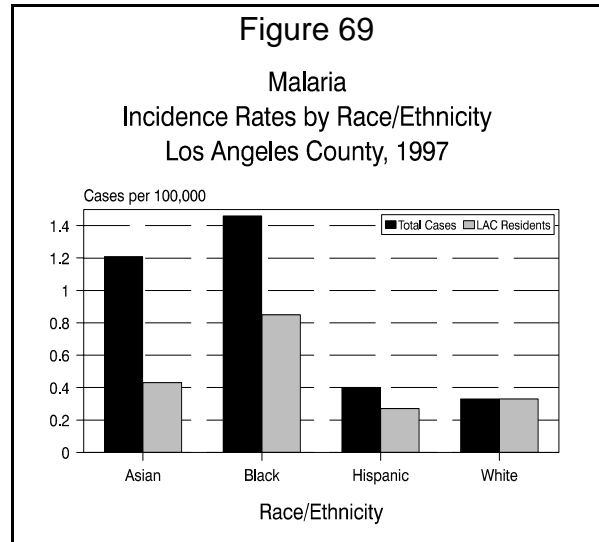
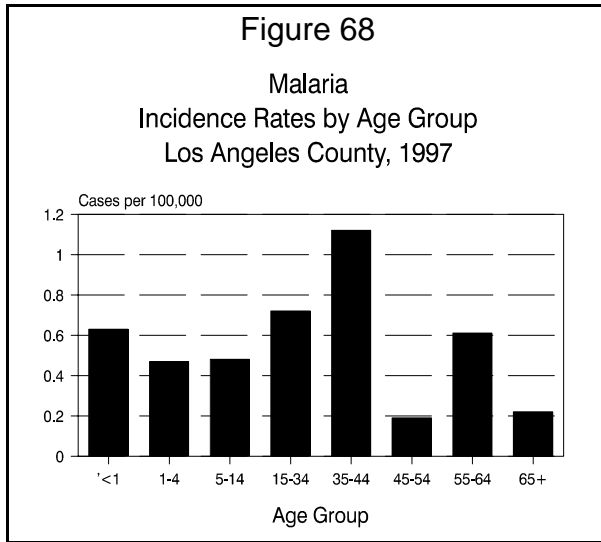
The incidence rate of malaria in Los Angeles County (LAC) decreased slightly (7.6%) in 1997 (Figure 66). Foreign travel, especially to Latin America, increased as a risk factor (Table 4).

STRATIFIED DATA

Seasonality: Malaria is not transmitted locally. However, travel to and from endemic areas during the traditionally busier summer season may account for the higher number of cases reported in the summer and early fall months (Figure 67).

Age: Malaria incidence was greatest among persons aged 35-44 years (Figure 68). In previous years, the 15- to 34-year-old age group usually had the highest incidence rate.





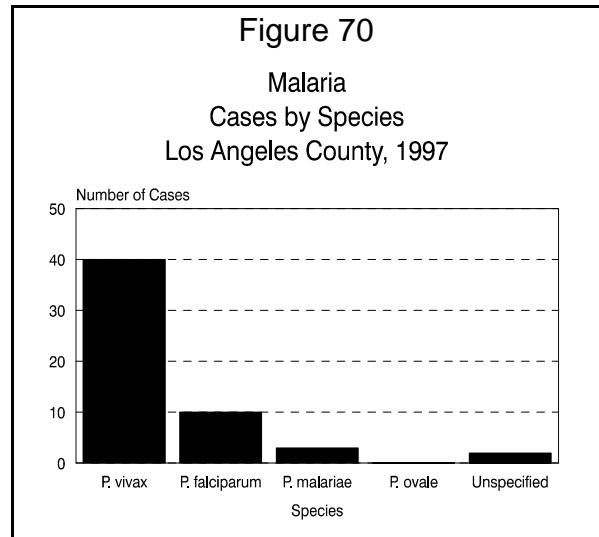
Sex: The majority (32, or 58%) of the cases were male, as usual.

Race/Ethnicity: Malaria incidence (both for total cases and LAC residents) was highest among African nationals/Black Americans and Asians (Figure 69).

COMMENTS

No local transmission of malaria, excluding congenital transmission, has been documented in LAC since 1949.

Of the 55 malaria cases reported in LAC in 1997, 31 (56%) were LAC residents who traveled abroad either for work (11, or 20%) or for pleasure or other reasons (20, or 36%). Calculation of incidence rates that include immigrants and foreign nationals leads to overestimation of the risk to local residents, but can help estimate health care burden.



For those malaria cases traveling abroad, Latin America was the most common destination (14, or 45%), and for recent immigrants or visitors to the US, India was the most common country of origin (10, or 42%) (Table 4).

Prophylaxis history was available for 29 of the 31 cases who traveled abroad (Table 5). Of those 29, proper antimalarial prophylaxis was taken by only seven (24%). Only one (6%) of the 18 cases who traveled for pleasure received proper anti-malarial prophylaxis. As might be expected, none of those immigrating to or visiting the US received prophylaxis.

Malaria species were identified for 53 (96%) of the 55 cases in LAC in 1997. The majority (40, or 75%) were infected with *P. vivax*, ten (19%) with *P. falciparum*, and three (6%) with *P. malariae* (Figure 70). Most of the *P. vivax* infections were acquired in Latin America, and most of the *P. falciparum* infections were acquired in Africa (Table 4).

