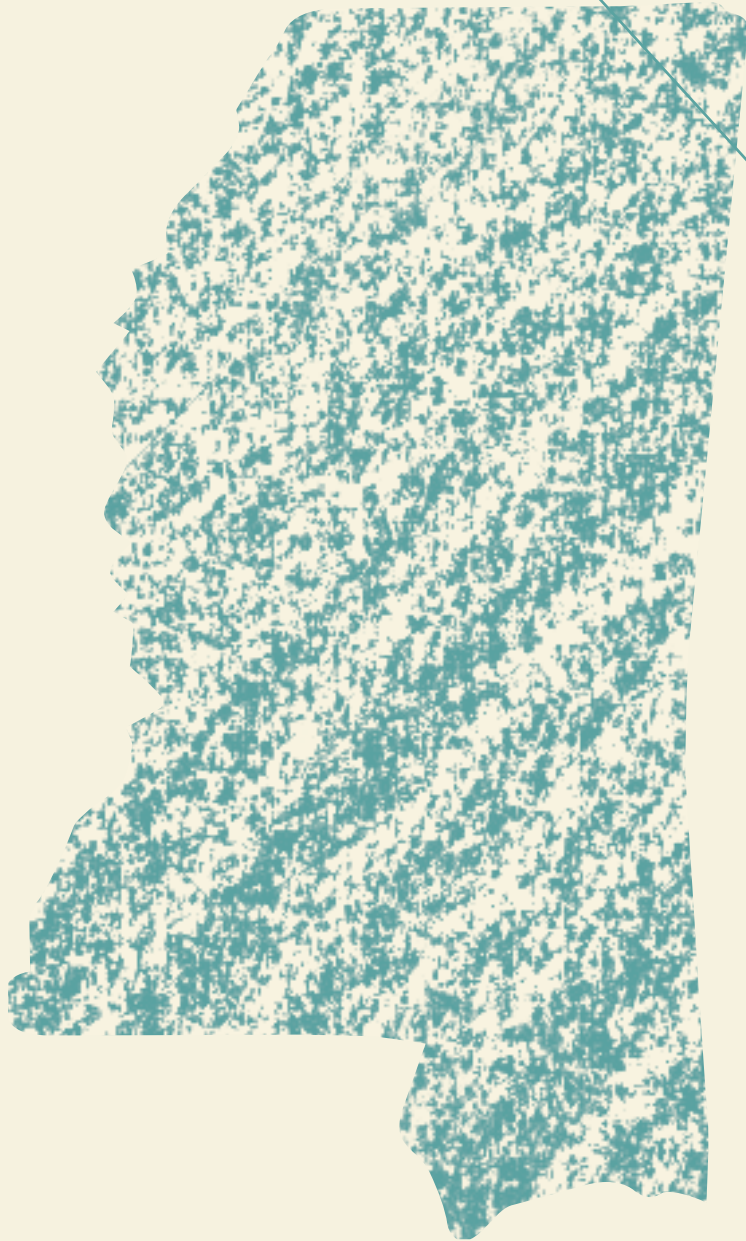


MISSISSIPPI DATA PROJECT

Report
December 2016

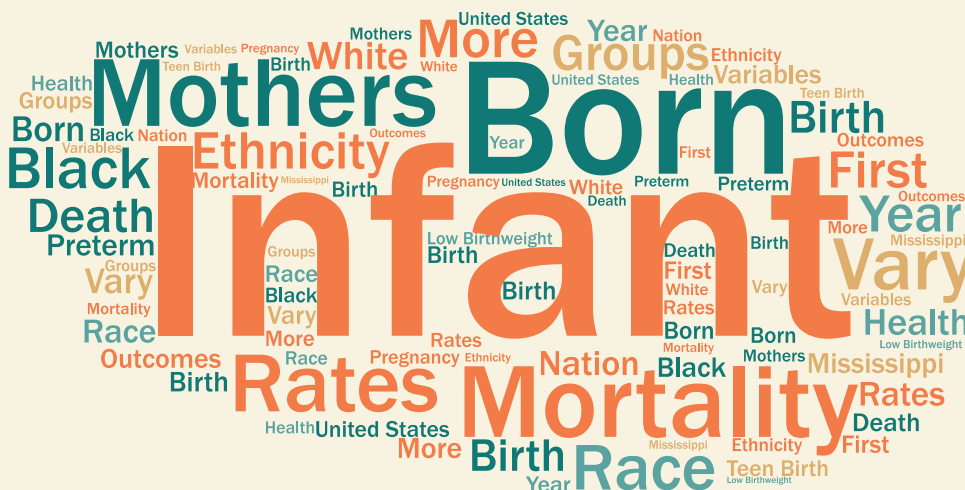
Birth Outcomes



INTRODUCTION

The rate of infant mortality—defined as the number of deaths during the first year of life per 1,000 live births in a given year—is often considered a good indicator of a region’s maternal and newborn health and care (World Health Organization, 2012). Between 1900 and 2000, the infant mortality rate in the United States declined substantially from 100 infant deaths per 1,000 live births to 6.89 infant deaths per 1,000 live births. However, changes in the rates between 2000 and 2005 were relatively small (from 6.91 to 6.87) (MacDorman, et. al., 2013). Much of the lack of decline during that period was attributed to increases in preterm birth and preterm related infant mortality (CDC, 2008). Despite these declines, infant mortality in the U.S. is relatively high when compared to other developed countries. In 2010 the U.S. ranked 26th among select European nations with a reported rate of 6.1 infant deaths per 1,000 live births; Finland reported the lowest rate of 2.3 (MacDorman, et. al., 2014).

