ALLEGHENY COUNTY
INFANT MORTALITY REPORT
2015-2019

Allegheny County Infant Mortality Report 2015-2019

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EXECUTIVE SUMMARY

Infant mortality, or the death of a child within one year of birth, is a serious public health issue in Allegheny County, the Commonwealth of Pennsylvania and the United States. The purpose of this linked infant mortality report is to assess the associations between both pregnant person and infant characteristics and infant mortality rate (IMR).

Significant disparities in IMR persist. The Allegheny County five-year IMR for Black infants was 14.1 compared to 3.7 for White infants, meaning Black infants were almost four times more likely than White infants to die before their first birthday. The Pennsylvania five-year IMR for Black infants was 13.4, while for White infants it was 4.7. Nationally, the IMR for Black infants was 10.6 compared to 4.5 for White infants, as of 2019. The disparity seen in IMR between Black and White infants in Allegheny County is greater than the disparity seen at the state and the national levels.

While the disparity in infant mortality is complex and influenced by social, environmental, and institutional factors, the purpose of this report is to examine how risk factors and characteristics among pregnant people and infants are associated with IMR. We can also compare this report to previous five-year linked infant mortality reports that the Allegheny County Health Department (ACHD) has produced to see how IMRs have changed over time. We aggregate five years of data for these reports because there are low numbers of infant deaths in individual years, so the combined data leads to more reliable rates. In Allegheny County from 2015 to 2019, there were 65,268 births and 394 infant deaths. This report analyzes the 372 infant deaths that had a corresponding birth certificate.

Major findings of this report include:

- The five-year IMR for Black infants was nearly four times the five-year IMR for White infants
- About 70 percent of infant deaths occurred within the first four weeks of life
- Two-thirds of infant deaths were among infants born preterm
- The three leading causes of infant death were short gestation (preterm) and low birthweight, sudden unexpected infant deaths (SUIDs) and sudden infant death syndrome (SIDS), and congenital malformations

RESULTS

Infant mortality rate (IMR) is defined by the World Health Organization as the number of deaths that occur in the first year of life per 1,000 live births (WHO, n.d.). Infant Mortality Rate provides information about both a pregnant person and infant's health and serves as an indicator for population health.

OVERVIEW

Table 1:

- There were 372 infant deaths with a corresponding birth certificate
- The five-year IMR was 5.7 per 1,000 live births
- The Black IMR of 14.1 per 1,000 was nearly four times the White IMR of 3.7 per 1,000
- The Black IMR had an average annual percent change of 3.5 percent from 2015 to 2019
- The White IMR had an average annual percent change of 0.9 percent from 2015 to 2019

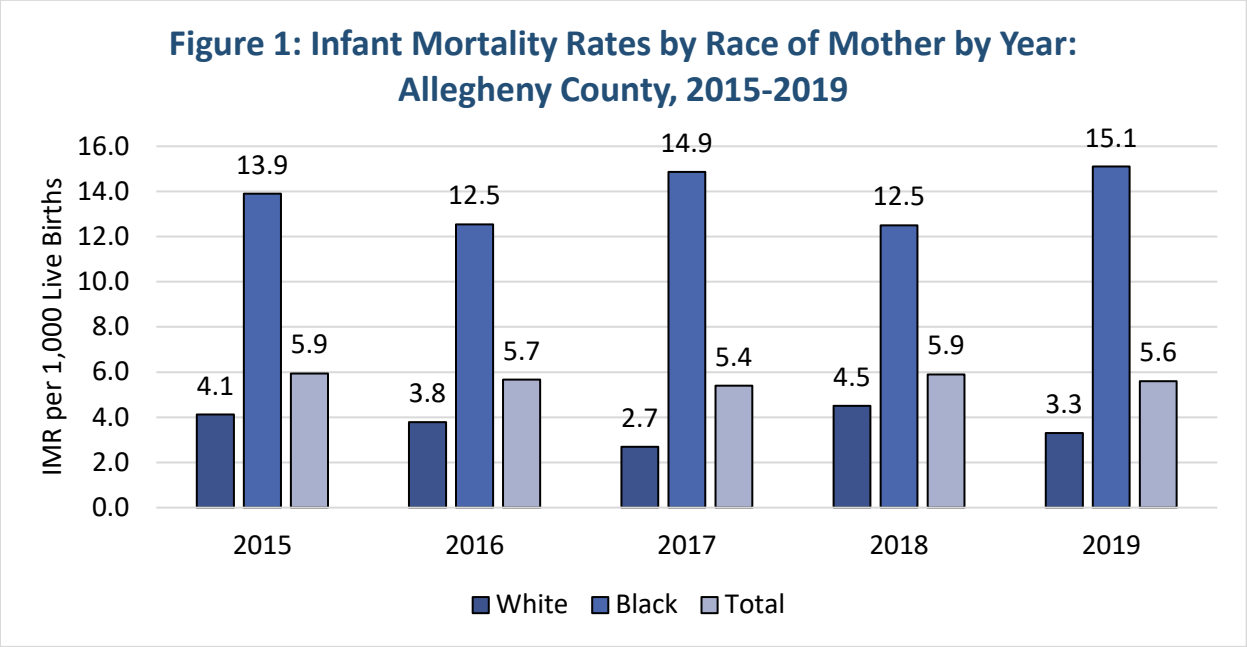
Table 1: Infant Mortality Rate per 1,000 Live Births by Race: Allegheny County, 2015-2019

	WHITE		BLACK		TOTAL	
Year	Infant Deaths	IMR (95% CI)	Infant Deaths	IMR (95% CI)	Infant Deaths	IMR (95% CI)
2015	39	**4.1** (2.8, 5.4)	37	**13.9** (9.5, 18.3)	79	**5.9** (4.6, 7.2)
2016	35	**3.8** (2.6, 5.1)	33	**12.5** (8.3, 16.7)	75	**5.7** (4.4, 7.0)
2017	24	**2.7** (1.6, 3.8)	41	**14.9** (10.4, 19.4)	70	**5.4** (4.1, 6.7)
2018	40	**4.5** (3.1, 5.9)	32	**12.5** (8.2, 16.8)	76	**5.9** (4.6, 7.2)
2019	29	**3.3** (2.1, 4.3)	39	**15.1** (10.4, 19.8)	72	**5.6** (4.3, 6.9)
2015-2019	167	**3.7** (3.1, 4.3)	182	**14.1** (12.1, 16.1)	372	**5.7** (5.1, 6.3)
AAPC*		0.9%		3.5%		-1.1%

Total includes individuals of all races
*Average Annual Percent Change
Note: Mortality rate per 1,000 live births by pregnant person's race as specified on the birth certificate

Figure 1:

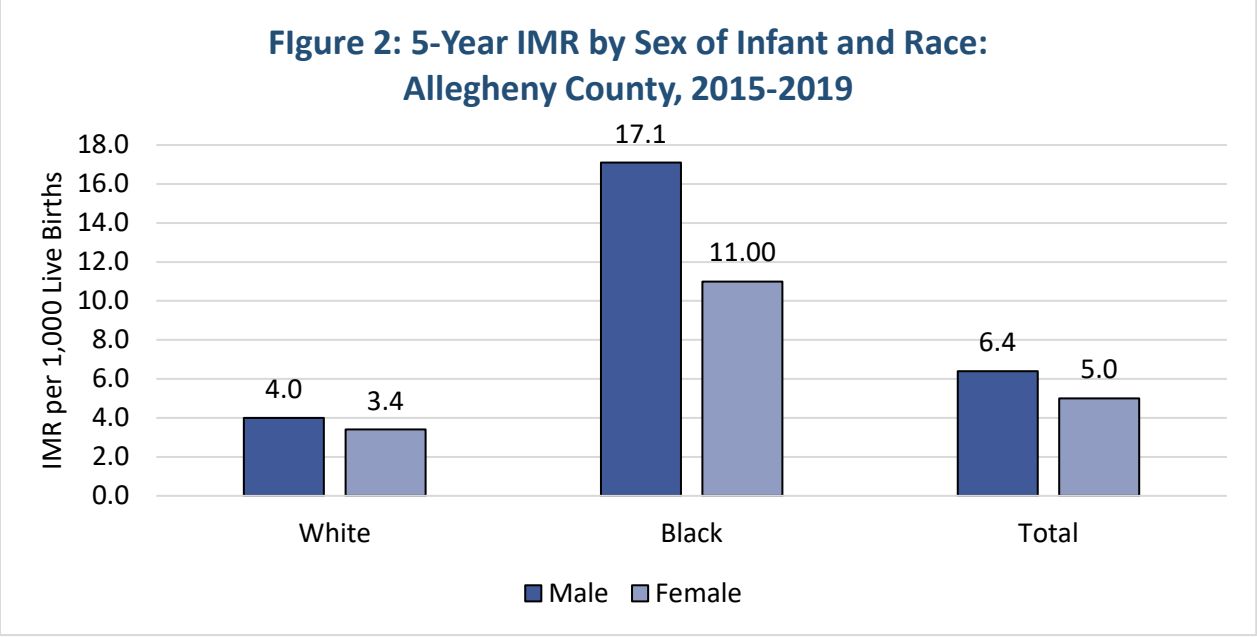
- IMR was consistently higher among Black than White pregnant people



