Varicella

Varicella is a Class C Disease and must be reported to the state within five business days.

Varicella (chickenpox) is the primary infection caused by the varicella-zoster virus (VZV), which consists of blister-like rash, itching, fatigue and fever. Illness usually lasts five to ten days. Humans are the only source of infection. Varicella is highly infectious with secondary infection rates in susceptible household contacts approaching 90%. Transmission occurs from person-toperson, by direct contact with patients with either varicella or zoster lesions, or by airborne spread from respiratory secretions.

The varicella vaccine has been available since 1995 and is recommended in two doses, one at 12 to 15 months of age and the other at four to six years of age. Prior to the availability of the varicella vaccine, almost everyone developed varicella during their lifetime. Each year, about four million people would get chickenpox; each year there were about 10,500 to 13,000 hospitalizations and 100 to 150 deaths from chickenpox. In February 1999, the Advisory Committee on Immunization Practices (ACIP) recommended that varicella vaccine be required for childcare and school entry. The ACIP also strengthened recommendations for the vaccination of susceptible adults at high risk for exposure. The ACIP continues to recommend that vaccination be considered for all susceptible adolescents and adults. In 2016 in the U.S., 90.3% of children aged 0 to 24 months had received one dose of varicella vaccine; 92% of adolescents 13 to 17 years old had received two doses as recommended according to the CDC's National Immunization survey. Increase in coverage has led to declines of >97% in varicella incidence and ≥90% in varicella-related hospitalizations and deaths (94% and 97% among persons age <50 years) over the 25 years (1995-2019) of the vaccination program.

Varicella in Louisiana

Varicella became a reportable disease in 1997. Since 2006, rates have continued to trend downward to 1.05 per 100,000 in 2022 (Figure 1).

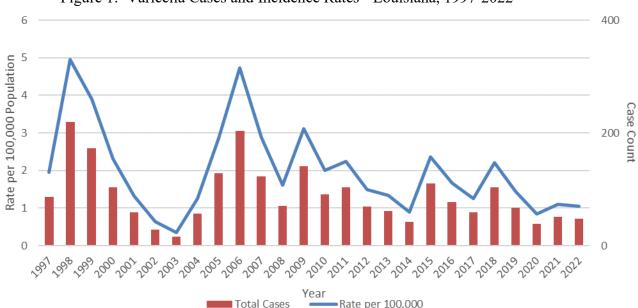


Figure 1: Varicella Cases and Incidence Rates - Louisiana, 1997-2022

Age, Sex and Race

Varicella affects mainly children, with approximately 82% of cases occurring before the age of 15 years. Younger age groups continue to be the demographic with the highest rates. Most cases among older individuals are the result of gaps in immunization coverage (Figure 2).

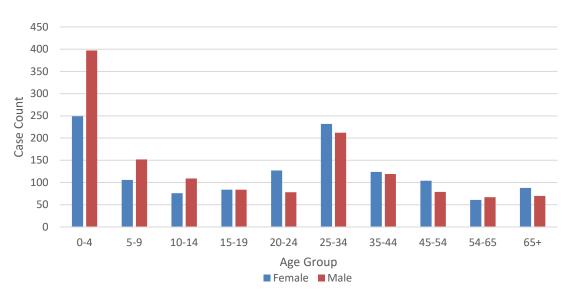


Figure 2: Varicella Incidence Rates by Gender and Age - Louisiana, 2012-2022

The cases by race show that the white population have the highest rates of disease. Overall, Whites make up 43% of all Varicella cases in Louisiana compared to African Americans, who account for 17% (Figure 3).

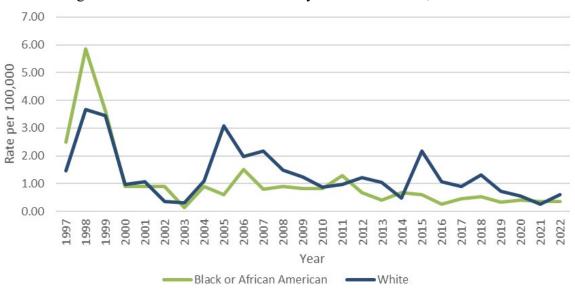


Figure 3: Varicella Incidence Rates by Race - Louisiana, 2012-2022

Seasonality

Varicella is a disease that exhibits a seasonal trend with the majority of cases occurring in the winter and spring from January to May. October 2012 and 2015 experienced a higher than average number cases, contributing to the peak demonstrated in Figure 4.

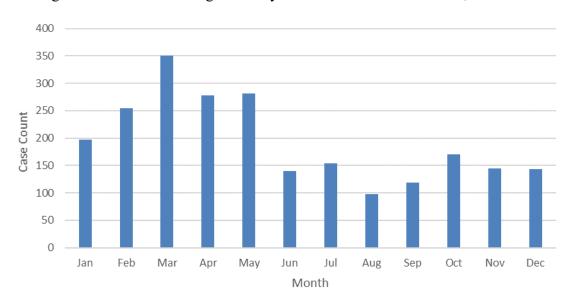


Figure 4: Varicella average monthly case distribution - Louisiana, 1990-2022