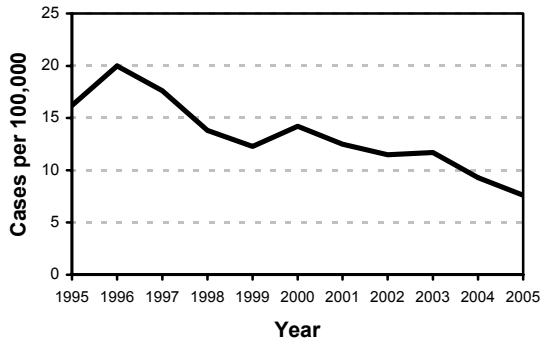
CAMPYLOBACTERIOSIS

CRUDE DATA	
Number of Cases	725
Annual Incidence[a]	
LA County	7.6
United States	N/A
Age at Diagnosis	
Mean	32.1
Median	31
Range	0–95
Case Fatality	
LA County	<1%
United States	N/A

[a] Cases per 100,000 population.

Figure 1
Campylobacteriosis
Incidence Rates by Year of Onset
LAC, 1995–2005



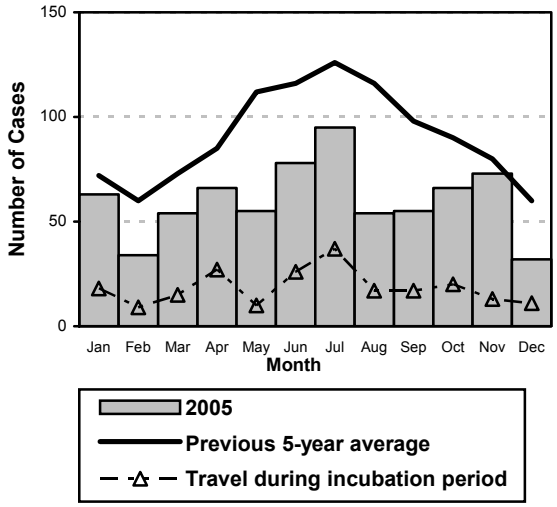
DESCRIPTION

Campylobacteriosis is a bacterial disease caused by Gram-negative bacilli transmitted through ingestion of organisms via consumption of undercooked poultry or other meat, contaminated food, water or raw milk, or contact with infected animals. The incubation period is 2–5 days. Common symptoms include watery or bloody diarrhea, fever, abdominal cramps, myalgia, and nausea. Species include *C. jejuni, C. upsaliensis, C. coli* and *C. fetus*. Sequelae include Guillain-Barré syndrome and Reiter syndrome, which occur in a limited number of cases.

DISEASE ABSTRACT

- There was an 18% decrease in the incidence of campylobacteriosis in 2005.
- In 2005, overall age-adjusted rates were highest for Latinos.
- No outbreaks of campylobacteriosis were reported in 2005.

Figure 2
Campylobacteriosis
Cases and Travel History by
Month of Onset
LAC, 2005



STRATIFIED DATA

Trends: The incidence of campylobacteriosis decreased by 18% in 2005. After two years of relative stability in 2002 and 2003, the rate of campylobacteriosis decreased significantly from 11.7 cases per 100,000 to 9.3 in 2004 and 7.6 in 2005 ($p < 0.05$). There has been an overall downward trend since 1996.

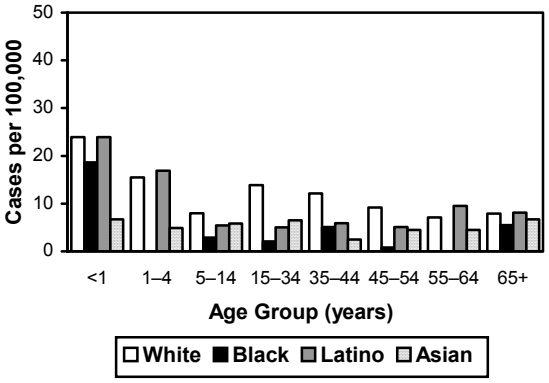
Seasonality: Overall incidence decreased as compared to the previous five-year average starting in February 2005. The number of cases increased in the spring and summer as in other years. Peaks during these seasons may be associated with the increase in travel. Travel is a risk factor for infection since it is most likely associated with an increase in eating at restaurants—which is a risk factor for this disease. Risk also increases when traveling to countries where food safety is questionable. In 2005, 220 cases (30%) reported travel during the incubation period. Of these, 20% traveled within the US. Mexico was the most commonly named (42%) travel destination outside the US. In 2005, overall incidence as well as travel related incidence peaked in July (Figure 2).

