

INFANT HEALTH IN ANNE ARUNDEL COUNTY, 2022

ANNE ARUNDEL COUNTY DEPARTMENT OF HEALTH

OFFICE OF ASSESSMENT AND PLANNING



INTRODUCTION

The Anne Arundel County Department of Health works toward the goal that all babies in Anne Arundel County are born healthy and thrive. There are several facets of infant health explored in this report.

Pregnancy in teens comes with increased risk of complications for both mother and baby. Infants born to teen mothers have a higher risk for low birth weight, preterm birth and death than infants born to older mothers.¹

Early prenatal care initiation reduces the risk of complications during pregnancy. Additionally, infants of mothers who do not get prenatal care are three times more likely to have low birth weight and five times more likely to die than those babies born to mothers who do get care.²

Preterm birth and low birth weight not only increase an infant's risk of death in the first days of life, but they also increase the risk of breathing problems, obesity and other diseases as the infant grows up and enters adulthood.³

BIRTHS IN ANNE ARUNDEL COUNTY

There were 6,827 live births among Anne Arundel County residents in 2020, a minor decrease from the previous year. The number of births decreased in non-Hispanic (NH) White and Hispanic populations from 2019 to 2020, while NH Black populations saw a small increase in the number of births (Table I).

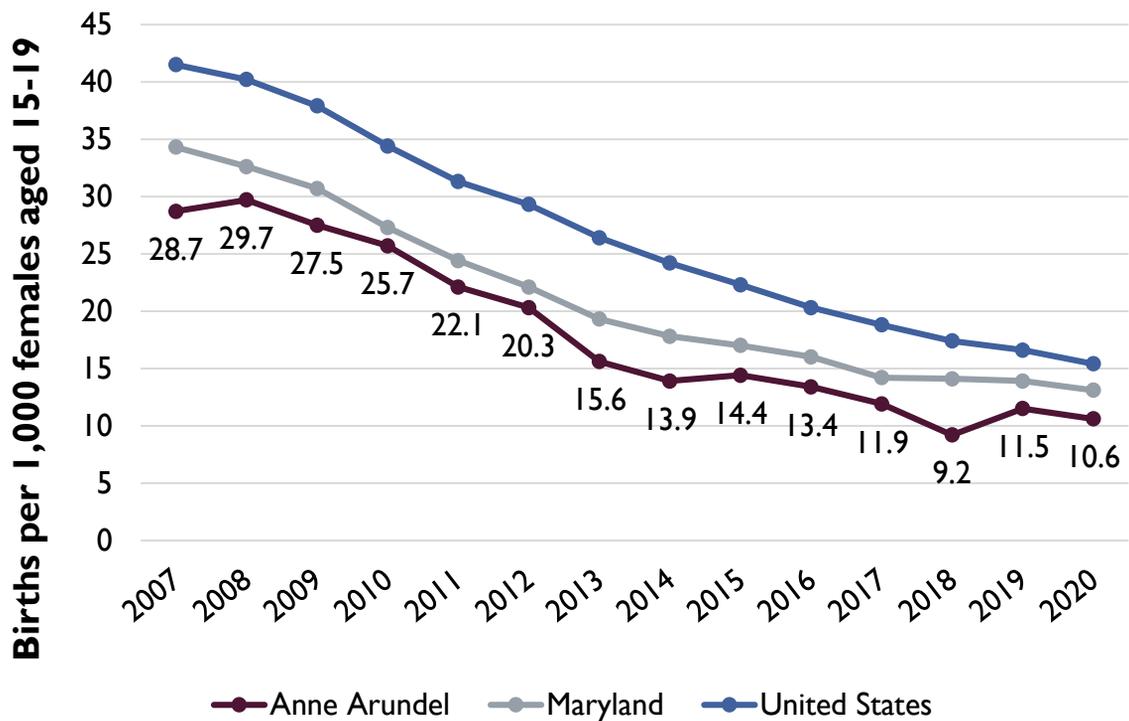
Table I. Live births by race/ethnicity, Anne Arundel County, 2016-2020

Race/Ethnicity	2016	2017	2018	2019	2020
White, NH	4,357	4,242	4,118	3,975	3,917
Black, NH	1,291	1,273	1,251	1,320	1,451
Hispanic	896	936	1,009	1,070	1,058
Total births	6,994	6,895	6,783	6,830	6,827

TEEN BIRTHS

The rate of teen births (births by a female aged 15-19) in Anne Arundel County has historically been lower than both the Maryland and the United States rate. The rate of teen births in Anne Arundel County has decreased 63% since 2007 (Figure 1).