Table 4. Malaria Cases by Travel Exposure, Los Angeles County, 1997

Foreign Travel		Recent Immigration or Visiting US	
Region/Country	Number of Cases (Species)*	Region/ Country	Number of Cases (Species)*
Africa		Africa	
Ethiopia	1 (1V)	Ethiopia	1 (1V)
Guinea	1 (1F)	Ghana	1 (1M)
Kenya	4 (2F,1V,1N)	Nigeria	2 (1F,1V)
Nigeria	3 (3F)	Unspecified	1 (1F)
South Africa	1 (1V)		
Latin America		Latin America	
Brazil	1 (1V)	Honduras	5 (5V)
El Salvador	1 (1V)	Mexico	2 (2V)
Guatemala	2 (2V)	Nicaragua	1 (1V)
Honduras	5 (5V)		
Mexico	3 (3V)		
Nicaragua	2 (2V)		
Asia/Oceania		Asia/Oceania	
India	2 (1F,1V)	India	10 (1F,1M,7V,1N)
Indonesia	2 (1M,1V)	Unspecified	1 (1V)
New Guinea	1 (1V)		
Tahiti	1 (1V)		
Europe			
Armenia	1 (1V)		
Total	31		24

*F= *P. falciparum*, M= *P. malariae*, V= *P. vivax*, N=Not determined

**Table 5. Malaria Cases by Travel and Prophylaxis History
Los Angeles County, 1997**

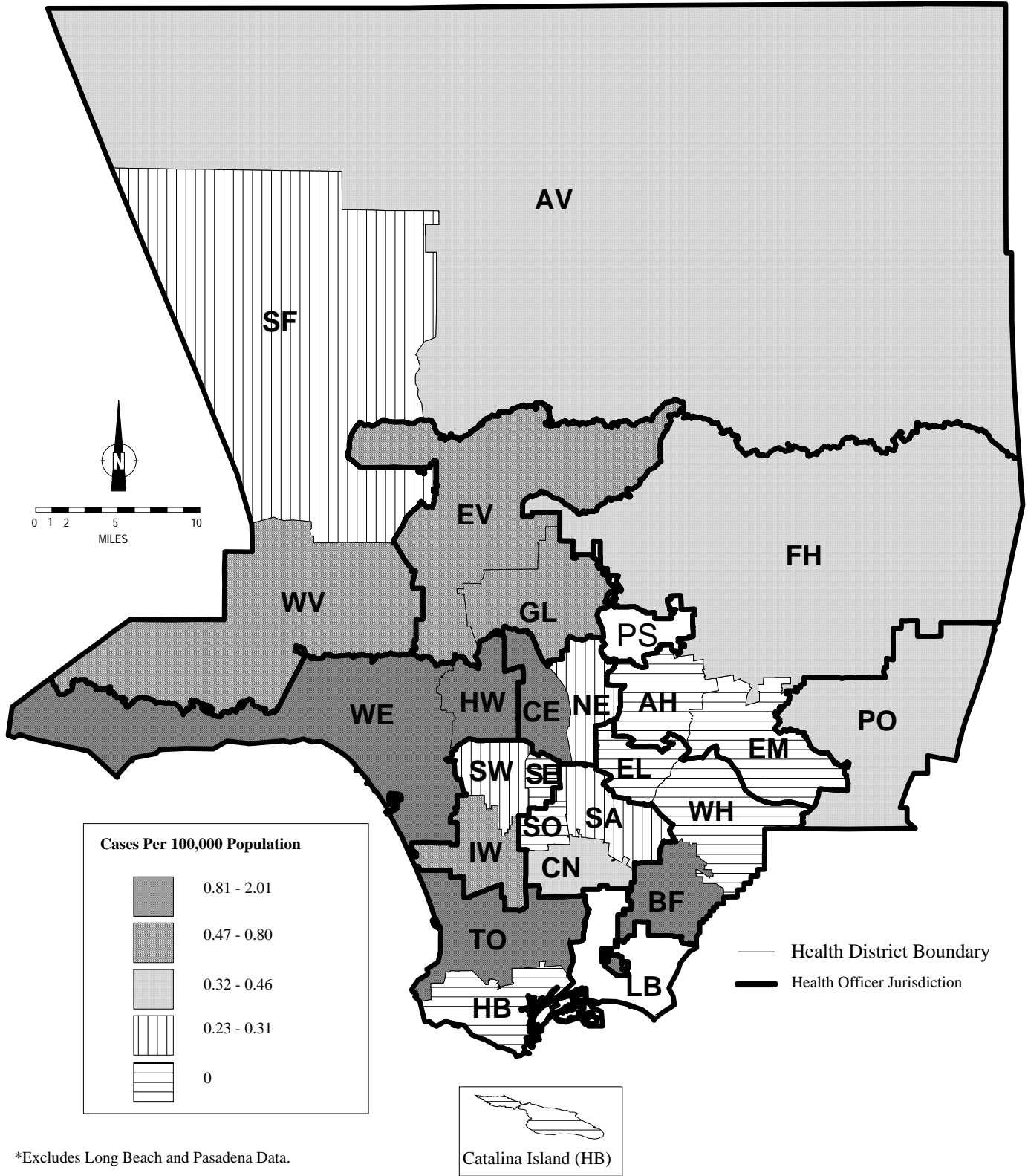
Proper Prophylaxis?	Recent Immigrant	Foreigner or Visitor to US	Travel for Work	Travel for Pleasure
Yes	0	0	6	1
No	17	6	2	15
Incomplete	0	0	3	2
Unknown	1	0	0	2

**Table 6. Malaria Cases by Travel and Previous Malaria History
Los Angeles County, 1997**

Previous Malaria?	Recent Immigrant	Foreigner or Visitor to US	Travel for Work	Travel for Pleasure
Yes	7	4	4	7
No	9	2	7	12
Unknown	2	0	0	1

MAP 8. Malaria

Rates by Health District, Los Angeles County, 1997*



*Excludes Long Beach and Pasadena Data.