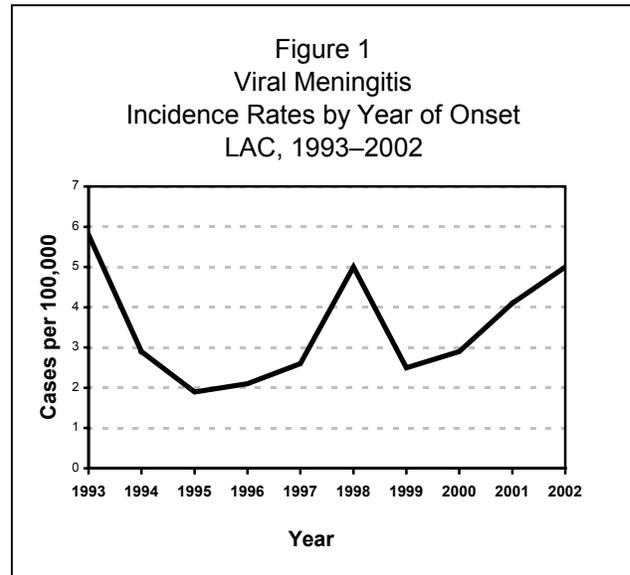




MENINGITIS, VIRAL

CRUDE DATA	
Number of Cases	466
Annual Incidence	
LA County	5.0
United States	N/A
Age at Diagnosis	
Mean	24
Median	22
Range	<1–84 years
Case Fatality	
LA County	1.3%
United States	N/A



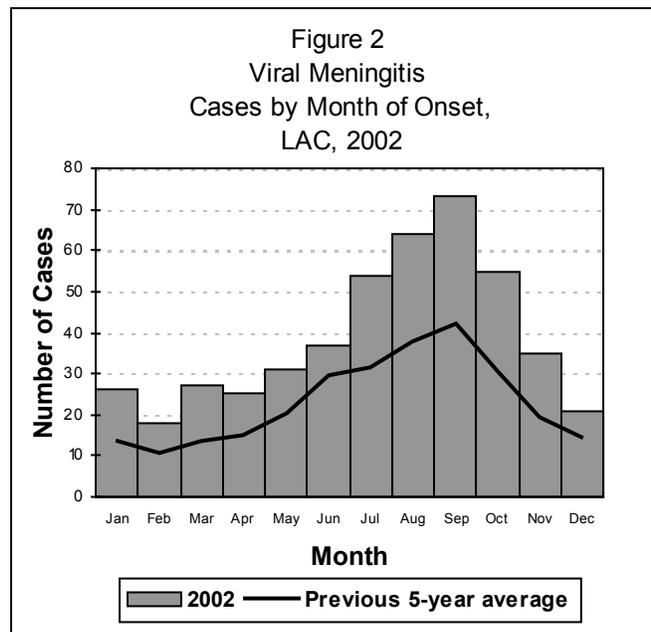
^a Cases per 100,000 population.

DESCRIPTION

Viral meningitis, also referred to as aseptic meningitis, is a clinical syndrome in which no etiologic agent is identified on bacterial culture or examination of cerebrospinal fluid. While no often performed, enterovirus is the virus most often detected in CSF culture. Transmission may be fecal-oral, respiratory or by another route specific to the etiologic agent. Viral meningitis can occur at any age but is most common among the very young. Symptoms, which usually last from 7 to 10 days, are characterized by sudden onset of fever, severe headache, stiff neck, photophobia, drowsiness or confusion, nausea and vomiting. Treatment is usually supportive although antiviral agents may be available; recovery is usually complete. Enteroviruses, the etiologic agents commonly associated with viral meningitis, are not vaccine-preventable (except for polioviruses).

DISEASE ABSTRACT

- In 2002, there were 466 cases of viral meningitis compared to 378 (19% increase) in 2001.
- The annual incidence was 5.0 per 100,000 compared to 4.2 per 100,000 in 2001.
- The summer seasonal increase continued later into the year compared with the previous 5-year average (Figure 2).
- Arboviral infections such as West Nile virus, can present as aseptic meningitis.
- One case of aseptic meningitis was confirmed as West Nile virus infection by CSF and serum (see special report for more details).





- No unusual viral etiologies, associated cases, or clusters were reported in 2002.
- The highest age-group specific rate (34.4 per 100,000) continued to be seen in infants aged less than 1 year (Figure 3).

COMMENTS

Surveillance for viral meningitis is passive and only outbreaks, not individual cases, are investigated. The number of cases reported annually is considered to be significantly lower than the actual burden of disease. In 2002, there was a 19% increase in the number of cases reported. In 2002, there were 5 cases per 100,000 compared to 4.2 cases per 100,000 in 2001. Reasons for the increase, whether actual, or the result of improved reporting or other unknown factors, were not apparent. A similar unexplained increase was seen in 1998.

Information about the causative agents of viral meningitis is rarely included with case reports because viral cultures and nucleic acid tests are not routinely performed at most medical facilities.

When an etiology is determined, an enterovirus, most of which are transmitted through the fecal-oral route, is the most frequently identified agent. Improvements in molecular testing capabilities should lead to faster diagnoses and changes in the management of viral meningitis such as less use of inappropriate antibiotics.

Supportive measures, and to a lesser extent antiviral agents, are the usual treatments for viral meningitis. Good personal hygiene, especially handwashing and avoiding contact with oral secretions of others, is the most practical and effective preventive measure.

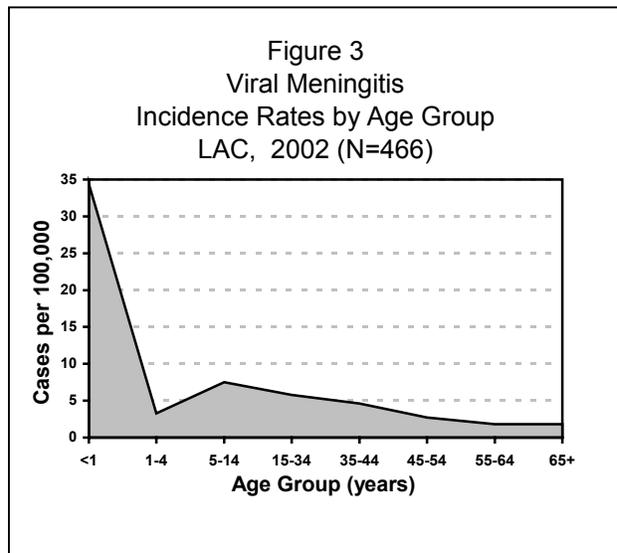
Of particular interest in 2002 is the recognition that arboviral infection, especially WNV, presents as aseptic meningitis. In 2002, one adult female had confirmed WNV as the underlying etiology of her meningitis. She recovered fully. This was the only case documented in the state of California (see special report for more details).

ADDITIONAL RESOURCES

CDC, Respiratory and Enteric Viruses Branch, Viral (Aseptic) Meningitis at:
www.cdc.gov/ncidod/dvrd/virlmen.htm

CDC, Respiratory and Enteric Viruses Branch, Non-polio Enterovirus Infections at:
www.cdc.gov/ncidod/dvrd/entrvirs.htm

Association of State and Territorial Directors of Health Promotion and Public Health Education, Infectious Facts, Viral Meningitis at: www.astdhppe.org/infect/vmenin.html





MAP 9. Meningitis, Viral Rates by Health District, Los Angeles County, 2002*

