

Alabama Perinatal Health Act Annual Progress Report for FY 2018 Plan for FY 2019



"It is more likely for a child to die in the first year after birth than in all the rest of childhood"

MESSAGE FROM THE STATE HEALTH OFFICER

Dear Senators and Representatives:

I am pleased to share the Alabama Perinatal Report, which describes the fiscal year 2017 infant mortality data, leading causes of infant mortality, and strategies for 2019.

Alabama's infant mortality rate decreased from 9.1 infant deaths per 1,000 live births to 7.4 infant deaths per 1,000 live births in 2017. This is the lowest rate ever recorded in Alabama's history and accounted for 102 fewer infant deaths than in 2016. We are encouraged by the progress made in lowering Alabama's infant mortality rate and remain committed to evidence-based initiatives that will continue to improve our state's infant morbidity and mortality. However, Alabama continues to have one of the highest infant mortality rates in the nation. Therefore, we are grateful to Governor Kay Ivey for providing additional funding and ongoing support for the State of Alabama Infant Mortality Reduction Plan.

Healthy mothers, babies, and families are the foundation of a healthier Alabama. In order to continue moving in the right direction, it is essential that we address the number of infants born before 37 weeks gestation and the number of infants born weighing less than 2,500 grams (5.5 pounds). To this end, the State Perinatal Program remains dedicated to working collaboratively to accomplish our vision of creating an environment for all Alabama citizens to be healthy.

Please take a few moments to review this report at: www.alabamapublichealth.gov/perinatal. Thank you, because of your ongoing support Alabama families can look toward the future with enthusiasm.

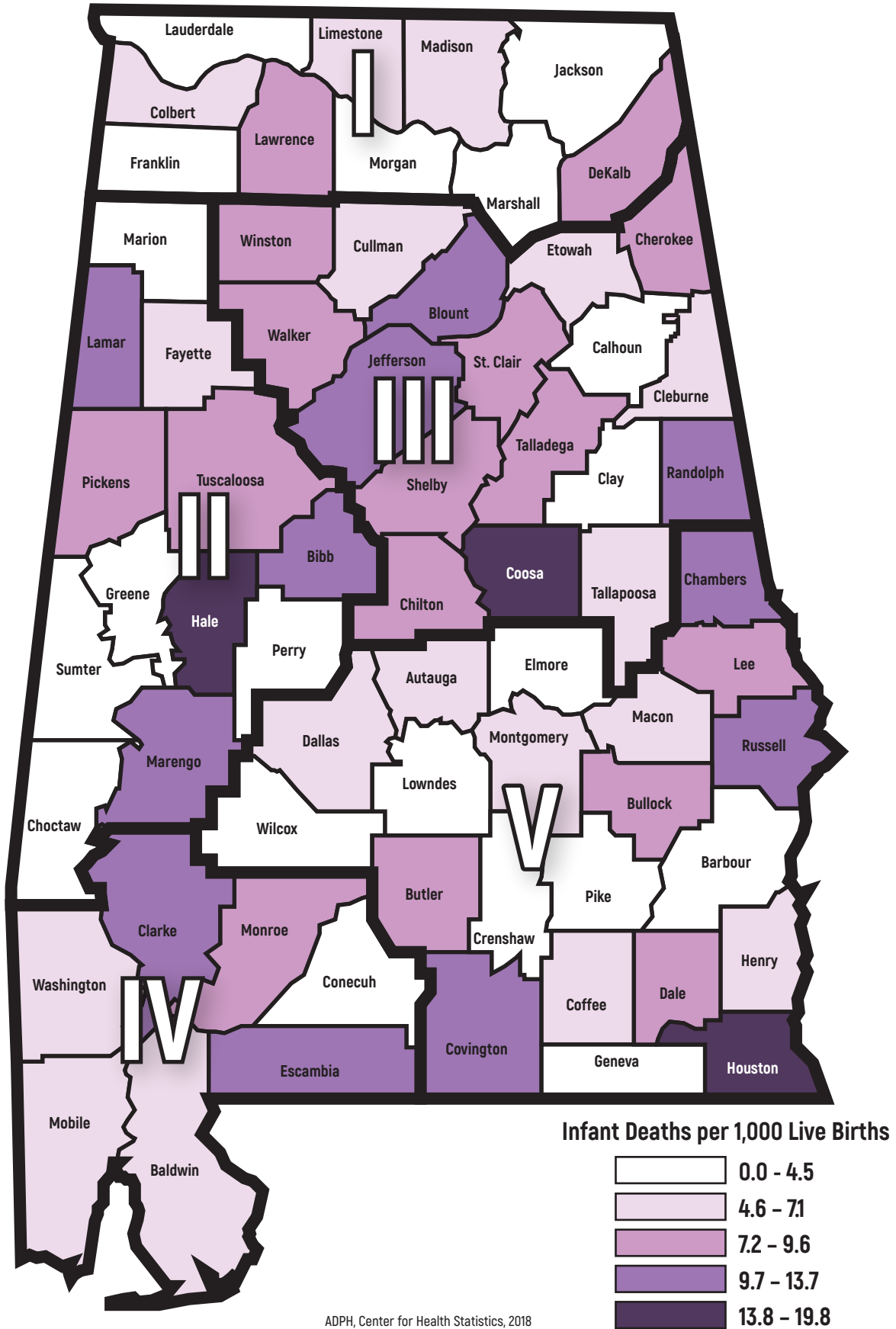


Sincerely,

A handwritten signature in black ink that reads "Scott Harris, MD". The signature is written in a cursive style.