Total includes individuals of all races

Figure 2:

- IMR was higher among male infants than female infants



Total includes individuals of all races

CAUSES OF INFANT DEATH

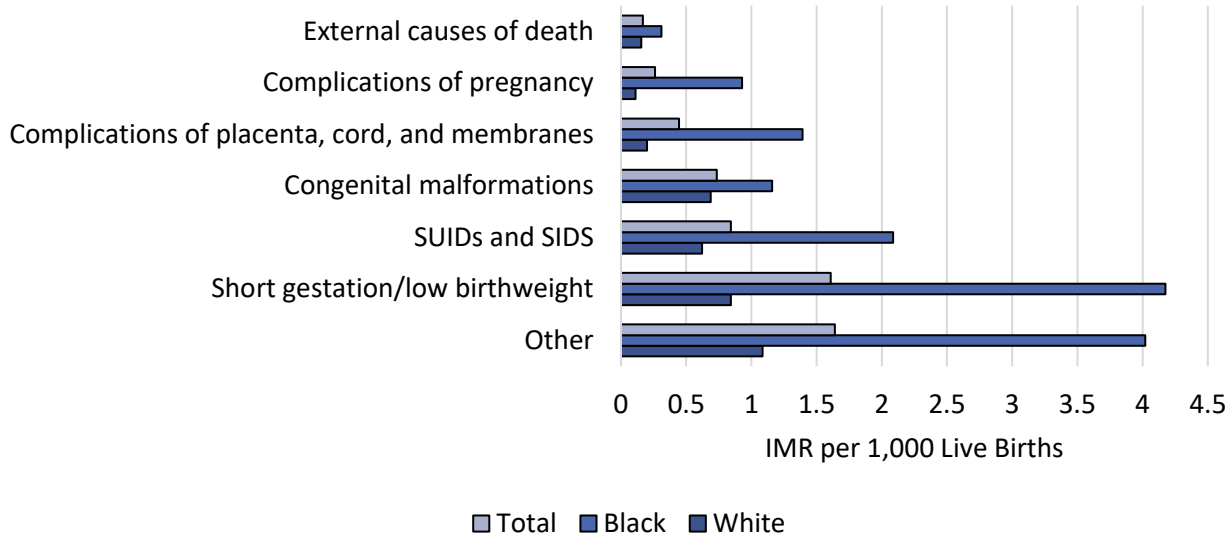
Cause of death was classified using ICD-10 codes from death certificates (Appendix, pg. 36). ICD-10 codes are used to identify specific conditions or diseases in medical records.

The top three leading causes of infant death in Allegheny County from 2015-2019:

1. Disorders related to short gestation and low birthweight
2. Sudden unexpected infant deaths (SUIDs) and sudden infant death syndrome (SIDS)
3. Congenital malformations

Together, these three causes of death account for 54 percent of all infant deaths from 2015 to 2019. The IMR for Black infants was higher than White infants for all leading causes of death (Fig. 3). There are a significant number of infant deaths categorized as "other" by ICD-10 codes. While appropriate ICD-10 codes were not available for these records, examination of the text fields revealed that over half of these "other" records were also due to short gestation/low birthweight.

Figure 3: 5-Year Infant Mortality Rates for Leading Causes of Death by Race: Allegheny County 2015-2019



Note: "External causes of death" include accidents, such as accidental suffocation or strangulation in bed, obstructions of respiratory tract, exposure to smoke, fire, and flames, assault, or undetermined intent. "Other" includes certain infections and parasitic diseases, metabolic disorders, diseases of the nervous, circulatory, respiratory, and digestive systems, and ill-defined and unknown causes of mortality.

INFANT-RELATED RISK FACTORS

Age of Infant

A neonatal infant is less than 28 days of age, and a postneonatal infant is 28 days to one year of age. NMR is neonatal mortality rate and PNMR is postneonatal mortality rate.

Figure 4: IMR was higher among neonatal than postneonatal infants

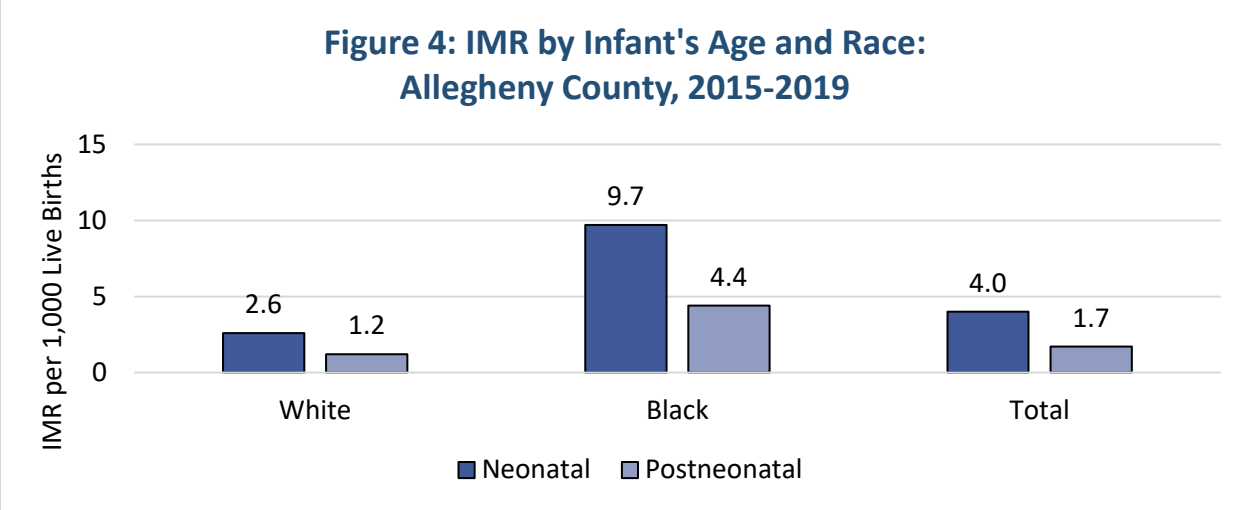


Table 2:

- About 70 percent of infant deaths occurred within the first four weeks of life
- Black infants had the highest mortality rate for both neonatal and postneonatal infants

Table 2: 5-Year Mortality Rate by Race of Pregnant person and Infant's Age: Allegheny County, 2015-2019

	NEONATAL			POSTNEONATAL		
Race	Neonatal Deaths	Percent of Deaths (%)	NMR	Postneonatal Deaths	Percent of Deaths (%)	PNMR
White	115	68.9	2.6	52	31.1	1.2
Black	125	68.7	9.7	57	31.3	4.4
Total	263	70.7	4.0	109	27.3	1.7

Total includes individuals of all races
NMR: neonatal mortality rate
PNMR: postneonatal mortality rate
Note: Mortality rate per 1,000 live births by pregnant person's race as specified on the birth certificate