This issue brief explores infant mortality, as well as low birthweight, preterm (premature) births and teen births in an examination of birth outcomes in Mississippi. Unless otherwise noted, data was obtained from the Mississippi State Department of Health (MSDH) and reflect the most recent reporting period: 2014.



INFANT MORTALITY RATE



While the nation as a whole has shown a marked decrease in infant mortality, when examining individual states, there is a great deal of variability in the rate at which infants survive to their first birthday. As a region, the southeastern part of the country has some of the highest rates in the nation. This disparity has been fairly consistent over the selected reporting period (2010-2014). In fact, the states with the highest infant mortality rates—Alabama (49th) and Mississippi (50th)—are adjacent to one another.

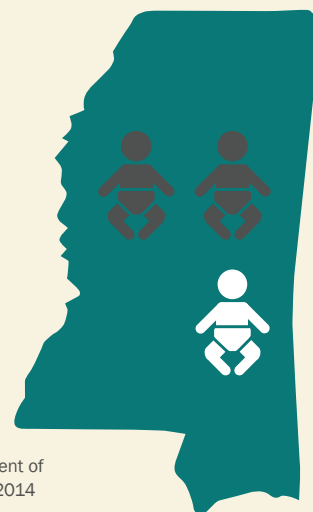
Mississippi: 9.2
Alabama: 8.6



Infant mortality rates vary by racial/ethnic groups. Infants born to **Black mothers** are **2×** more likely to die in the first year after birth as infants born to **White mothers**.

The infant mortality rate for **Black** babies is **12.7** per 1,000 live births.