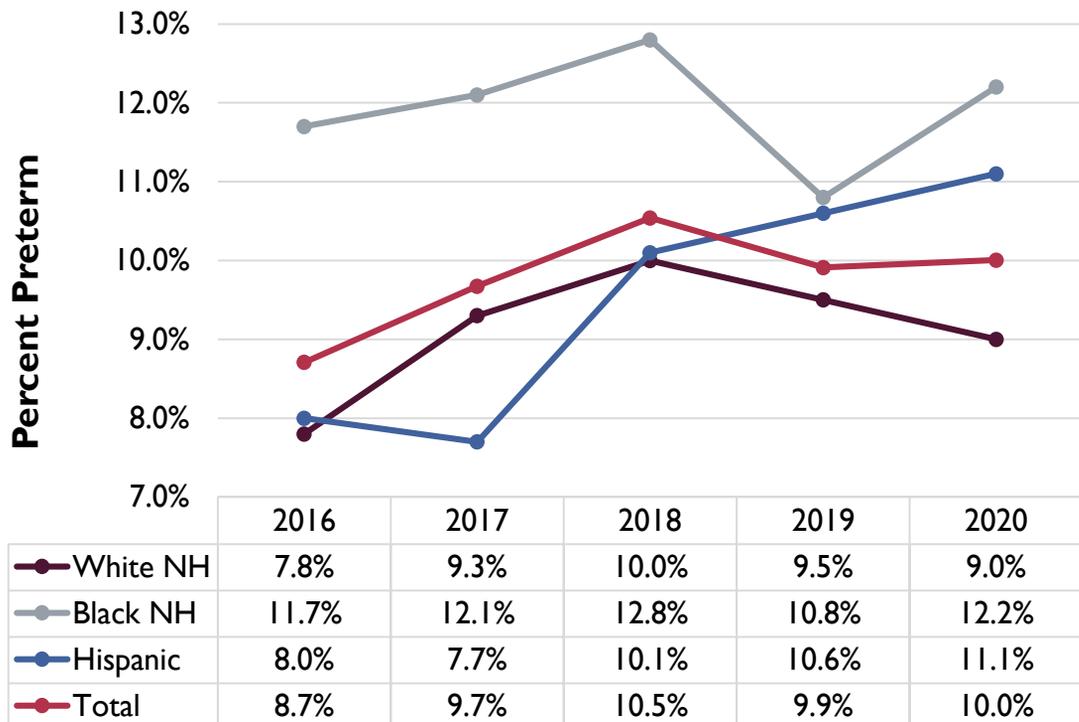
Figure 1. Teen Birth Rates, 2007-2020



PRETERM BIRTHS

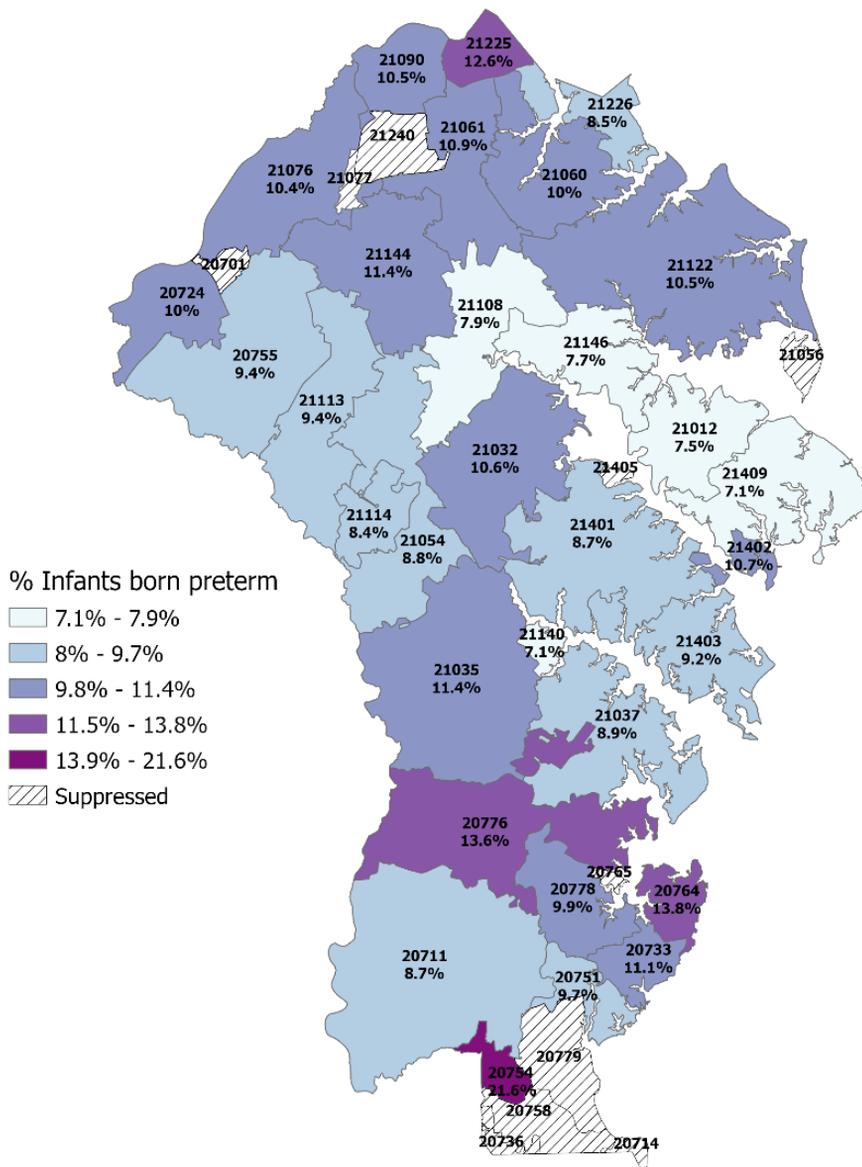
Births occurring before 37 weeks of gestation are considered preterm births. From 2016 to 2020, increases in preterm births were seen among all races and ethnicities. The largest increase in preterm births was among Hispanic mothers, who had a 38% increase in preterm births over the five-year period (Figure 2).

Figure 2. Preterm Births by Race/Ethnicity, 2016-2020



PRETERM BIRTHS BY ZIP CODE

Infants born preterm by ZIP code, percentage of live births, Anne Arundel County, 2016-2020