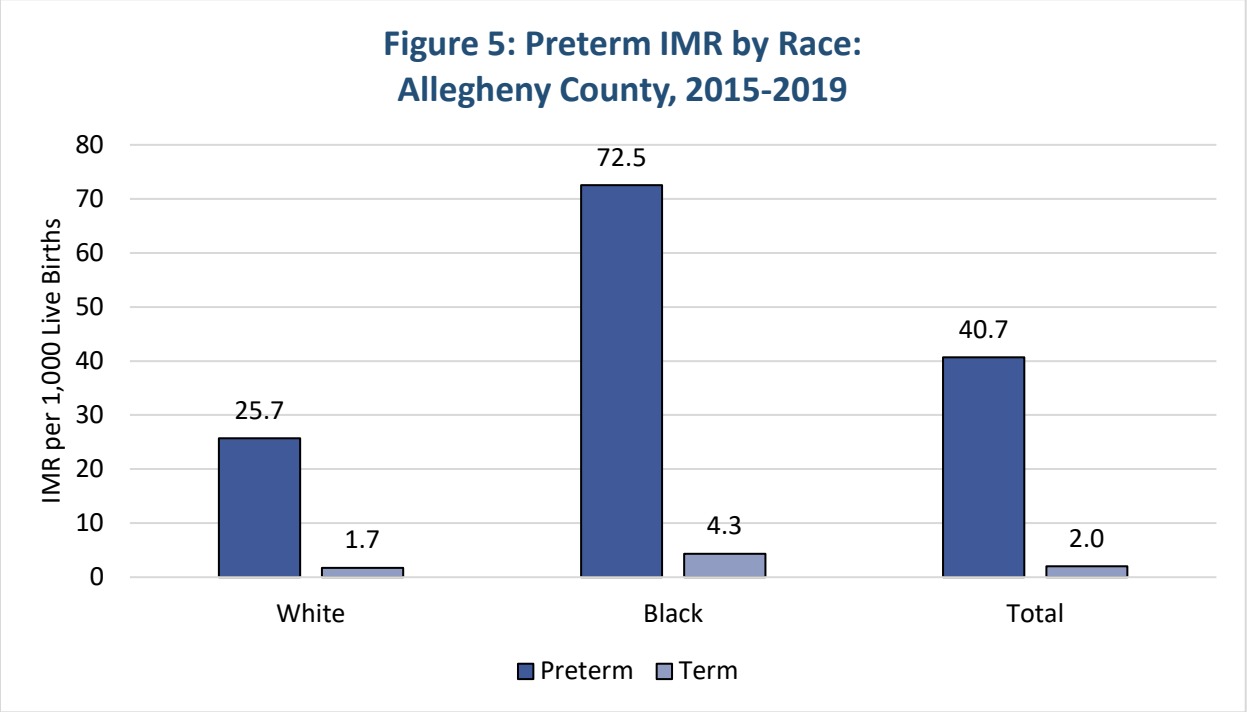
Length of Gestation (Age at Birth)

Length of gestation is the length of the pregnancy in weeks since a pregnant person's last menstrual cycle, during which the embryo or fetus is developing. Preterm is defined as infants born before 37 weeks of gestation. Babies born preterm, especially those born before 32 weeks, have higher rates of death and disability due to having less time to grow and develop before being born (CDC, 2022).

In Allegheny County from 2015-2019, two-thirds of infant deaths were born preterm.

Figure 5:

- The preterm IMR was 40.7 per 1,000 compared to the full-term IMR of 2.0 per 1,000
- The preterm IMR for Black births was about three times that of White births



Total includes individuals of all races

Preterm births can be divided into subcategories based on the number of weeks of pregnancy before birth (weeks of gestation):

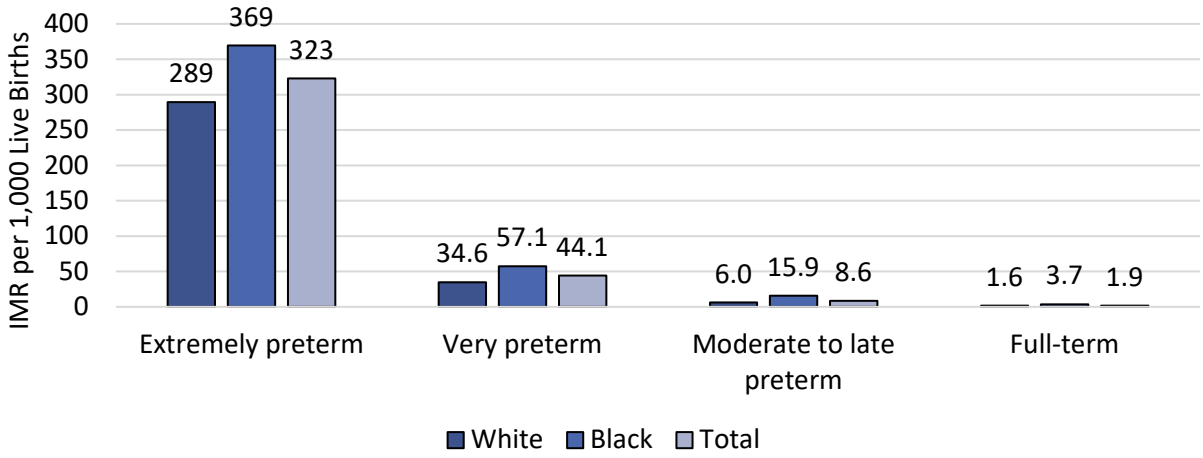
- Extremely preterm (less than 28 weeks)
- Very preterm (28 to 31 weeks)
- Moderate to late preterm (32 to 37 weeks)

In Allegheny County from 2015-2019, about half of all infant deaths occurred in infants born extremely preterm.

Figure 6:

- The IMR for extremely preterm infants was about 171 times the full-term IMR
- The IMR for very preterm infants was about 22 times the full-term IMR
- The IMR for moderate-to-late preterm infants was about 4.5 times the full-term IMR
- The IMR for Black infants was higher than the IMR for White infants across all gestational age categories

Figure 6: 5-Year IMR by Gestational Category and Race: Allegheny County, 2015-2019



Extremely preterm (less than 28 weeks), Very preterm (28 to 31 weeks), Moderate to late preterm (32 to 37 weeks), Full-term (greater than 37 weeks)
Total includes individuals of all races

To better understand the role of gestational age among other social factors influencing birth outcomes, please see our multivariable analysis.

Birthweight

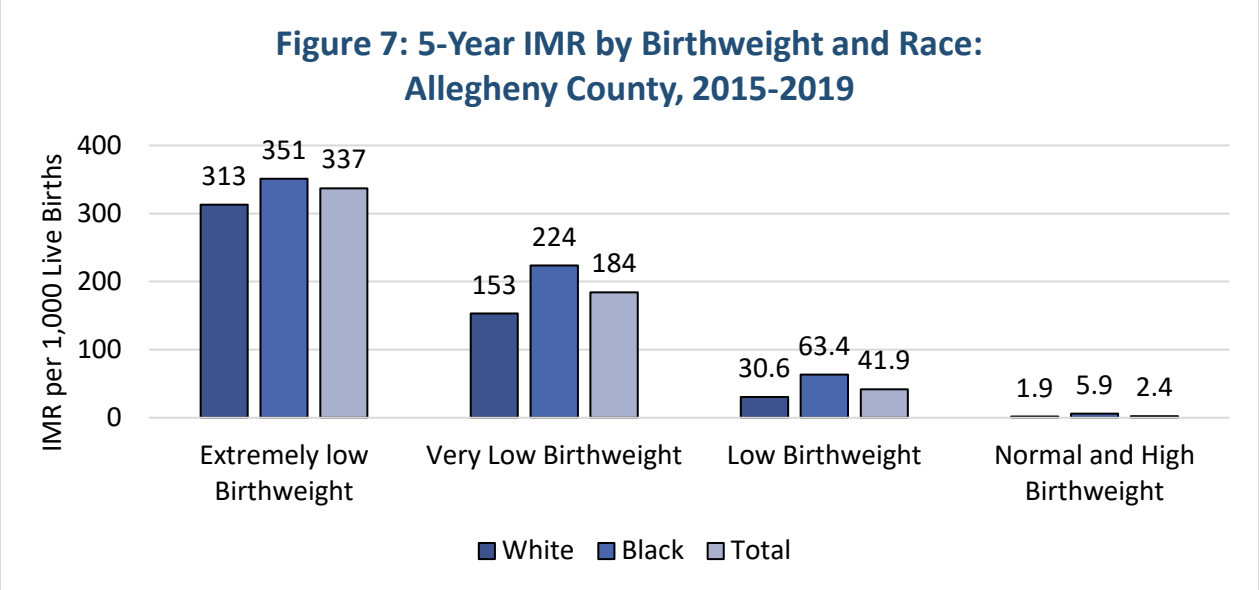
Birthweight is closely associated with the length of gestation. Many infants born preterm are also low birthweight. Low birthweight is defined as infants weighing less than 2,500 grams, very low birthweight less than 1,500 grams, and extremely low birthweight less than 1,000 grams (WHO, n.d.). Normal and high birthweight infants are grouped together here and defined as infants weighing more than 2,500 grams. Infant mortality rates are typically highest among extremely low birthweight infants.