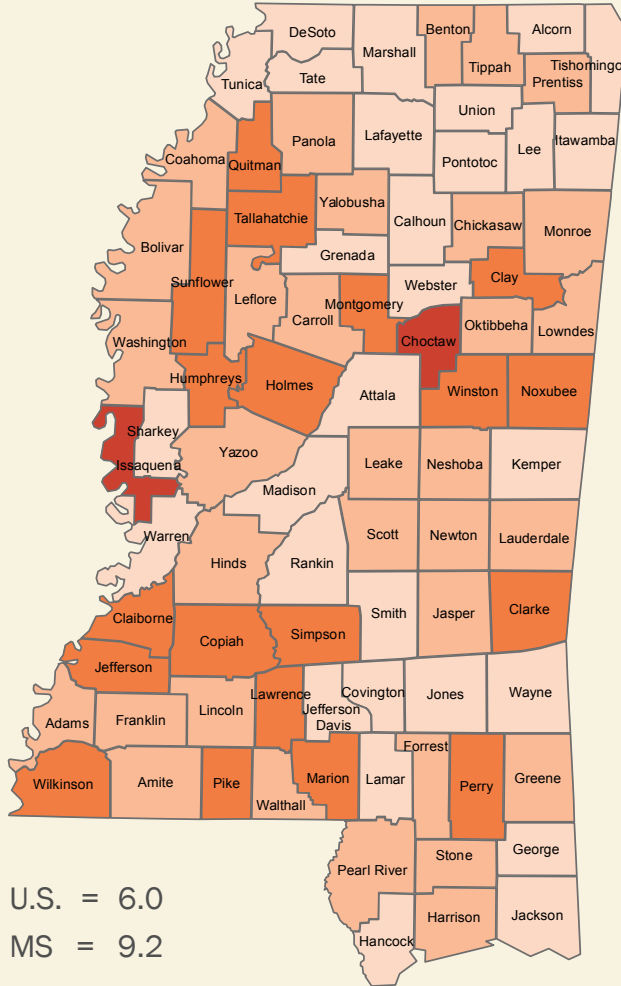
The infant mortality rate for **White** babies is **6.3** per 1,000 live births.



Source: Mississippi Department of Health; Vital Records. 2010-2014

Infant Mortality Rate 2010-14

Rate per 1,000
live births



U.S. = 6.0
MS = 9.2

Source: Mississippi Department of Health; Vital Records. 2010-2014

Over the last five years (2010-2014) overall rates in the state have shown improvement. However, stark differences appear between counties and some of the highest rates can be found in the Delta and southwestern regions. Issaquena County had the highest rate of infant mortality with 41.1 per 1,000 live births, compared to Kemper County with a rate of 2.1 (MSDH, 2014).

WHAT CAN WE DO?