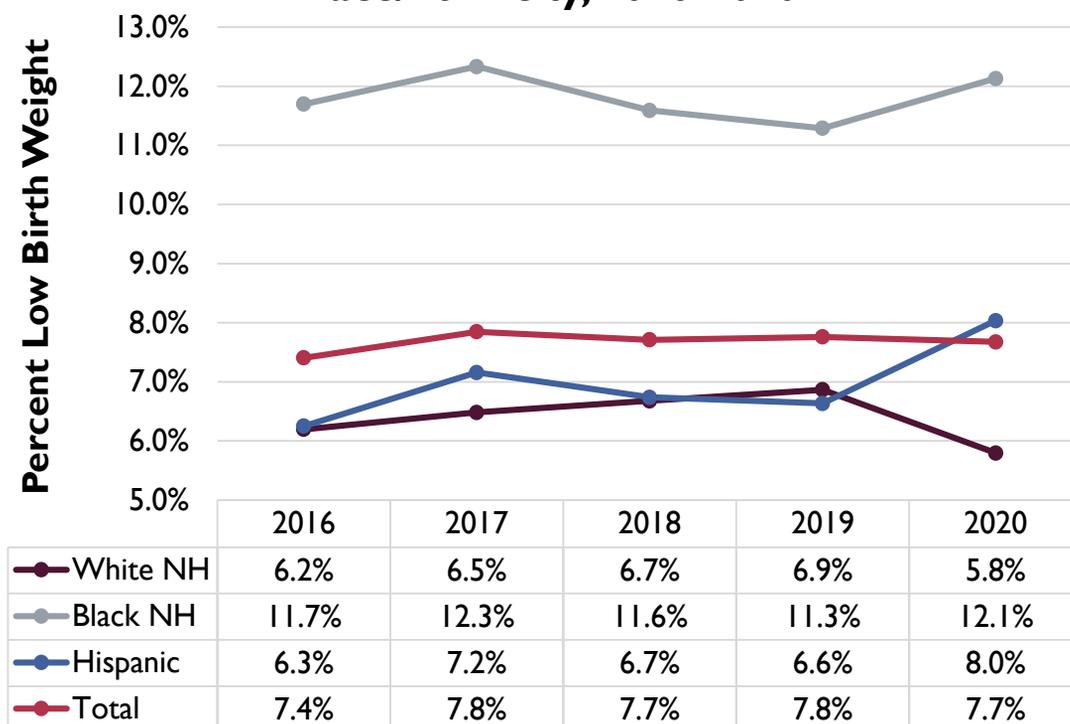


In the five-year period from 2016 to 2020, certain ZIP codes in the county saw higher rates of preterm births compared to other ZIP codes and the county rate (9.8%). The ZIP codes that had higher rates of preterm births were primarily in the northern and southern areas of the county.

LOW BIRTH WEIGHT

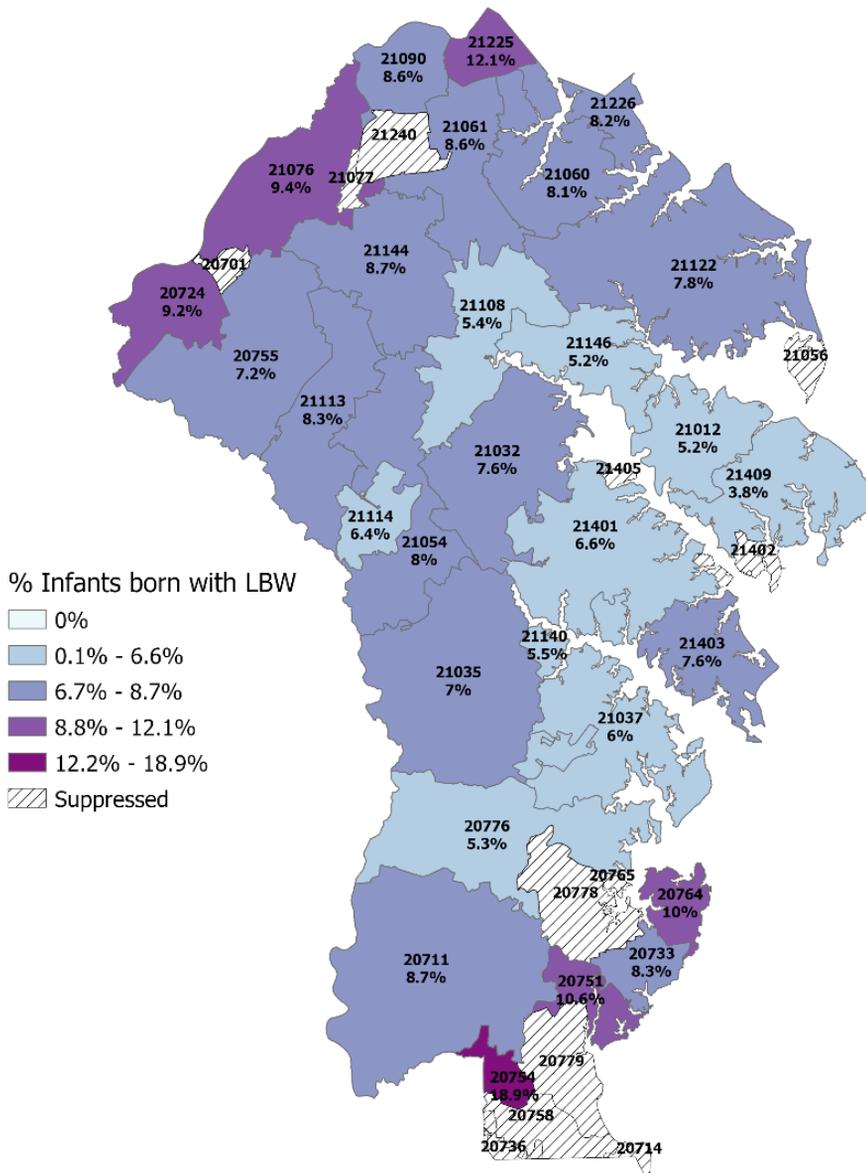
Infants who are born weighing less than 2500 grams (5.5 lbs.) are considered to have a low birth weight (LBW). The percentage of infants born with LBW has stayed relatively stable in the last five years. However, the percentage of Hispanic LBW infants has increased by 29%. The percent of Black NH LBW infants is consistently higher than all other races and ethnicities (Figure 3).

