

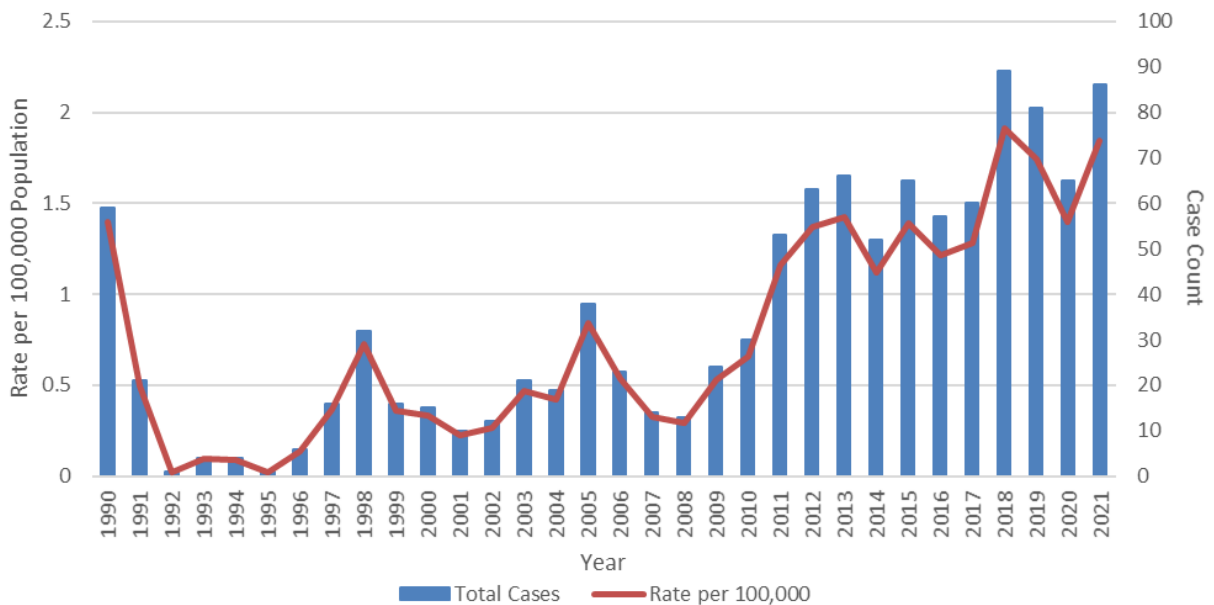
Haemophilus Influenzae (Invasive Disease)

Haemophilus influenzae invasive disease is a Class A Disease and must be reported to the Office of Public Health within 24 hours.

Incidence

There are six serotypes of *Haemophilus influenzae* bacteria, a through f, and other *H. influenzae* that are nontypeable. A vaccine is available for *Haemophilus influenzae* serotype b (Hib).

Figure 1: Incidence of *Haemophilus influenzae* Invasive Disease, All Types
Louisiana, 1990-2021



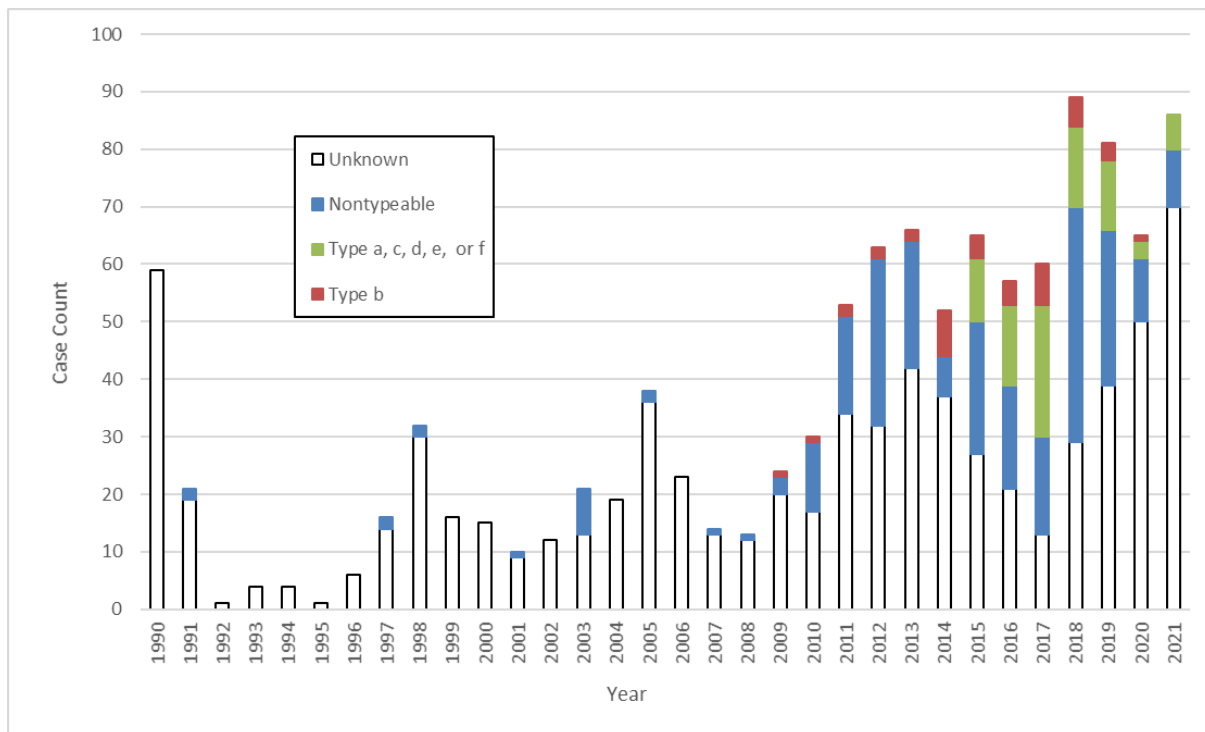
Haemophilus influenzae Type b (Hib) vs. Non-Type b