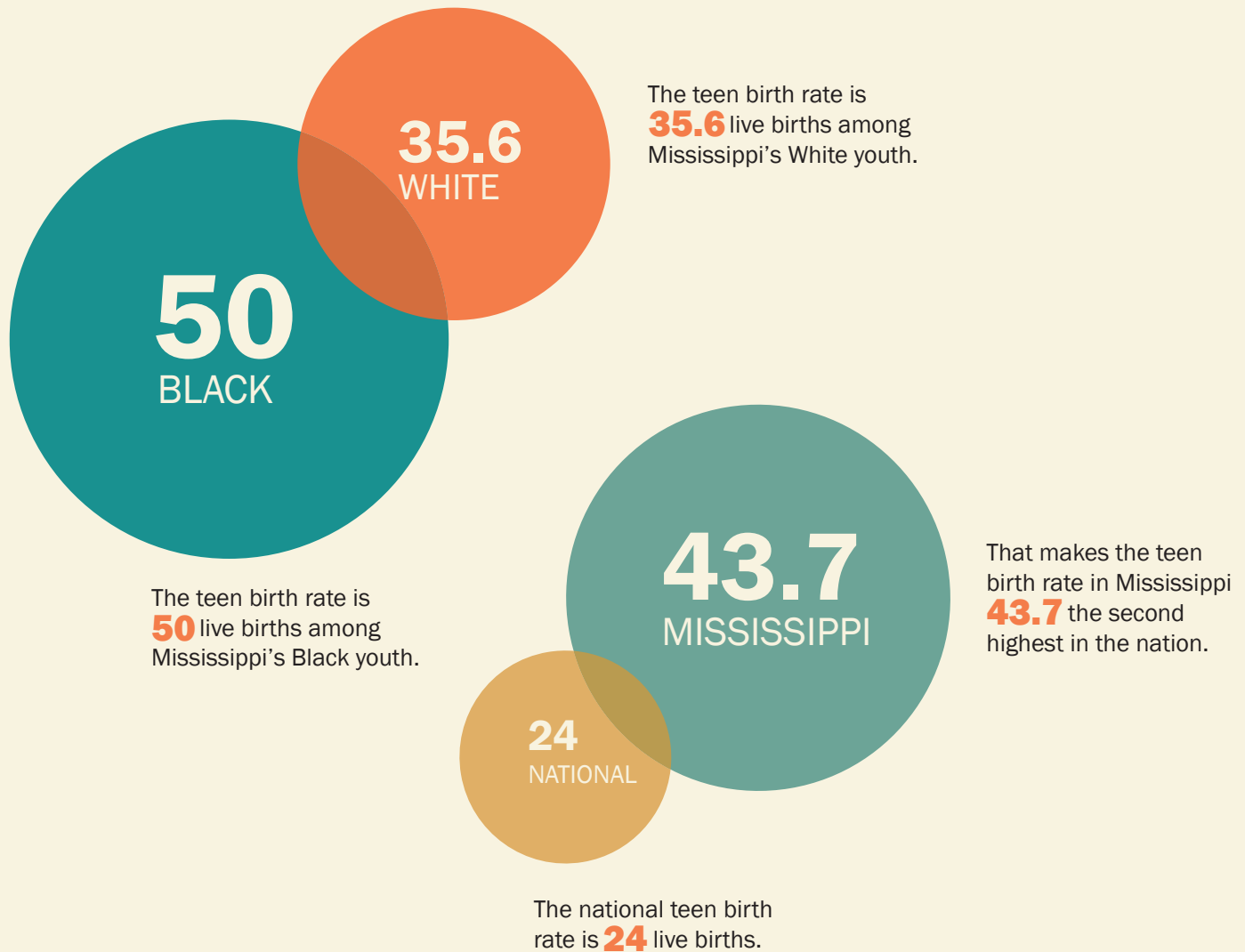
- +ENSURE PROPER PRENATAL CARE
- +ASSIST TEEN MOMS
- +SAFE SLEEP ENVIRONMENT
- +IMMUNIZE INFANTS
- +DRUG-FREE/ALCOHOL-FREE PREGNANCY
- +NEWBORN SCREENING
- +PROPER NUTRITION FOR MOM
- +ENCOURAGE BREAST FEEDING

Source: Mississippi Department of Health; Vital Records

TEEN BIRTH RATE

Nationally teen birth rates have shown a consistent and steady decline since the early 1990s. In 2014, the United States recorded its