Figure 3. Low Birth Weight Births by Race/Ethnicity, 2016-2020



LOW BIRTH WEIGHT BY ZIP CODE

Infants born with low birth weight (LBW) by ZIP code, percentage of live births, Anne Arundel County, 2016-2020

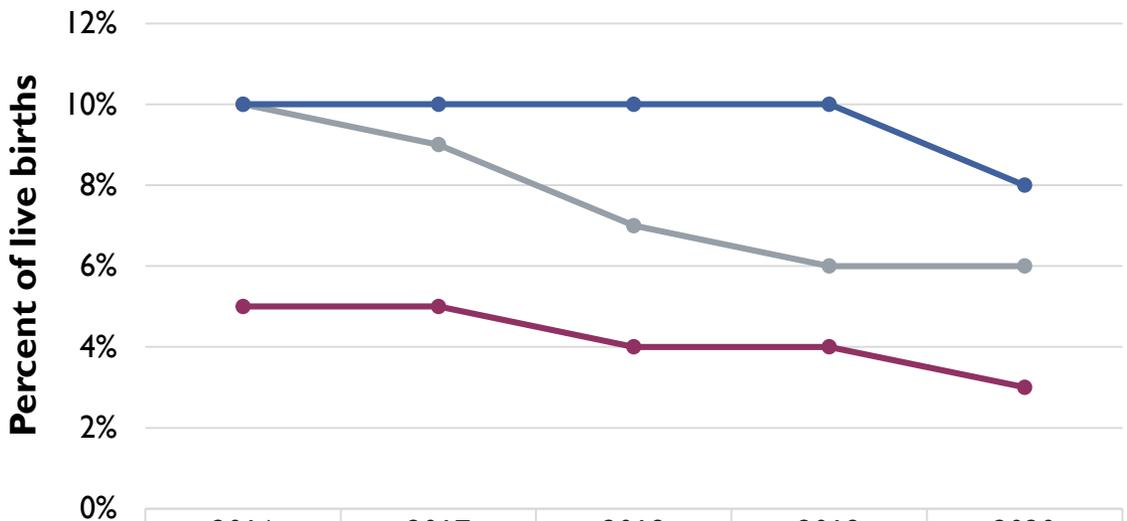


In the five-year period from 2016 to 2020, infants were born with low birth weight at higher rates in certain ZIP codes compared to other regions and the county rate (7.7%). LBW infants were born more frequently in the northern and southern areas of the county.

