## **MENINGITIS, VIRAL**

CRUDE DATA	
Number of Cases	227
Annual Incidence <sup>a</sup>	
LA County	2.51
United States	N/A
Age at Onset	
Mean	16
Median	9
Range	0-74 yrs
Case Fatality	
LA County	0.4%
United States	N/A



<sup>a</sup>Cases per 100,000 population.

## ETIOLOGY

A wide variety of viruses can cause meningitis. Previous studies show that the vast majority of cases are of undetermined etiology. Of those with laboratory confirmation, most are caused by enteroviruses.

## DISEASE ABSTRACT

The incidence rate of viral meningitis increased slightly in 1997 (from 2.08 cases per 100,000 to 2.51 cases per 100,000). As in previous years, the incidence of viral meningitis was highest during the summer months, which parallels the enterovirus season.

Although viral meningitis can occur at any age, it was highest among infants less than one year of age (37.32 cases per 100,000). The male-to-female rate ratio was 1:0.9. The ageadjusted incidence rate was highest among Whites (3.1 cases per 100,000 population), followed by Blacks (2.6 per 100,000), Hispanics (2.2 per 100,000),and Asians (1.3 per 100,000). The highest rates of viral



meningitis in 1997 were in Bellflower (5.8 per 100,000) and Foothill (5.7 per 100,000) Health Districts.

## COMMENTS

The majority of cases reported as viral meningitis are not laboratory confirmed. The diagnosis is usually based on a clinical description consisting of meningeal symptoms, fever, white blood cells in the cerebrospinal fluid, and no laboratory evidence of a bacterial or fungal etiology. Viral cultures are usually not performed due to cost, requirement for a laboratory with virologic capability, extended time needed for viral growth and identification (usually obtained long after the patient's recovery), and lack of specific therapy.

Preventive measures depend on the specific etiologic agent. Vaccination provides primary prevention against meningitis due to those viral



diseases for which a vaccine is available, such as measles, mumps, and rubella. Prior to widespread mumps immunization, the mumps virus was the most common cause of viral meningitis. Although the etiologic agent for over 90% of cases is never identified, epidemiologic evidence suggests that most cases of viral meningitis are enteroviral in origin. Since enteroviral transmission is primarily through the fecal-oral route, prevention is directed at proper personal hygiene with emphasis on good handwashing.