lowest teen birth rate (24.2) in the 70+ years that these data have been collected (Mart in, Hamilton and Ventura, 2015).

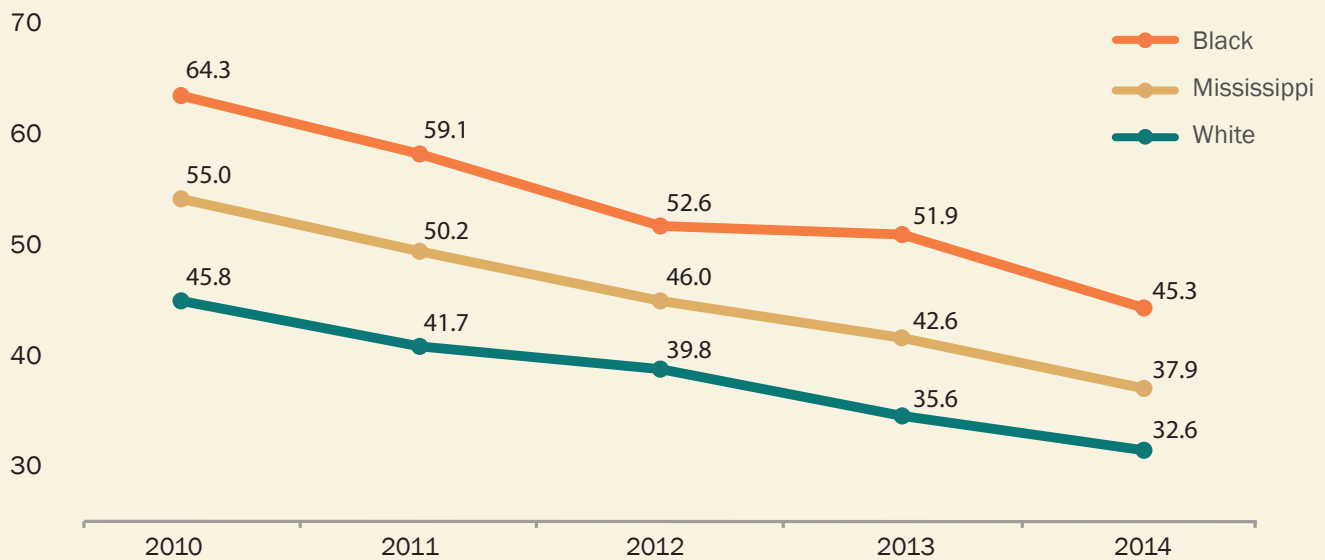
During the last two decades Mississippi teen birth rates also have declined. Nevertheless, even with fewer teens giving birth, the state rate has consistently remained higher than the national average and is currently second highest in the nation at 43.7 births per 1,000 women ages 15-19.



