

Ehrlichiosis and Anaplasmosis

Ehrlichiosis/Anaplasmosis is a Class C disease. It must be reported to the state within five business days.

Ehrlichiosis and anaplasmosis are emerging illnesses caused by tick-borne rickettsial bacteria that are sometimes clinically indistinguishable - resulting in acute, influenza-like illness with fever, chills, headache, malaise and myalgia and nausea. They can also frequently cause rash with leukopenia, thrombocytopenia, and elevated liver enzymes, mainly ALT. Ehrlichiosis and anaplasmosis, if left untreated or poorly managed, can also result in severe and even fatal complications such as acute respiratory distress syndrome (ARDS), meningitis/encephalitis and renal failure. The incubation period before the onset of symptoms is typically within 1-2 weeks after a tick bite or exposure.

Epidemiology

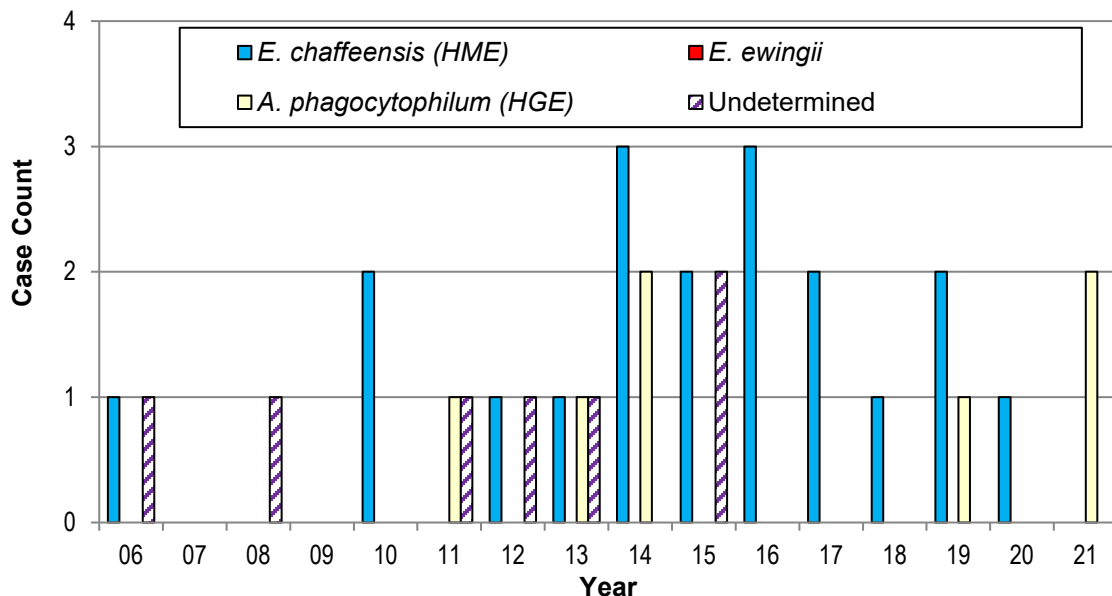
For surveillance purpose, four sub-categories of confirmed or probable ehrlichiosis/anaplasmosis should be reported:

- 1) Human ehrlichiosis (HME) caused by *E. chaffeensis*,
- 2) Human ehrlichiosis caused by *E. ewingii*,
- 3) Human anaplasmosis (HGE) caused by *A. phagocytophilum*, or
- 4) Human ehrlichiosis/anaplasmosis – undetermined

Cases

As of 2021, the average incidence of ehrlichiosis has been 0.03 cases per 100,000 per year and the average incidence of anaplasmosis has been 0.01 cases per 100,000 per year (Figure 1). Nationally, the number of cases of both the diseases has increased steadily since the diseases became reportable in 1999, while case fatality rates has declined to 1% for ehrlichiosis and remained low, at less than 1% for anaplasmosis (Figure 1).