Age: The highest rates continued to be among infants aged <1 year and children, aged 1–4 years (Figure 3). These age groups had significantly higher rates than any other age group but the rates were lower than the previous five-year average. In developed countries, children younger than five years and young adults have the highest incidence of this disease. The rates for persons older than 55 years were lower than the previous five-year average.

Sex: The male-to-female rate ratio was 1.2:1. The preponderance of males is typical and the reason for this is not known [1]. Among men above the age of fifteen, 3% reported sexual contact with other men (MSM).

Race/Ethnicity: The highest overall age-adjusted rate was in Whites (11.0 cases per 100,000 population). In 2005 age-adjusted rates decreased for Latinos (7.0) although Latinos had similar incidence to Whites. Age-adjusted rates for Asians (5.2) and Blacks (2.8) decreased. Latino, White, and Black infants (aged <1) have higher age-adjusted rates compared to Asians (Figure 3).

Figure 3
Campylobacteriosis Incidence Rates by Age Group and Race/Ethnicity
LAC, 2005 (N=725)



Location: SPA 2 again had the highest number of cases at 201 (9.4 per 100,000), and SPA 5 had the highest rate with 16.5 per 100,000 (N= 108). The higher rate in SPA 5 is consistent with previous years and is significantly higher than the county average.

Severity of Illness: Seventeen percent of campylobacteriosis cases (N=124) were hospitalized for at least two days. Two campylobacteriosis-associated deaths occurred in a 71 year-old male and a 95 year-old male. Both deaths were associated with multiple medical problems including a history of stomach and prostate cancer. There was one report of Guillain-Barré syndrome (GBS) subsequent to a campylobacteriosis diagnosis. Six percent of campylobacteriosis cases were immunocompromised (N=47). Reasons for immunosuppression included HIV, AIDS, diabetes, leukemia, kidney transplant, lupus, sickle cell disease, cancer, and recent diagnosis of cancer with treatment.

PREVENTION

To reduce the likelihood of contracting campylobacteriosis, all food derived from animal sources should be thoroughly cooked, particularly poultry. Cross contamination may be avoided by making sure utensils, counter tops, cutting boards and sponges are cleaned or do not come in contact with raw poultry or meat or their juices. Hands should be thoroughly washed before, during and after food preparation. The fluids from raw poultry or meat should not be allowed to drip on other foods in the refrigerator or in the shopping cart. It is especially important to wash hands and avoid cross contamination of infant foods, bottles and eating utensils. It is recommended to consume only pasteurized milk, milk products or juices. In addition, it is important to wash hands after coming in contact with any animal or its environment.

COMMENTS

Visiting countries where food safety is questionable may increase risk of campylobacteriosis. Travel is associated with eating in restaurants more often, which can be a risk factor for this disease. Consuming raw milk or raw milk products was a risk factor for fourteen sporadic cases; seven of these cases consumed the milk or product while traveling outside the US and six consumed unpasteurized cheese brought back from Mexico.

No campylobacteriosis outbreaks were reported in 2005.