Before the advent of effective vaccines, *Haemophilus influenzae* type b (Hib) was the most common cause of serious bacterial infections and meningitis in children in the United States. It occurs primarily in under immunized or unimmunized children and in infants too young to have completed the primary vaccination series. It can cause severe disease including pneumonia, bacteremia, and meningitis. Up to 20% of patients who survive Hib meningitis have permanent hearing loss or other long-term neurological sequelae. Between 3% and 6% of Hib cases in children are fatal.

The first Hib vaccine was licensed in 1985 for use in the United States. In 1987, the vaccine was reformulated to be effective in children younger than 18 months of age. The current Hib vaccines are safe in children as young as six-weeks old.

Since Hib vaccines were introduced, Hib disease has dramatically decreased and is no longer common. While Hib invasive infections declined dramatically following widespread vaccination, there is currently no vaccine that protects against other types of *Haemophilus influenzae* (types a, c-f, and non-typeable). Although serotype is unknown for most reported cases, it is likely that disease caused by types other than b is increasing (Figure 2).

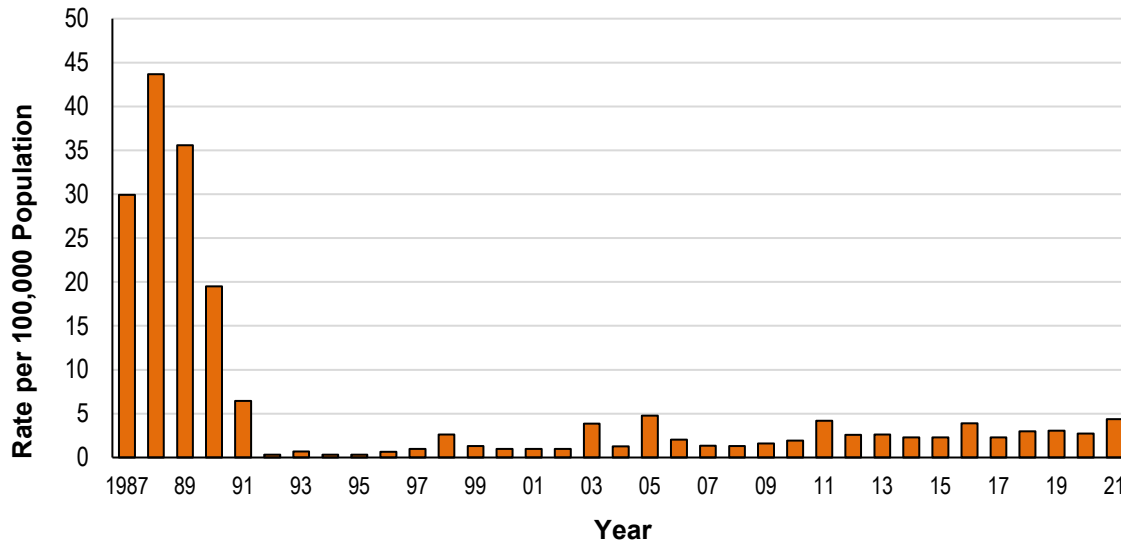
Figure 2: Reported *Haemophilus* Invasive Disease Cases, by Type - Louisiana, 1990-2021