In Allegheny County from 2015-2019:

- 52.4 percent of infant deaths were both premature and low birthweight
- 40.3 percent of infant deaths occurred in extremely low birthweight infants
- 78 percent of preterm infants were also low birthweight
- Conversely, 87 percent of low birthweight infants were born prematurely

Figure 7:

- The IMR for extremely low birthweight infants was greater than eight times the IMR for low birthweight infants, and greater than 140 times the IMR for normal and high birthweight infants



Total includes individuals of all races
Extremely low birthweight (less than 1,000g), Very low birthweight (less than 1,500g), Low birthweight (less than 2,500g), Normal and High birthweight (greater than 2,500g)

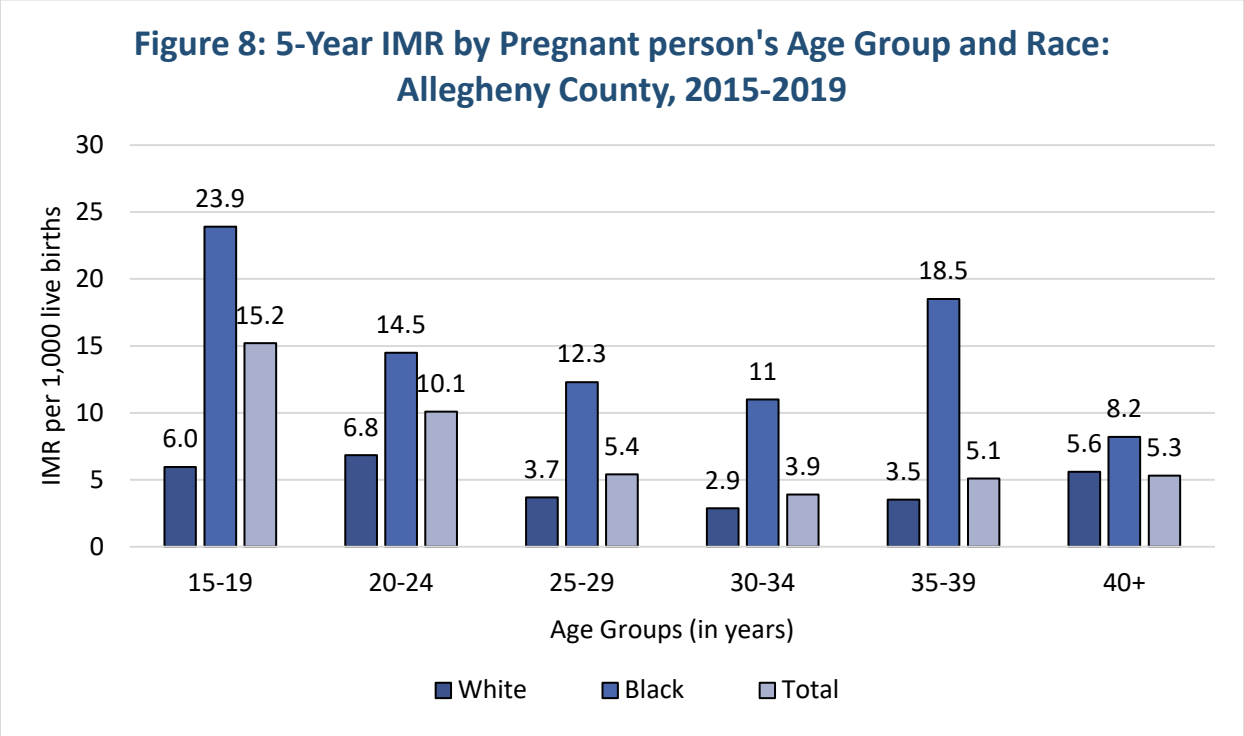
PREGNANT PERSON-RELATED RISK FACTORS

Age of Pregnant Person

A pregnant person's age can affect their risk of having a premature birth and having a low birthweight baby, among other adverse outcomes. These risks tend to be greater after age 35 (Mayo Clinic, 2022) and in adolescents aged 15-19 (WHO, 2022).

Figure 8:

- Overall IMR was highest for pregnant people aged 15-19 and 20-24; However, trends in IMR by age group differed by race:
  - The highest IMR among Black residents was in the age groups 15-19 and 35-39 years
  - The highest IMR among White residents was in the age group 20-24 years
- The Black IMR remained highest among all age groups



Total includes individuals of all races

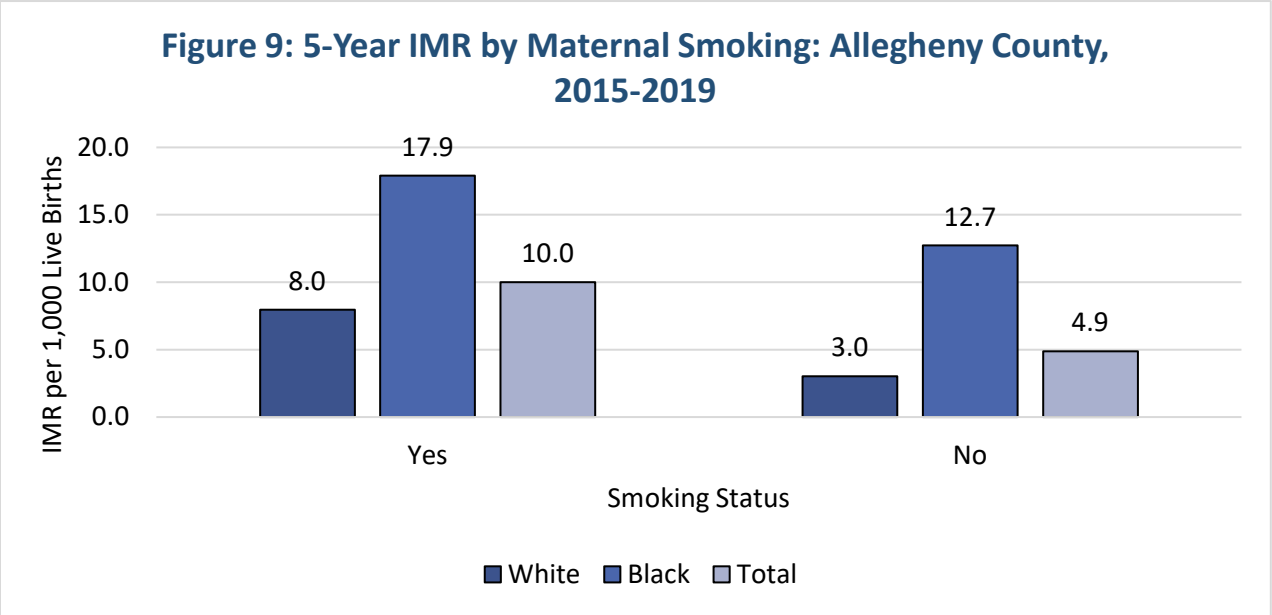
Smoking during Pregnancy

According to the CDC, smoking during pregnancy increases the risk of health problems for infants and can result in preterm birth, low birthweight and/or birth defects (CDC, 2020).

In Allegheny County from 2015-2019, about 11.3 percent of pregnant people smoked during pregnancy.

Figure 9:

- Smoking was associated with twice the overall IMR
  - 10 per 1,000 for smokers compared to 5.1 per 1,000 for non-smokers
- The Black IMR remained highest among both smokers and non-smokers



Total includes individuals of all races
Smoking Status: pregnant person smoked during pregnancy or 3 months prior to becoming pregnant

Pre-pregnancy Body Mass Index (BMI)

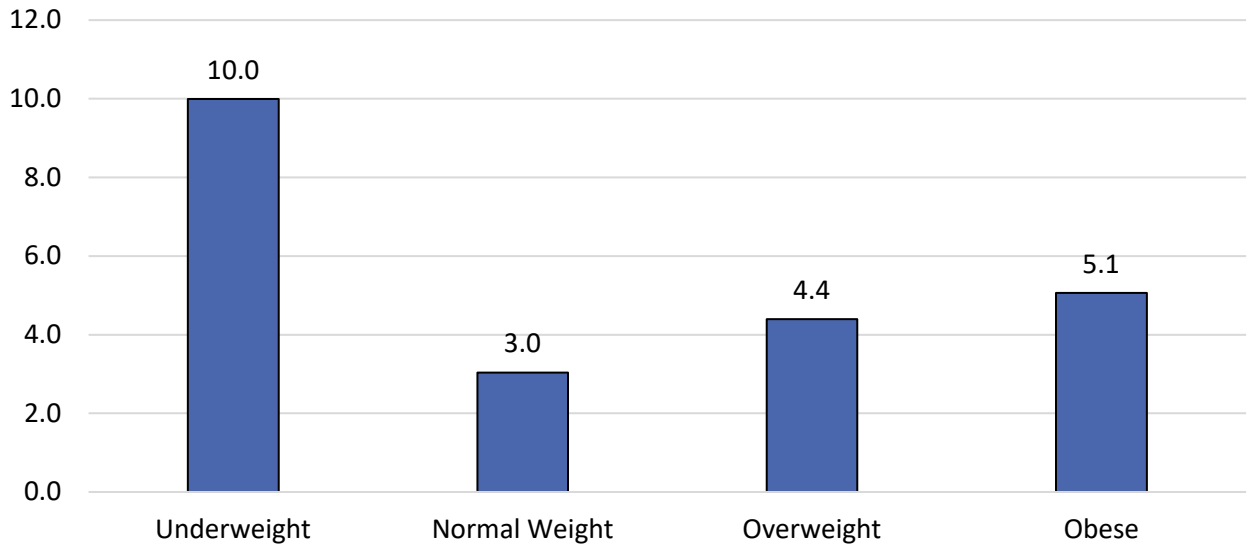
Pre-pregnancy BMI was calculated using the pregnant person's height in centimeters and the pregnant person's weight in kilograms prior to pregnancy. Per CDC definitions, a BMI less than 18.5 was considered underweight, a BMI between 18.5 and 24.9 was considered normal weight, a BMI between 25 and 29.9 was considered overweight, and a BMI greater than 30.0 was considered obese (CDC, 2022).