Source: Mississippi Department of Health; Vital Records. 2010-2014

Racial disparities in teen births continue to exist. In each year from 2005 to 2014, birth rates for non-White teens—the overwhelming majority of which were Black—were higher than their White counterparts. (Note: the race categories are those reported by the Mississippi State Department of Health.) However, during the last five years of this period, with one exception (2012 to 2013), teen births for non-whites declined at a faster rate than those for Whites. The most recent data show the smallest gap in 20 years in birth rates between Whites and non-Whites (32.6 and 43.8, respectively). Future analyses will determine if this trend continues.

Teen Births by Race, 2010-2014 (per 1,000 live births)

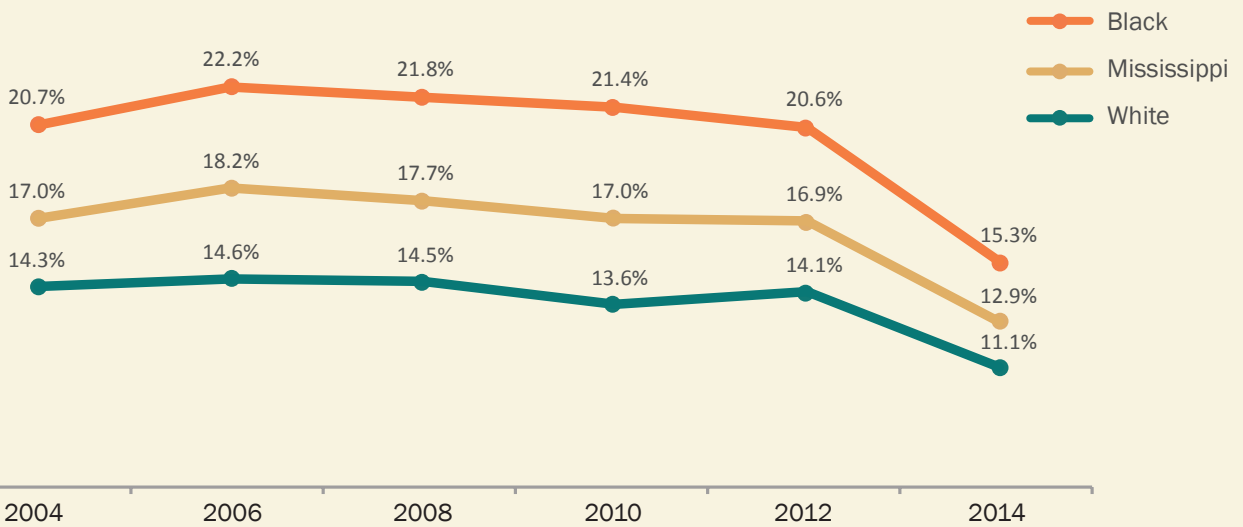


Source: Mississippi Department of Health; Vital Records. 2010-2014

PRETERM BIRTHS

Infants born preterm (prior to 37 weeks gestation) are at increased risk of serious medical complications, even death, in the first year of life. It is during the final weeks of pregnancy that many of the major organ systems develop and infants that do not have sufficient time in the womb are susceptible to a number of health challenges. Complications preterm babies may face include: breathing problems, feeding problems, cerebral palsy, developmental delay and hearing and/or vision problems (CDCb, 2016).

Preterm Births by Race, 2004-2014



Source: Mississippi Department of Health; Vital Records. 2010-2014

Preterm births are babies that are born earlier than 37 weeks gestation. The overall percentage in Mississippi was 12.9% in 2014. Coahoma County saw the largest percentage of preterm births with 24.6%, while Yalobusha saw the smallest with 8% in 2014.

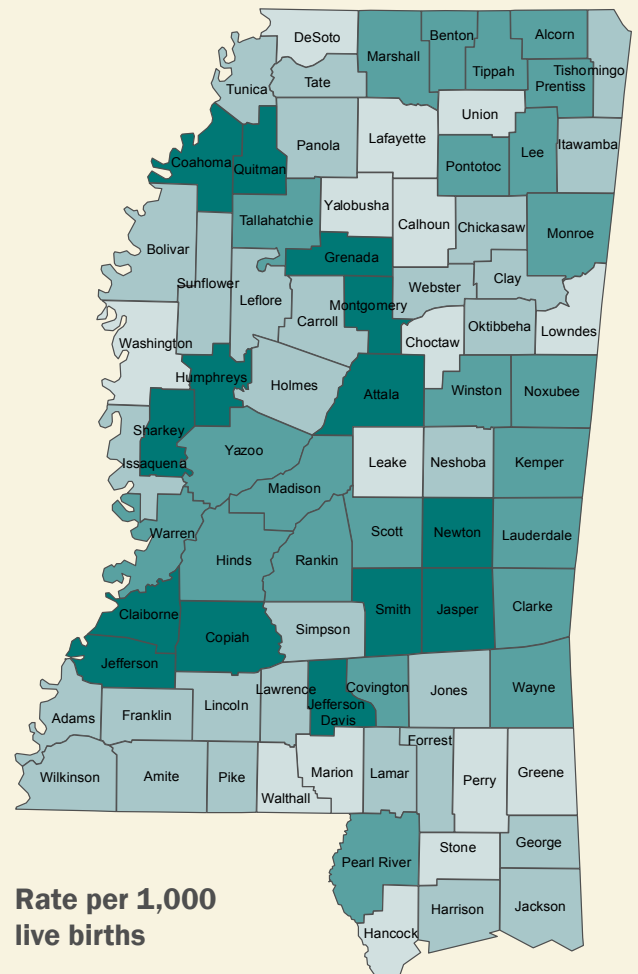
There were also regional differences. Ironically, while the Mississippi Delta typically has some of the poorest birth outcomes, in 2014 other parts of the state, particularly the central and southwestern counties, had pockets of equally high rates of preterm births.

2014 PRETERM BIRTH (gestation less than 37 weeks)

In 2014, the preterm birth rate in the United States declined for the sixth straight year, to 11.6% of all births. The declines were evident for both non-Hispanic White and non-Hispanic Black births (NCHS, 2013).

Mississippi generally has higher rates of preterm births than the nation overall, but it has experienced similar trends in decline. In 2005, the state reported an overall rate of 18.3. Each subsequent year the rate declined slightly (with the exception of 2008 when there was a slight uptick) and by 2014 the rate had fallen to 12.9. The state saw its largest decreases between 2012 and 2013, when the rate shrank from 16.9 to 13.1.

As with other birth outcomes there were differences between racial groups; for all years, preterm births were consistently higher among non-Whites than Whites.