REFERENCES

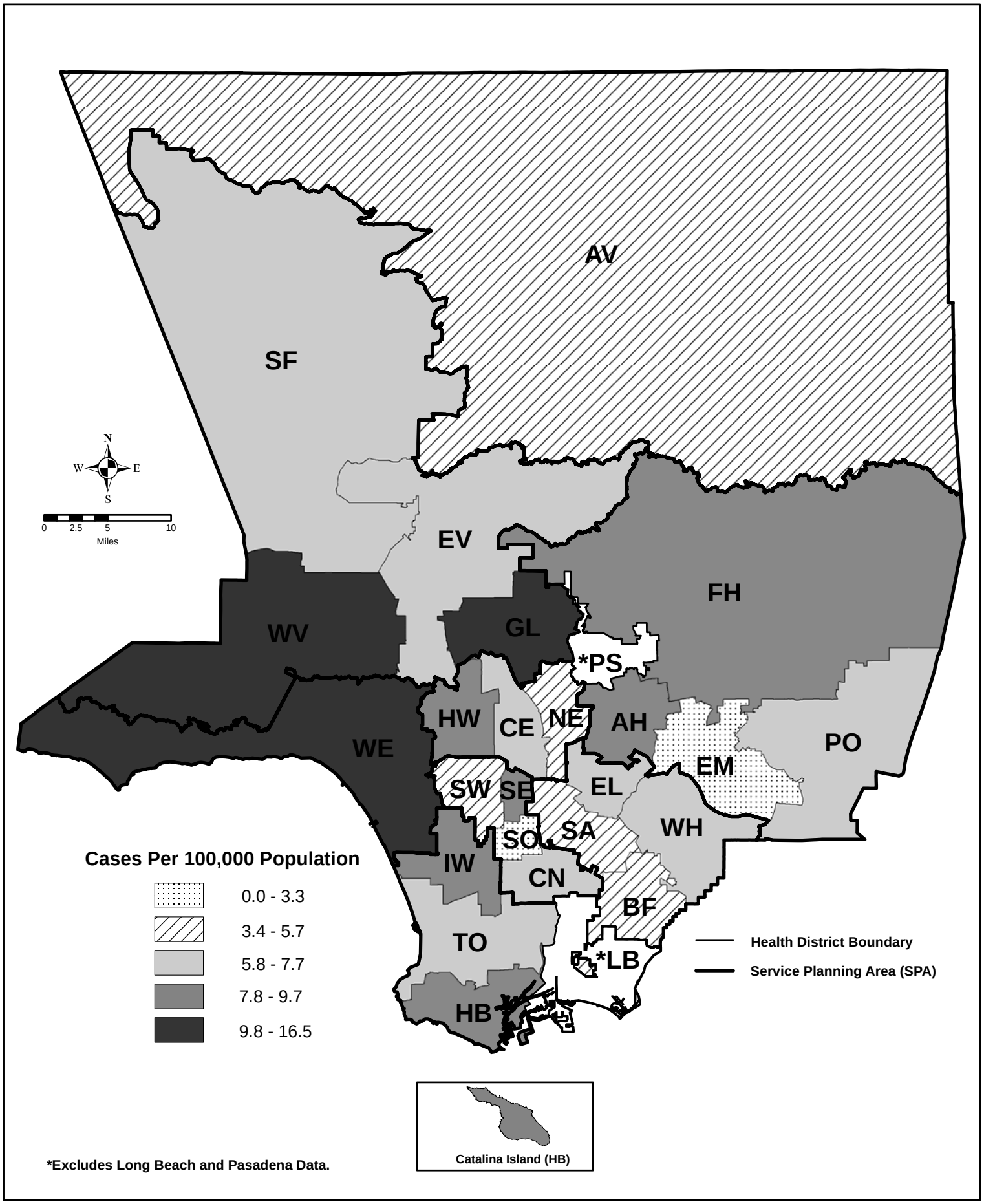
1. Allos, B.M. Campylobacter jejuni infections: update on emerging issues and trends. Clinical Infectious Diseases 2001;32:1201–6.

ADDITIONAL RESOURCES

Disease information is available from the CDC at:
www.cdc.gov/ncidod/dbmd/diseaseinfo/campylobacter_g.htm

General information and reporting information about this and other foodborne diseases in LAC is available at: www.lapublichealth.org/acd/food.htm

Map 2. Campylobacteriosis
Rates by Health District, Los Angeles County, 2005*



*Excludes Long Beach and Pasadena Data.