Scott Harris, M.D.
State Health Officer

INFANT MORTALITY RATES BY COUNTY, ALABAMA, 2017



ADPH, Center for Health Statistics, 2018



STATE OF ALABAMA INFANT MORTALITY REPORT 2018



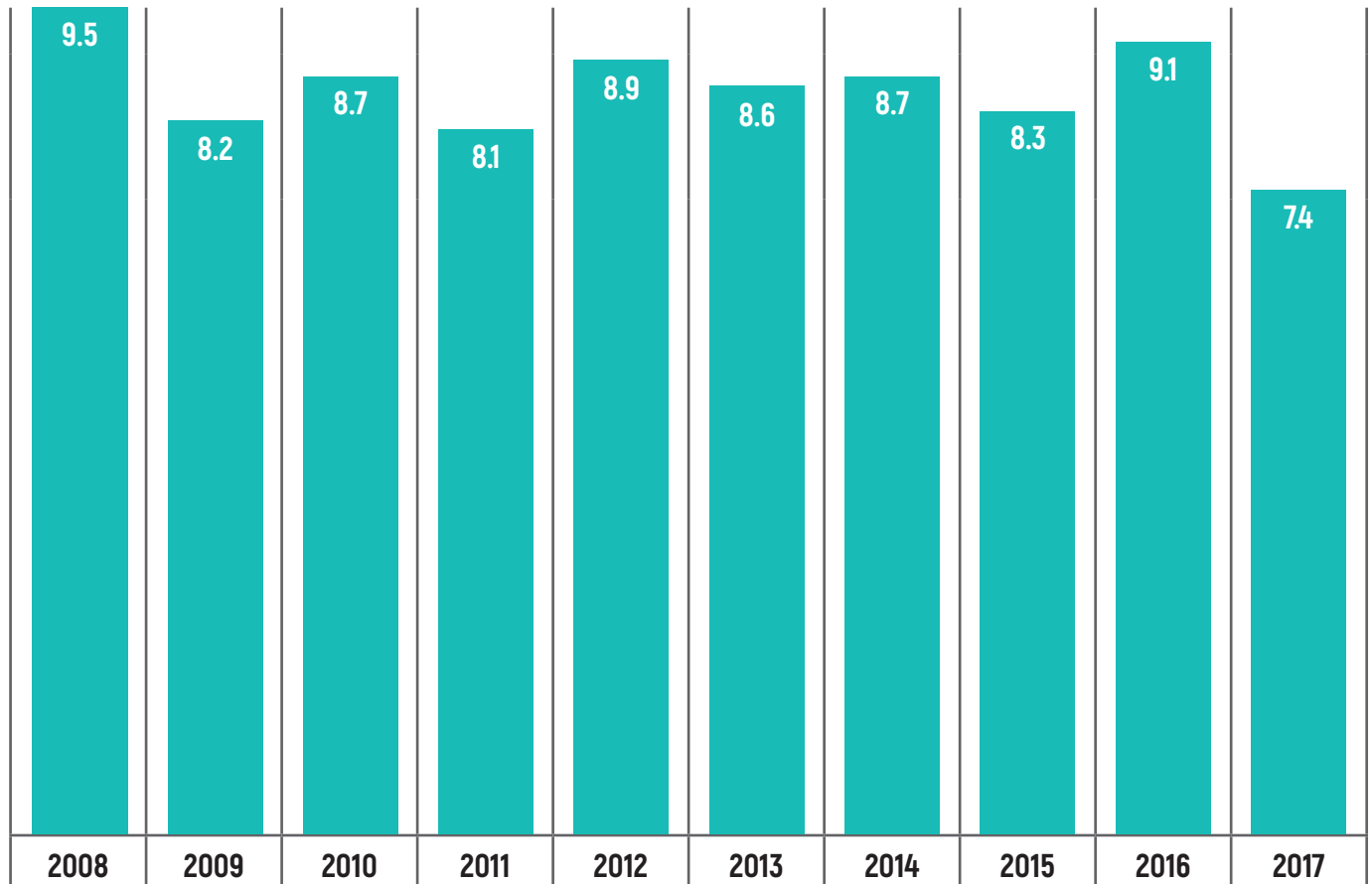
The Alabama Department of Public Health (ADPH), Center for Health Statistics, Bureau of Family Health Services – State Perinatal Program, and Maternal and Child Health Epidemiology Branch compiled this annual report as required under §22-12A-6, Alabama Perinatal Health Act, [Acts 1980, No. 80 – 761, p. 1586, §1.]