Age

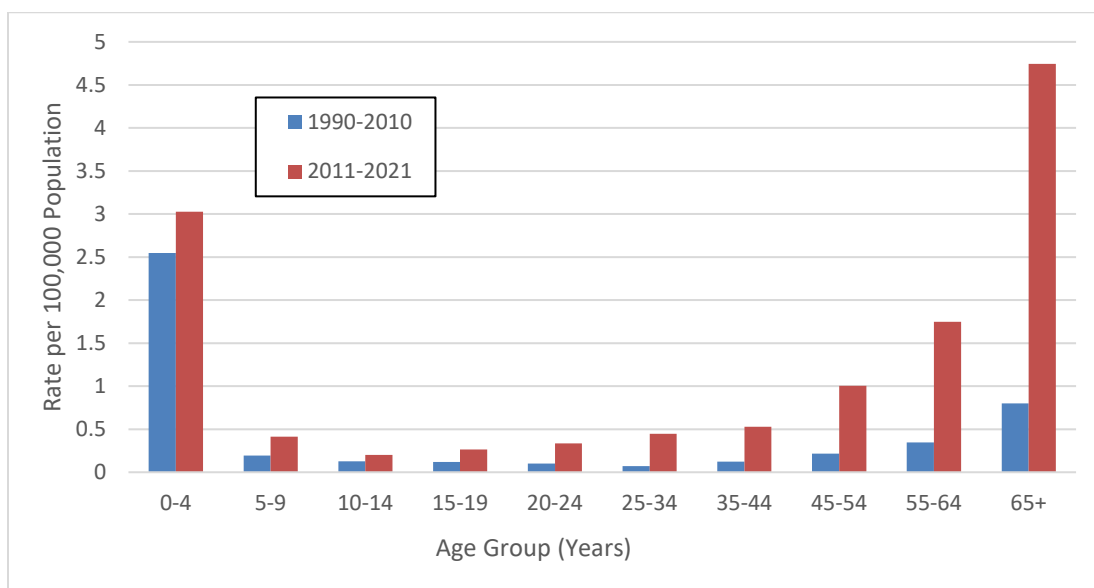
Much of the decrease in Haemophilus cases seen since the introduction of Hib vaccine occurred in children younger than four years of age (Figure 3).

Figure 3: Reported Incidence of *Haemophilus Influenzae* Invasive Disease Aged Newborn to Four Years - Louisiana, 1987-2021



However, invasive Haemophilus infection has increased in the last decade, especially among those in older age groups, due to non-type b strains (Figure 4).

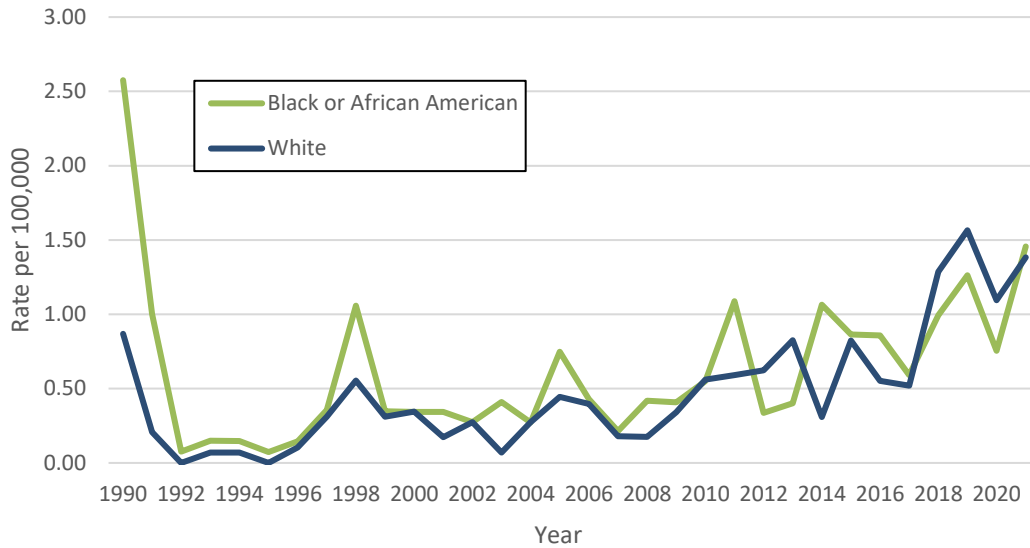
Figure 4: Reported Incidence of *Haemophilus Influenzae* Invasive Disease - All Types by Age Louisiana, 1990-2010 and 2011-2021



Race

On average, incidence rates among African-American individuals are slightly higher than incidence rates among White individuals since 1990. (Figure 5).

Figure 5: *Haemophilus influenzae* Invasive Disease - All Types – Rates by Race - Louisiana, 1990-2021



Sex

On average, incidence rates among men are slightly higher than incidence rates among women since 1990. (Figure 6).

Figure 6: *Haemophilus influenzae* Invasive Disease - All Types – Rates by Sex - Louisiana, 1990-2021