DISPARITIES IN INITIATING PRENATAL CARE

Disparities in initiating prenatal care exist between racial/ethnic groups in the county: in 2020, 74% of non-Hispanic White mothers initiated prenatal care in the first trimester, compared to 68% of non-Hispanic Black mothers and 54% of Hispanic mothers. Additionally, the rate of late or no initiation of prenatal care among Hispanic mothers was more than double that of non-Hispanic White mothers in 2020 (Figure 5).

Figure 5. Late or no initiation of prenatal care by race/ethnicity of the mother, 2016-2020



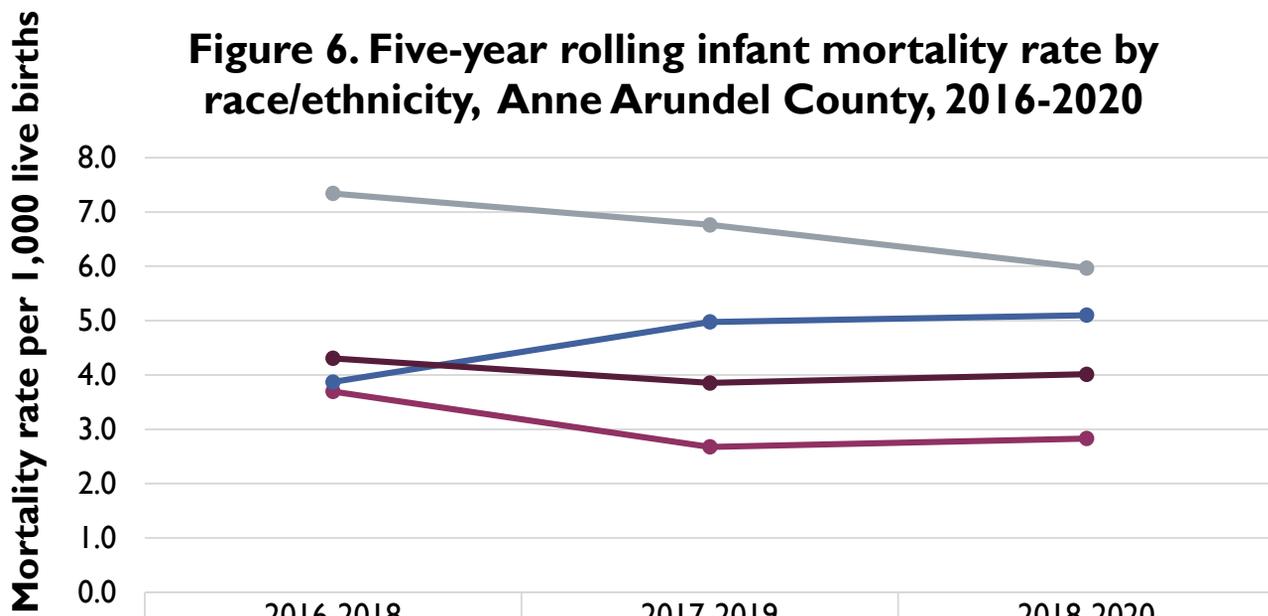
	2016	2017	2018	2019	2020
White, NH	5%	5%	4%	4%	3%
Black, NH	10%	9%	7%	6%	6%
Hispanic	10%	10%	10%	10%	8%

Percentages may not sum to 100 due to some initiation of prenatal care in the second trimester as well as missing/incomplete data

INFANT MORTALITY

Infant mortality rates in the county have slowly declined since 2016; the three-year rolling infant mortality rate among all infants has decreased from 4.3 deaths per 1,000 live births to 4.0 deaths per 1,000 live births (Figure 6). Non-Hispanic Black communities have seen the largest decrease in mortality rates, with the rolling infant mortality rate decreasing by nearly 20% in this time period. However, Hispanic communities have experienced a recent uptick in the infant mortality rates, as the rolling rate has increased in the last two three-year periods. Both Hispanic and non-Hispanic Black infants died at a greater rate than the county rate in the 2016-2020 period.