Source: Mississippi Department of Health; Vital Records. 2010-2014

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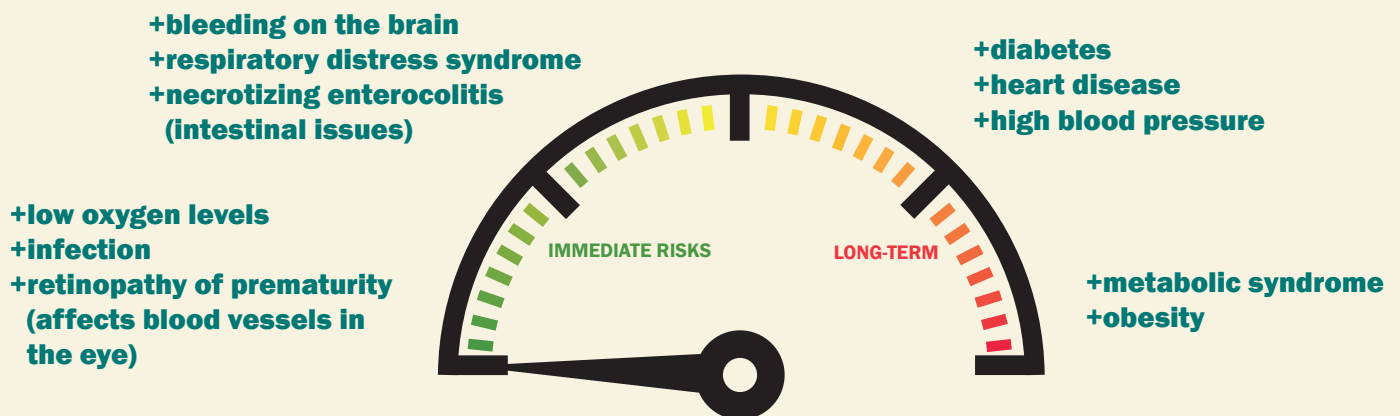
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LOW BIRTHWEIGHT

Smoking, poor nutrition, poverty, stress, infections and violence can increase the risk of a baby being born with a low birthweight.

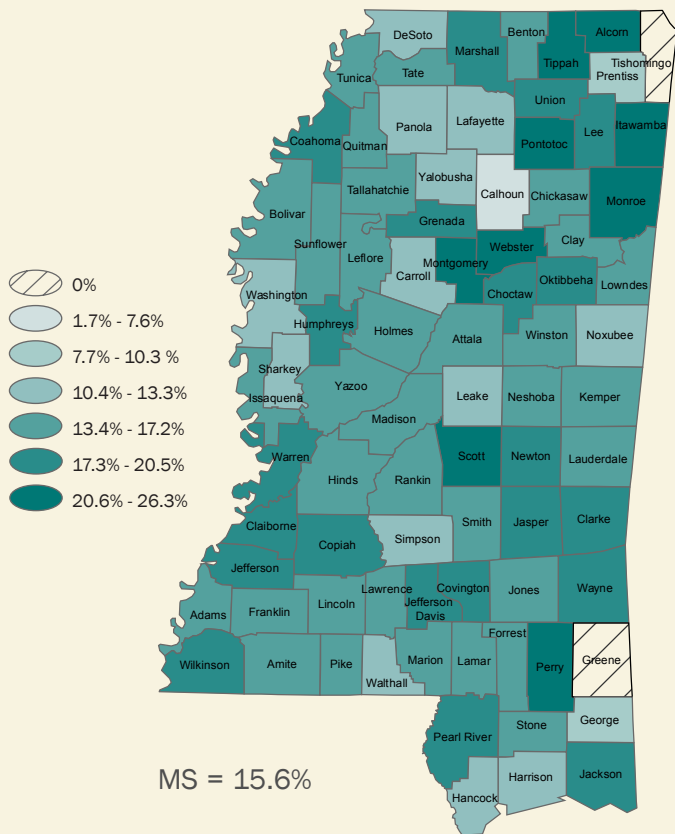
Weight at birth is strongly correlated with gestational age; the earlier a child is born preterm, the more likely he/she is to be low birthweight (NCHS, 2013). Infants born with low birthweight (less than 2,500 grams or 5.5 pounds) are at increased risk for medical challenges and poorer health outcomes.