In Allegheny County from 2015-2019, pre-pregnancy BMI data was only available for 175 out of 372 (47%) pregnant people with deceased infants.

Figure 10:

- The five-year IMR for pregnant people of a normal weight was lower than the IMRs for pregnant people that are underweight, overweight or obese
- The IMR for underweight pregnant people was more than three times the IMR for pregnant people of a normal weight

Figure 10: 5-Year IMR per 1,000 Live Births by Pregnant person's Pre-pregnancy BMI Category: Allegheny County, 2015-2019

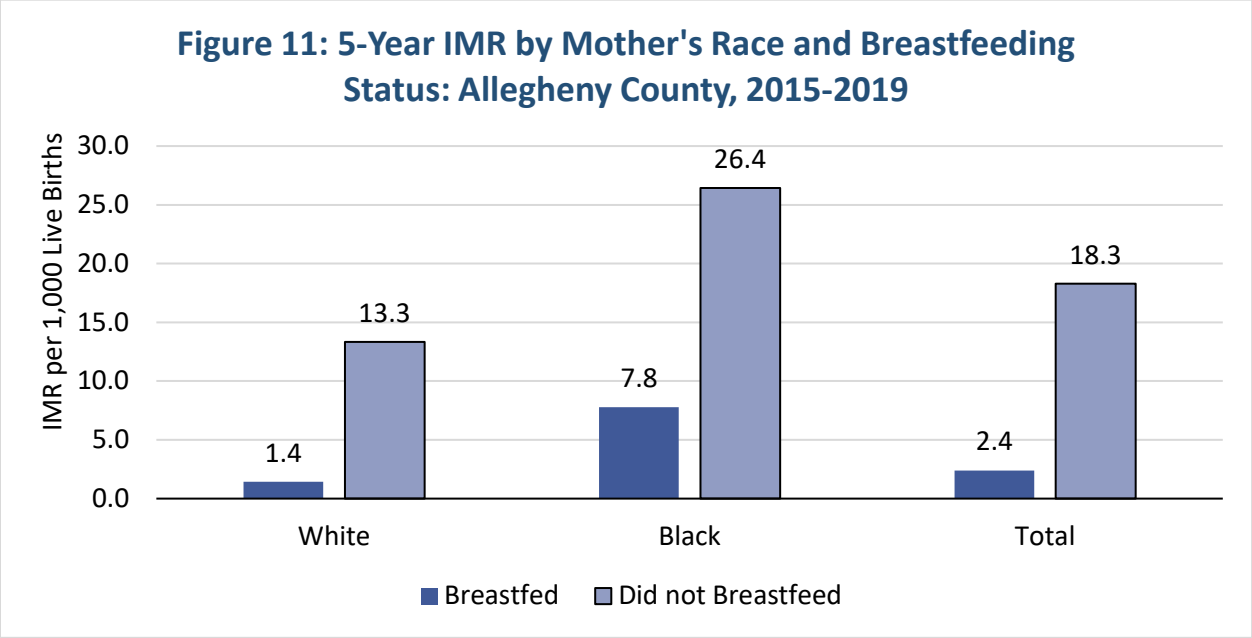


Breastfeeding

Intent to breastfeed is reported on the birth certificate. Breastfeeding reduces an infant's risk of conditions such as asthma, obesity and sudden infant death syndrome (SIDS), among others (CDC, 2022).

Figure 11:

- IMR was lower among pregnant people who breastfed for all races



Total includes individuals of all races
Note: Breastfeeding data has a limitation of unknown duration and exclusivity

PREGNANCY AND BIRTH-RELATED RISK FACTORS

Twins, Triplets and other Multiples

Infant mortality rates are higher among pregnancies with twins, triplets and other multiples compared to single pregnancies. This is likely because pregnancies with multiples are about seven times more likely to be delivered preterm than singleton pregnancies (NCHS, 2022).

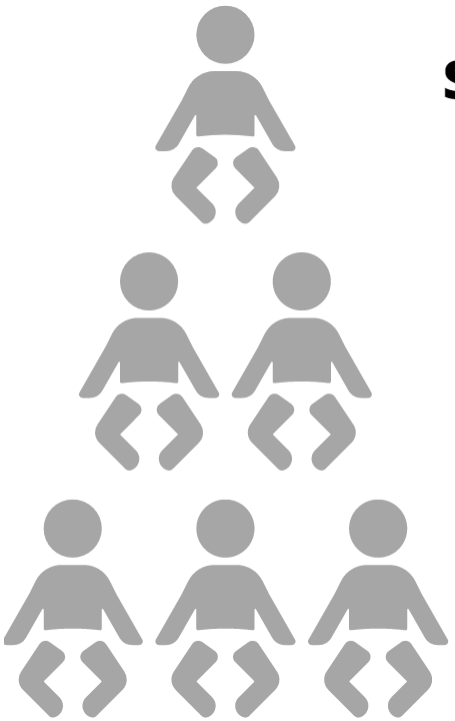
In Allegheny County from 2015-2019:

- Ninety-two percent of singleton births were born full-term, while only 47 percent of twins and 3.9 percent of triplets were born full-term
- More than 50 percent of twins and more than 90 percent of triplets were born preterm
- There were no quadruplet or quintuplet infant deaths

Figure 12:

- The IMR for twins and triplets were about four times higher than the IMR for singletons

Figure 11: 5-Year IMR by Multiples: Allegheny County, 2015-2019



Maternal Morbidity

The National Institutes of Health (NIH) defines maternal morbidity (MM) as short or long-term health problems that result from being pregnant and giving birth (NIH, 2022). In this report, we looked at the six morbidities reported in the birth records: pregnant person transfusion, perineal laceration, ruptured uterus, unplanned hysterectomy, admission to intensive care and unplanned operations. About 7 percent of pregnant people with a deceased infant had MM from 2015-2019. The five-year IMR for pregnant people with MM in Allegheny County was 16.1 per 1,000 live births. The most common morbidities among pregnant people of deceased infants included admission to intensive care (63%), unplanned operations (26%) and pregnancy-related transfusion (22%).

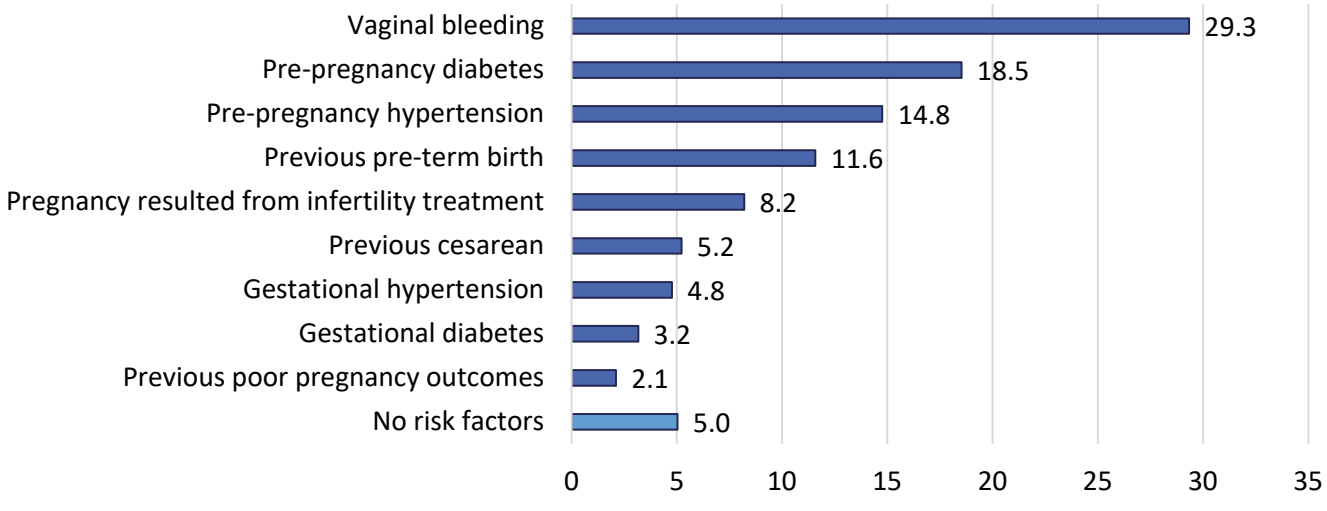
Other Risk Factors During Pregnancy

There are nine pregnancy-related risk factors reported in the birth records.