Figure 6. Five-year rolling infant mortality rate by race/ethnicity, Anne Arundel County, 2016-2020



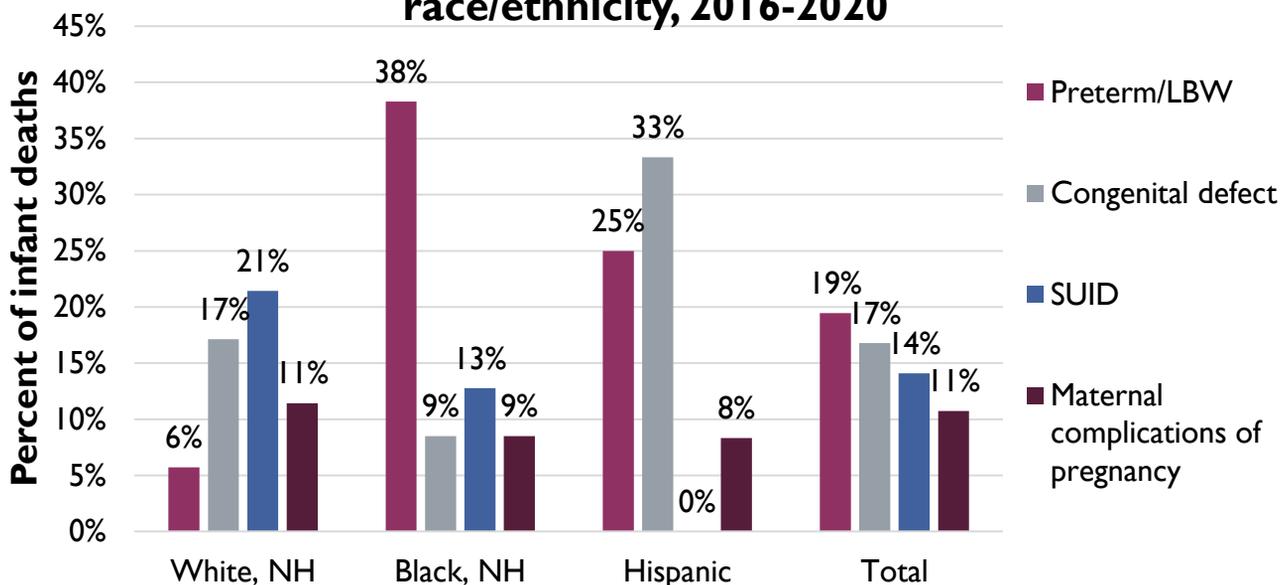
	2016-2018	2017-2019	2018-2020
White, NH	3.7	2.7	2.8
Black, NH	7.3	6.8	6.0
Hispanic	3.9	5.0	5.1
County	4.3	3.9	4.0

INFANT MORTALITY

Certain causes of infant death are monitored by the Health department: preterm birth/low birth weight (LBW), congenital defects, Sudden Unexplained Infant Death (SUID), and maternal complications of pregnancy. Preterm birth/LBW was the leading cause of infant deaths from 2016-2020, followed by congenital defects.

Among non-Hispanic White infants, SUID was the leading cause of death, followed by congenital defects. Preterm birth and/or low birth weight was the leading cause of death among non-Hispanic Black infants, while congenital defects were the leading cause of death among Hispanic infants (Figure 7).

Figure 7. Causes of infant mortality by race/ethnicity, 2016-2020



SOURCES

Data:

Maryland Department of Health, Vital Statistics Administration, Birth and Death Certificate Files, 2016-2020.

CDC National Center for Health Statistics, Teen Birth Rate by State.

Osterman et. al. (7 February, 2022). Births: Final Data for 2020. National Vital Statistics Reports, 70 (17).

Citations:

1. Marvin-Dowle K, Kilner K, Burley VJ, Soltani H. Impact of adolescent age on maternal and neonatal outcomes in the Born in Bradford cohort. *BMJ Open*. 2018 Mar 16;8(3):e016258.
2. Office on Women's Health. Prenatal care. U.S. Department of Health and Human Services. 2021 February 22.
3. Crump C. An overview of adult health outcomes after preterm birth. *Early Hum Dev*. 2020 Nov;150:105187.