Low birthweight babies are high risk for developing a number of both immediate risks and long-term complications:



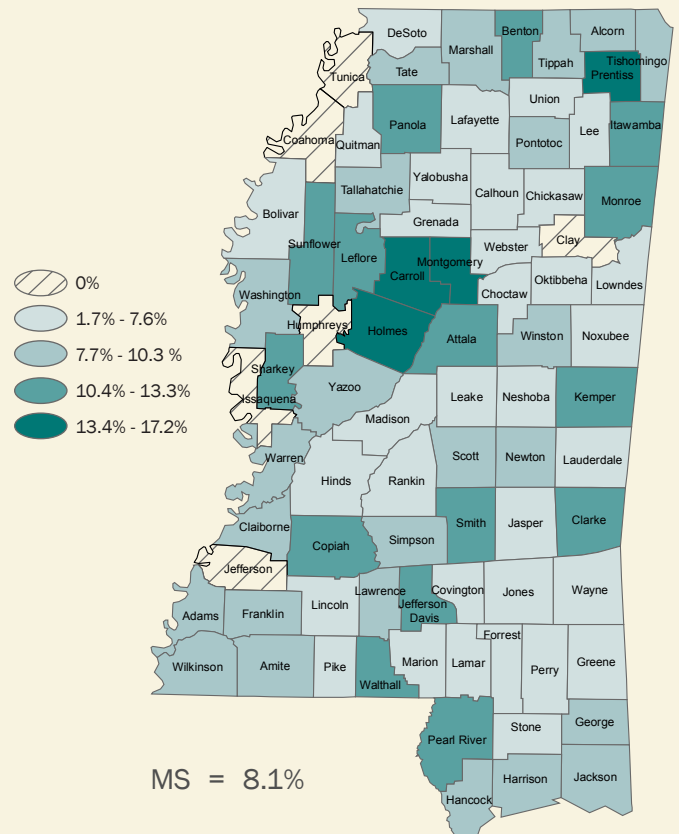
(Center for Disease Control and Prevention, 2016; March of Dimes, 2014; Boston Children's Hospital, n.d.).

Black Low Birthweight Babies* (weighing less than 5.5 pounds)



Source: Mississippi Department of Health; Vital Records. 2010-2014

White Low Birthweight Babies* (weighing less than 5.5 pounds)



Source: Mississippi Department of Health; Vital Records. 2010-2014

Low birthweight infants are more likely to occur in minority populations; overall, Blacks are almost twice as likely to have a low birth weight infant as Whites. In Mississippi, among Whites, there are no counties where the rate of low birth weights babies is above 17.2%. Among Blacks, however, several counties have rates of low birth weight that are above 17.2% and some counties even have rates that exceed 25%.

Source: Mississippi Department of Health; Vital Records

SUMMARY

Infant mortality rates have decreased across the nation, however, rates in Mississippi are the highest in the country.

Nationally, teen birth rates are at their lowest point since these statistics have been documented. Mississippi also has seen a decline in teen births. Nonetheless, it still has the second highest rate of teen births among all states.

While teen births are still higher among Blacks than Whites, overall declines in the last five years have been greater for Black teens than for White teens.

Preterm birth and low birth weight are highly correlated. Babies born before 37 weeks gestation are at increased risk of having a low birthweight.

Racial disparities in birth outcomes continue to exist.

- Infant mortality rates are twice as high for infants born to Black mothers as compared to infants born to White mothers.
- Preterm births and low birth weight births are more likely in Black populations.
- Although teen birth rates are declining for Black teens, rates are still higher for Black teens.

Many of these poor birth outcomes (teen pregnancy, infant mortality, low birthweight and preterm birth) are co-occurring.

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