Figure 13:

- Vaginal bleeding of the pregnant person was associated with the highest IMR of 29.3 per 1,000 live births, followed by pre-pregnancy diabetes (18.5/1,000) and pre-pregnancy hypertension (14.8/1,000)

Figure 13: 5-Year IMR per 1,000 Live Births by Pregnancy Risk Factors: Allegheny County, 2015-2019



Delivery Method

From 2015-2019, there was no significant difference in infant mortality based on delivery method.

Table 4:

- Black infant mortality rates were higher than White IMRs for both vaginal and cesarean delivery

Table 3: 5-Year IMR by Delivery Method and Pregnant Person's Race: Allegheny County, 2015-2019

Delivery Method	White IMR	Black IMR	Total IMR
Cesarean	4.3	14.6	5.8
Vaginal	3.4	13.9	5.1

Total includes individuals of all races
Note: Mortality rate per 1,000 live births by pregnant person's race as specified on the birth certificate

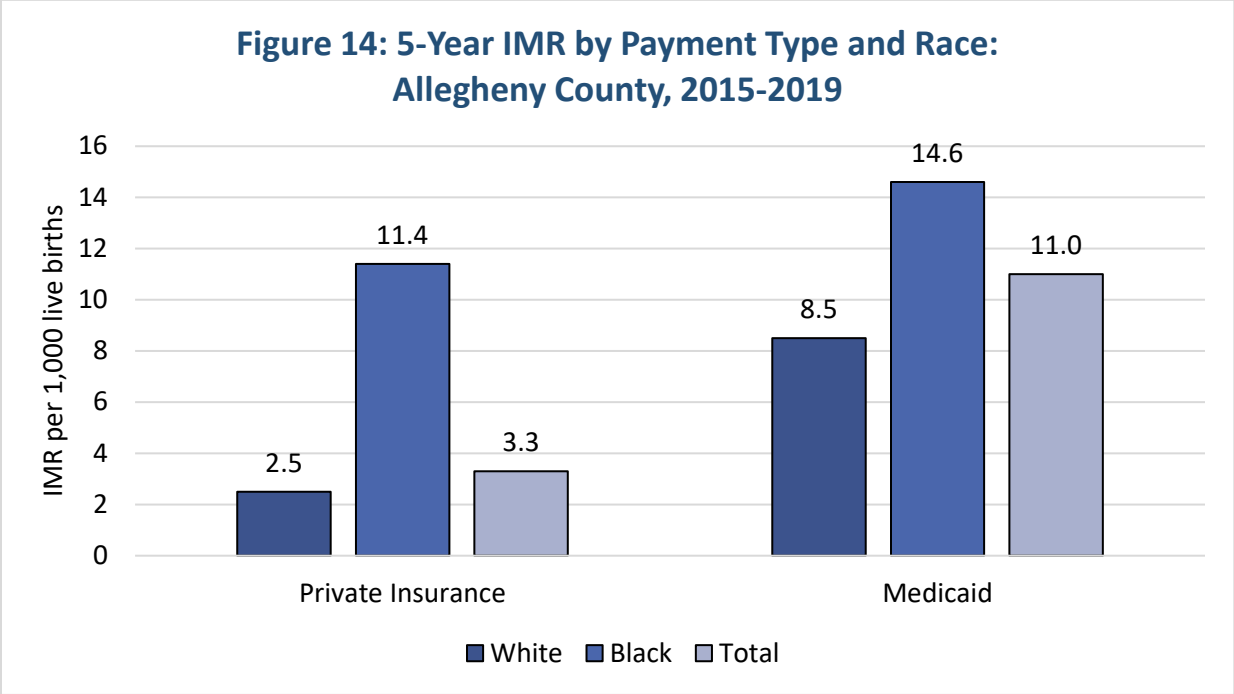
SOCIAL RISK FACTORS

Socioeconomic disparities can have effects on birth outcomes and infant health. Here we examine differences in IMR by insurance type, level of education, WIC enrollment and early prenatal care.

Insurance

Figure 14:

- Overall, the IMR for infants born to pregnant people using Medicaid for pregnancy care was 11 per 1,000 compared to 3.3 per 1,000 for pregnant people using private insurance for pregnancy care
- IMR among Black infants was higher for pregnant people with both Medicaid and private insurance, compared to all races

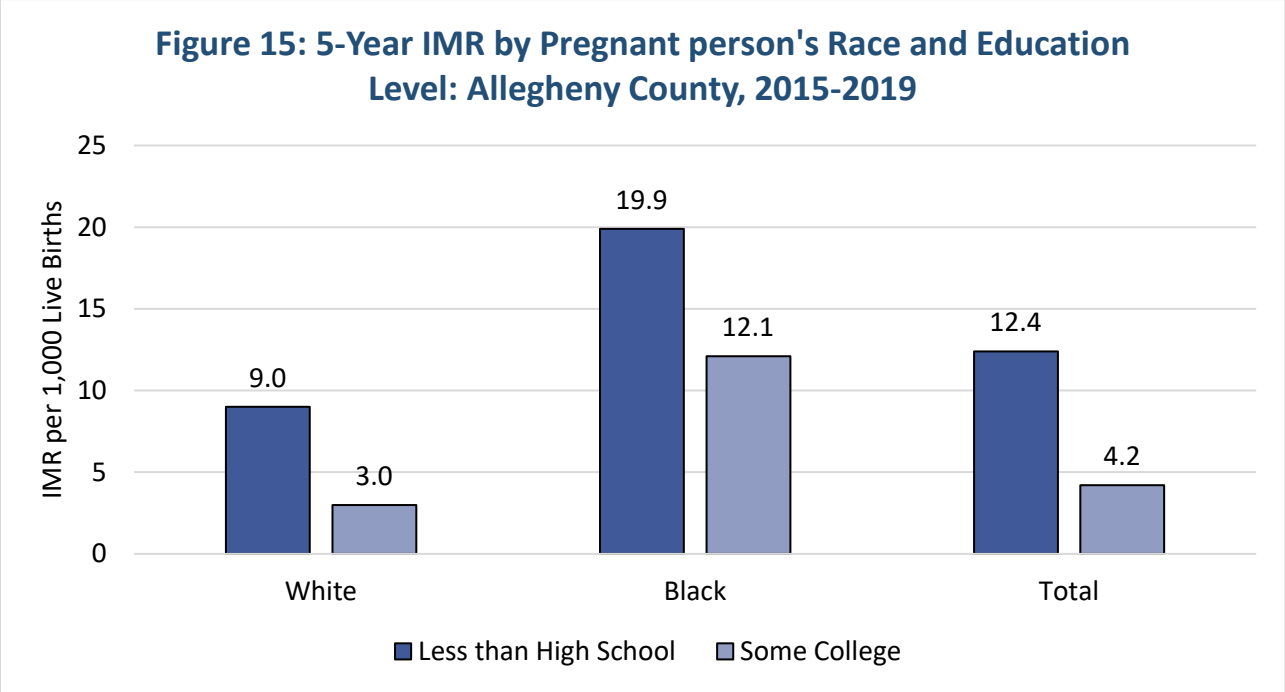


Total includes individuals of all races

Education

Figure 15:

- The IMR for pregnant people with less than a high school education was almost three times the IMR for pregnant people with some college education
- While the IMR is lower for pregnant people with some college education compared to those with less than high school education, the IMR for Black infants is still higher than the IMR for White infants, for both levels of education