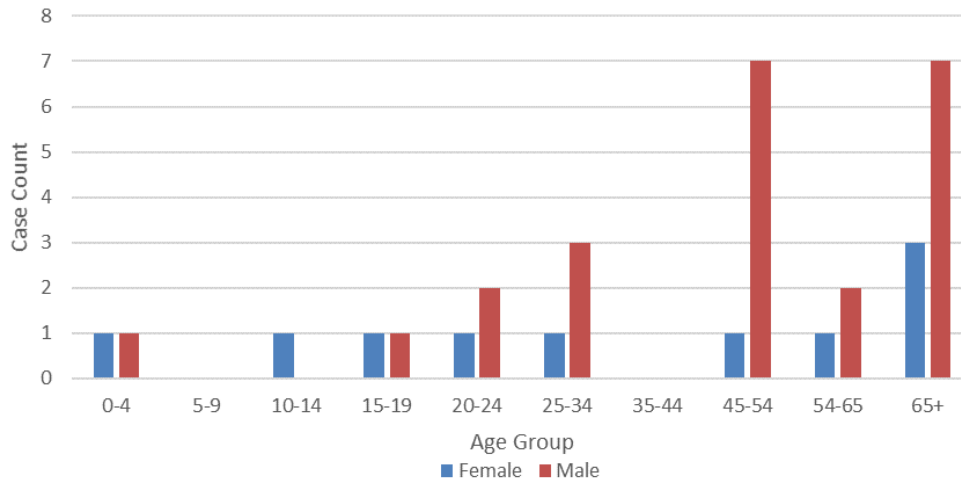
Figure 1: Ehrlichiosis/Anaplasmosis Reported Cases - Louisiana, 2006-2021



Gender and Age

Nationally, the frequency of both diseases is highest in males and people aged 60 years and older. Louisiana has a similar trend, with more cases reported among males (70%) than females. Data also indicated more cases among males in the age group of 45 to 64 years old, as well as those aged 65 years and older (Figure 2).

Figure 2: Ehrlichiosis/Anaplasmosis Cases by Age and Gender - Louisiana, 2006-2021



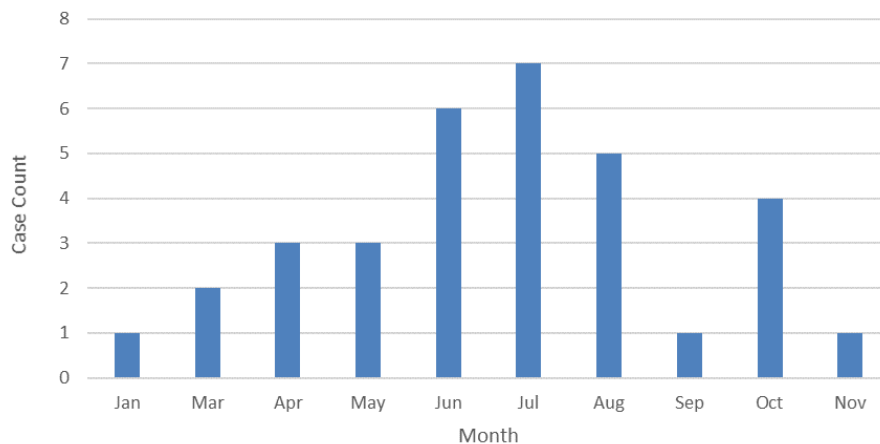
Race and Age

Race and ethnicity are frequently unreported in cases of rare illnesses. Current nationwide data on the breakdown of cases by race has not been published. The remaining cases did not have race reported.

Seasonality

In the United States, a majority of cases are infected during summer months with a peak in the months of June and July (Figure 3).

Figure 3: Ehrlichiosis/Anaplasmosis Reported Cases by Month of Onset - Louisiana, 2006-2021



Geography

Cases have been identified throughout the state, however several cases likely acquired their infections while travelling in other states (Figure 4).

Figure 4: Ehrlichiosis and Anaplasmosis Case Counts by Parish - Louisiana, 2006-2021

