Viral (Aseptic) Meningitis

Viral (Aseptic) Meningitis is a Class B Disease and must be reported to the state within one business day.

Epidemiology

Viral meningitis is a relatively common and rarely serious disease caused by one of several types of viruses. The reservoirs and modes of transmission vary with the specific infectious agent. Aseptic meningitis includes viral meningitis, but may be caused by non-viral entities. However, the term is often used synonymously with viral meningitis.

The viruses most often implicated in this condition are non-polio enteroviruses, such as coxsackieviruses and echoviruses. A specific cause is only isolated in approximately 10% to 15% of the cases.

Incidence

Reporting of viral meningitis was suspended in 1998, but was reintroduced in 2002 because of concerns that viral meningitis secondary to arboviral infections could be missed. However, arboviral causes of aseptic meningitis were no longer included in aseptic meningitis surveillance beginning in 2005 with the introduction of arboviral disease case definitions that included neuroinvasive disease. The rate varies from year to year, the high years being those with small outbreaks of infection (Figure 1).

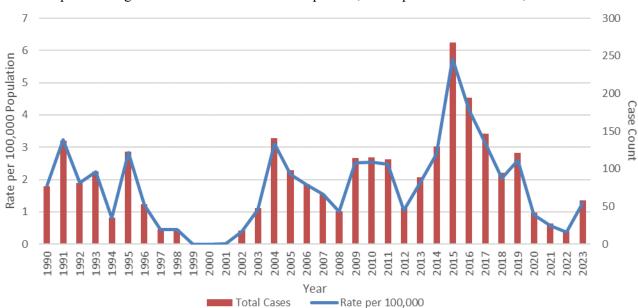
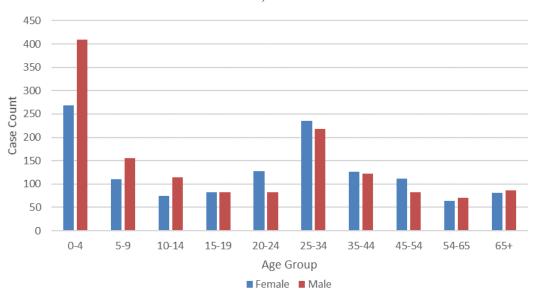


Figure 1: Aseptic Meningitis Cases and Incidence Rates per 100,000 Population – Louisiana, 1990-2023

Age and Sex Distribution

The disease preferentially affects children and young adults (Figure 2). Children are exposed to enteroviruses in day care centers and at schools where many of the people looking after them are young adults, the population most frequently infected with enteroviruses.

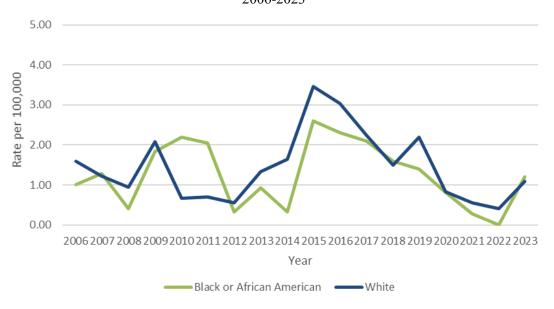
Figure 2: Viral Meningitis Average Annual Incidence Rates by Gender and Age, per 100,000 Population Louisiana, 1990-2023



Race

There are no reported significant trends of incidence rates by race when comparing White and Black or African American individuals with viral meningitis (Figure 3).

Figure 3: Viral Meningitis Average Annual Incidence Rates by Race, per 100,000 Population Louisiana, 2006-2023



Seasonal Variation

The seasonal variation in disease incidence, typically four to seven times higher in the summer and early autumn compared to winter, directly reflects the seasonal pattern of systemic enteroviral infections. These infections are most prevalent during warmer months and are a leading cause of aseptic meningitis (Figure 4).