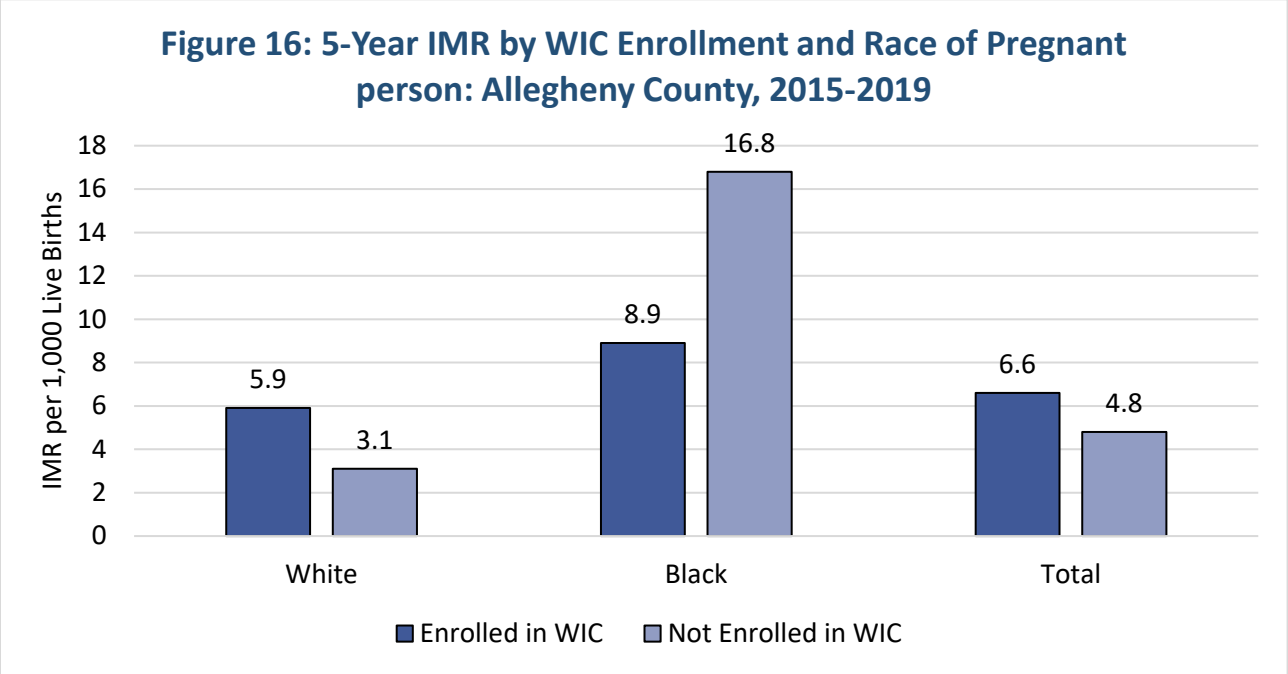


Total includes individuals of all races

WIC Enrollment

Figure 16:

- The five-year IMR for White pregnant people was higher among those enrolled in WIC (5.9 per 1,000) than those not enrolled in WIC (3.1 per 1,000)
- The five-year IMR for Black pregnant people was higher among those not enrolled in WIC (16.8 per 1,000) than those enrolled in WIC (8.9 per 1,000)

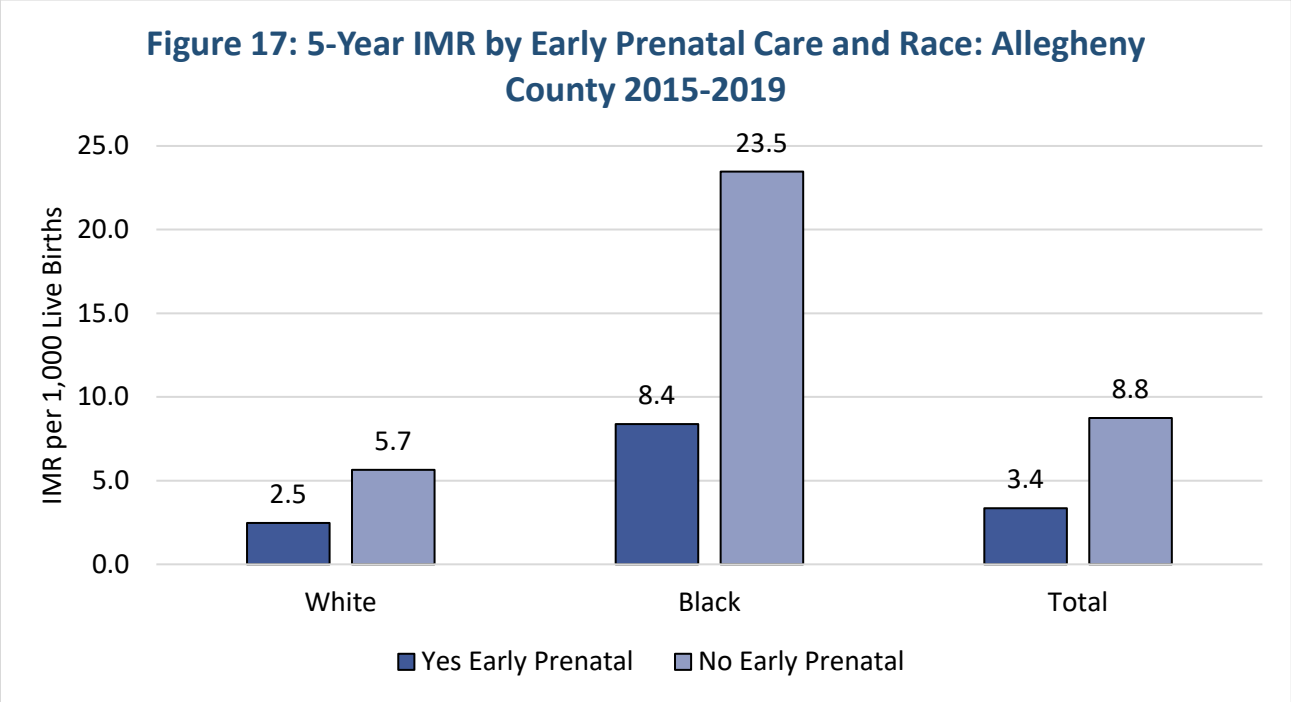


Total includes individuals of all races

Early Prenatal Care

Figure 17:

- The IMR for pregnant people who did not receive prenatal care in the first trimester was 8.8 per 1,000 live births compared to 3.4 per 1,000 live births for pregnant people who did receive prenatal care in the first trimester

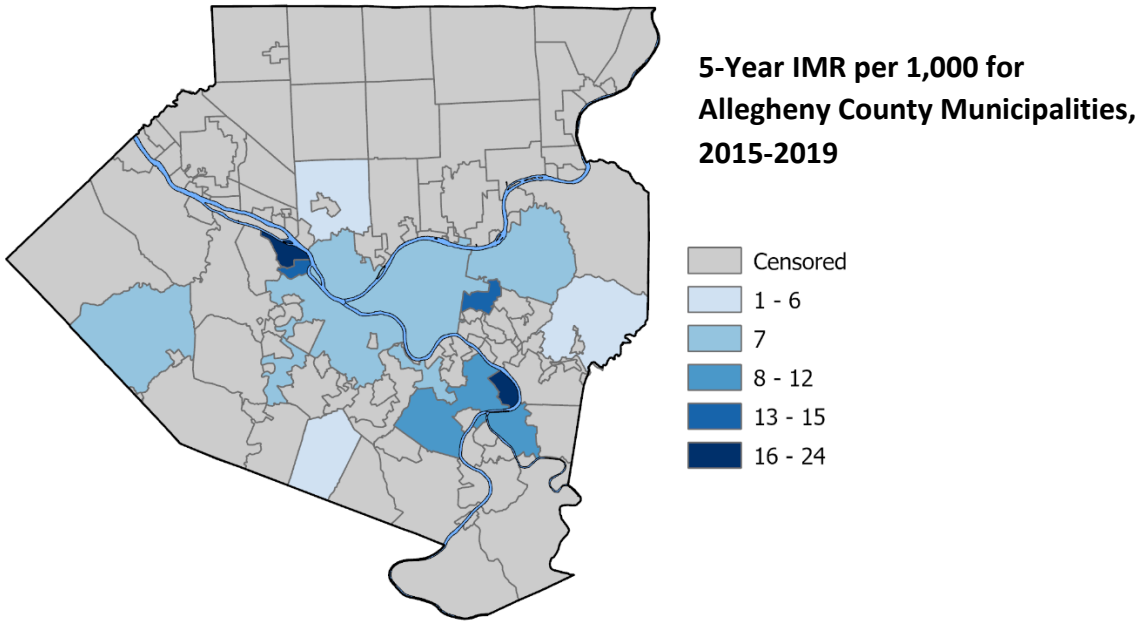


Total includes individuals of all races

GEOGRAPHY

Infant mortality rates are shown for Allegheny County municipalities where the number of infant deaths between 2015 and 2019 is greater than five (Fig. 18). Of 130 municipalities in Allegheny County, 13 had five or more infant deaths in this time frame (Table 6). Due to such small counts, the IMR of each locale will often fluctuate each year. However, municipalities with consistently high IMRs since 2011 include McKees Rocks, Stowe Township, McKeesport, Wilkinsburg, City of Pittsburgh, Penn Hills Township, Scott Township and Monroeville.

Figure 17: Map of 5-Year IMR by Allegheny County Municipality



Note: Municipalities were censored if fewer than five infant deaths occurred there between 2015-2019

Positive changes from the 2013-17 report to the 2015-19 report (Table 7):

- McKees Rocks has decreased its IMR by 28.8 percent
- McKeesport has decreased its IMR by 20.2 percent

Table 4: 5-Year IMR by Allegheny County Municipality, 2015-2019

Allegheny County Municipality	IMR
Stowe Township	24.1
Duquesne	16.1
McKees Rocks	15.3
Wilkinsburg	14.9
West Mifflin	12.1
McKeesport	10.3
Penn Hills	7.3
North Fayette Township	7.3
City of Pittsburgh	7.2
Scott Township	6.6
Monroeville	6.1
Ross Township	4.0
Bethel Park	4.0

Note: Only includes municipalities where number of infant deaths from 2015-2019 was five or greater

Table 5: Comparison of Allegheny County Municipality IMR and Percent Change from 2013-2017 to 2015-2019

Municipality	2013-2017 IMR	2015-2019 IMR	Percent Change (%)
McKees Rocks	21.5	15.3	-28.8
McKeesport	12.9	10.3	-20.2
City of Pittsburgh	6.7	7.2	+7.5
Stowe Township	20.5	24.1	+17.6
Scott Township	5.4	6.6	+22.2
Monroeville	4.7	6.1	+29.8
Wilkinsburg	11.2	14.9	+33.0
Penn Hills Township	4.4	7.3	+65.9

LIMITATIONS & CONCLUSIONS

LIMITATIONS

The data in this report have limitations worth noting. First, these results are for surveillance purposes and show associations between factors, rather than a definitive cause-and-effect relationship. Many factors related to infant mortality cannot be understood in isolation. Second, because there were very few infant deaths among pregnant people of races other than Black and White, and among people of Hispanic ethnicity, other race-specific and ethnicity-specific calculations were censored. However, the observations for all races were included in the total and overall rates. Third, breastfeeding data reported on the birth certificate just includes initiation and does not include duration or exclusivity. Fourth, errors in reporting of ICD-10 codes for cause of death are possible. Birth and death certificates may have different levels of completeness.

CONCLUSIONS

Infant mortality is a public health issue in Allegheny County. Infant mortality rates are significantly higher among Black infants than White infants. Disparities in IMR exist between populations that have different insurance types, smoking statuses, birthweights, and lengths of gestation, among others. The disparities seen in this report are similar to disparities seen in other health and infant outcomes, such as in the 2020 Perinatal Periods of Risk Report and the 2019 Natality Report (ACHD PPOR, 2020) (ACHD 2019 Natality, 2021). These data support that factors such as social determinants of health and environment affect a pregnant person's health and infant outcomes.

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APPENDIX

METHODS

The data in this report were obtained from the 2015-2019 birth and death certificates from the Pennsylvania State Birth and Death Certificate final files. This report presents the data as an infant death cohort. Infant deaths, defined as an infant who died within Allegheny County under the age of one year, were extracted and linked with the corresponding birth certificates on infant last name and date of birth. A unique birth and death certificate number were not available. The data were linked using Tableau Prep and analyzed using SAS and ArcGIS Pro.

Linking the infant's death certificate with the birth certificate allows ACHD to be consistent with the reporting procedures of the Centers for Disease Control (CDC) National Vital Statistics System (NVSS). Both the CDC NVSS Linked Birth and Infant Death Data and this report present the data as a death cohort. Using this method allows for the pregnant person's race reported on the birth certificate to be used in both the numerator and the denominator when calculating IMRs. Race reported on the birth certificate is reported by the pregnant person and is more reliable than the reported infant's race on the death certificate (Ely et al., 2022). In addition, more detailed analyses of infant mortality patterns can be achieved using linked data because more information on pregnant person and infant characteristics are available through birth records than through the death records alone.

For pregnant people of multiple races, only the single self-reported race on the birth certificate was used. Specific IMRs for people of Hispanic ethnicity and people of races other than Black and White were censored due to low counts. However, these observations were included in the total and overall rates. Cause of death was classified using ICD-10 codes (see page 34). Pregnant person's smoking status was determined by birth record data. Pregnant people reported the average number of cigarettes smoked per day during the three months before pregnancy and by trimester during pregnancy. Pregnant person smoking status on the birth certificate does not include vaping or e-cigarettes. Intent to breastfeed was reported by the pregnant person in the birth records. The month prenatal care began is calculated from the last normal menses date and the date of the first prenatal care visit. Education is reported by the pregnant person as the highest level of education completed at the time of delivery.

Infant deaths that did not have a corresponding birth certificate were excluded from analysis. These infants were removed to assess the prevalence and trends of pregnant person and infant characteristics only available in the birth records. There were 11 infant deaths without corresponding birth certificates from 2015-2019. Additionally, fetal deaths were not included in this report.

DATA SOURCES

Birth and Death Data

The registration of birth and death records is the responsibility of the Pennsylvania Department of Health. Birth and death record information is shared with the Allegheny County Health Department through a cooperative agreement which requires the following disclaimer: "These data were supplied by the State Health Data Center, Pennsylvania Department of Health, Harrisburg, Pennsylvania. The Pennsylvania Department of Health specifically disclaims responsibility for any analyses, interpretations, or conclusions."

Population Data

Population estimates for the state and county were provided by the Division of Health Informatics, Pennsylvania Department of Health. These data were used to compare rates and were produced jointly by the United States Bureau of the census and the Pennsylvania State Data Center of the Pennsylvania State University at Harrisburg under the Federal-State Cooperative Program for Local Population Estimates.

FORMULAS

Infant Mortality Rate = $\frac{number\ of\ deaths\ under\ 1\ year\ of\ age}{number\ of\ live\ births} * 1{,}000$

Average Annual Percent Change = $\frac{\sum_{i=2}^{k}(\frac{IMR_i}{IMR_{i-1}}-1)}{k-1} * 100$

Confidence Interval for IMR = $IMR \pm 0.975 * \frac{\sqrt{IMR(1-IMR)}}{n}$

BMI = $\frac{mother\ weight\ in\ kilograms}{(mother\ height\ in\ meters)2}$

GLOSSARY

AAPC: average annual percent change

ACHD: Allegheny County Health Department

Birthweight: first weight of the fetus or newborn after birth

Cause of Death: Cause of death is determined to be the most proximal or causal condition or action resulting in an individual's death. The International Classification of Disease, Tenth Revision (ICD-10) is a means of categorizing cases causing an alpha numeric system set forth by the World Health Organization.

Extremely low birthweight: birthweight less than 1,000 grams

Extremely preterm: less than 28 weeks gestation

Full Term: birth that occurred at 37 weeks or longer gestation

Gestation: the length of the pregnancy in weeks since a pregnant person's last menstrual cycle, during which the embryo or fetus is developing in the uterus

ICD-10: International Classification of Diseases 10th Revision

Infant Mortality Rate (IMR): number of deaths that occur in the first year of life per 1,000 live births

Infant Death: death of a child within the first year of life

Live Birth: According to Pennsylvania law, a live birth is the expulsion or extraction from its pregnant person of a product of conception, irrespective of the period of gestations, which shows any evidence of life at any moment after such expulsion or extraction.

Low Birthweight: birthweight under 2,500 grams

Moderate to Late Preterm: from 32 to 37 weeks gestation

Neonatal Death: death of a child within the first 28 days of life

Normal and High birthweight: birthweight 2,500 grams or greater

NMR: neonatal mortality rate

PNMR: post-neonatal mortality rate

Postneonatal Death: death of a child between 28 and 364 days of life

Preterm: birth that occurred at less than 37 completed weeks of gestation

Race: All data in this report are based on the race of the pregnant person from the birth certificate, as recommended by the National Center for Health Statistics.

SIDS: sudden infant death syndrome

Smoking: Smoking status was defined as cigarette use. A pregnant person was considered as having smoked if they smoked at least one cigarette during any trimester of their pregnancy.

SUID: sudden unexpected infant death

Very Low Birthweight: birthweight under 1,500 grams

Very Preterm: 28 to 31 weeks gestation

ICD-10 CODES

Complications of pregnancy	'P010','P011','P012','P018'
Complications of placenta, cord, and membranes	'P021', 'P024', 'P027'
Short gestation / low birthweight	'P070','P071','P072', 'P073'
Congenital malformations	'Q000', 'Q039', 'Q049', 'Q212', 'Q213', 'Q230', 'Q234', 'Q249', 'Q262', 'Q333', 'Q423', 'Q529', 'Q601', 'Q613', 'Q642', 'Q743', 'Q780', 'Q790', 'Q793', 'Q868', 'Q899', 'Q913', 'Q917', 'Q929', 'Q935'
Unexpected infant deaths	'R95', 'R99'
External causes of death	'W75', 'W80', 'W83', 'X00', 'X91', 'Y079', 'Y34'

DISCLAIMER

The data are provided by the Allegheny County Health Department through a cooperative agreement with the Pennsylvania Department of Health which requires the following disclaimer: "These data were supplied by the State Health Data Center, Pennsylvania Department of Health, Harrisburg, Pennsylvania. The Pennsylvania Department of Health specifically disclaims responsibility for any analyses, interpretations, or conclusions."