INTRODUCTION

Infant health is an indicator of the overall quality of health of a population. Infant mortality is the death of an infant born alive who dies before his or her first birthday. The infant mortality rate is the number of infants who die per 1,000 infants born alive. The health of women before and during pregnancy, access to adequate healthcare, and living conditions and circumstances are among the multiple factors associated with poor pregnancy outcomes and contribute to higher rates of infant mortality. Alabama remains committed to improving birth outcomes for women, infants, and families statewide. This 2018 report illustrates infant mortality statistics and describes some of the collaborating strategies to address them.

INFANT MORTALITY RATE

The 7.4 infant deaths per 1,000 live births in 2017 represents a 19 percent decrease from the 2016 rate of 9.1 infant deaths per 1,000 live births.



Rate per 1,000 live births. ADPH, Center for Health Statistics, 2018

TOTAL BIRTHS IN 2017: 58,936

38,728 WERE TO WHITE MOTHERS;

18,419 WERE TO BLACK MOTHERS; AND

1,789 WERE TO OTHER MOTHERS.

**TOTAL INFANT
DEATHS IN
2017: 435**

ADPH, Center for Health Statistics, 2018

**THERE WERE
102 FEWER
INFANT
DEATHS IN 2017
COMPARED
TO 2016.**

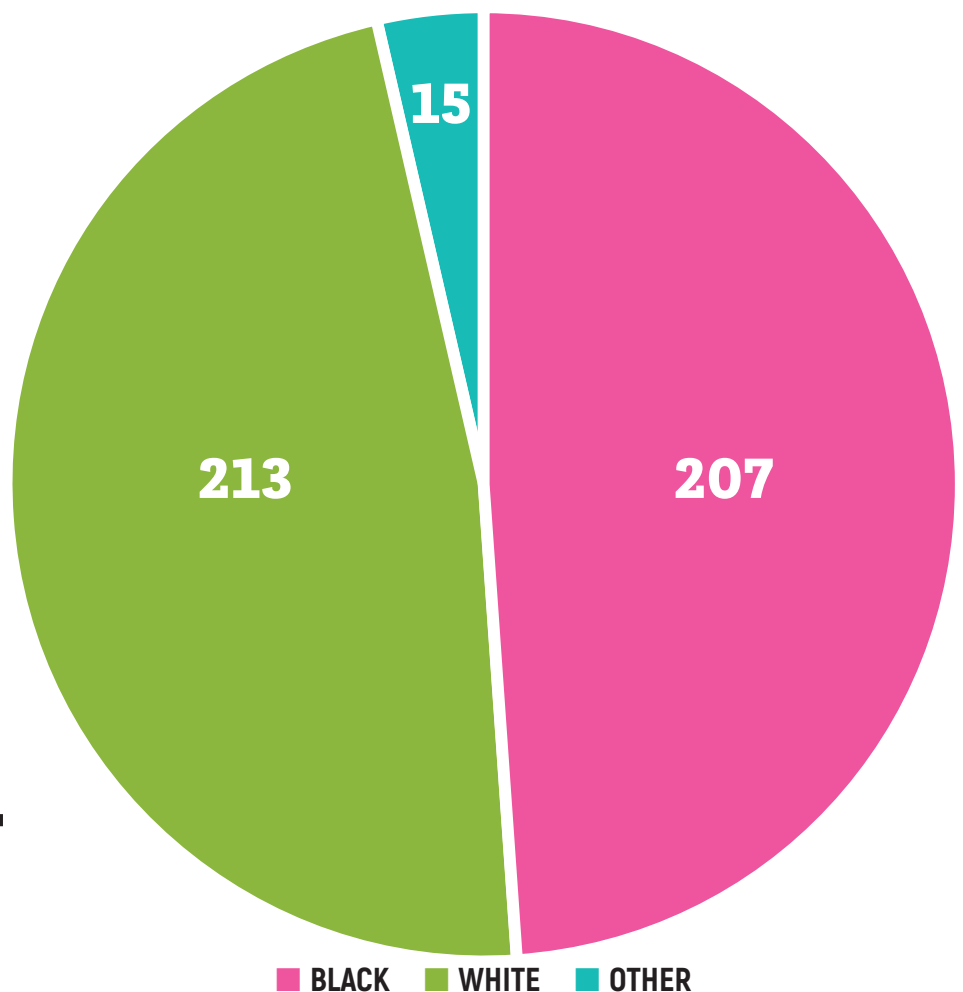
ADPH, Center for Health Statistics, 2018

**2016 UNITED
STATES INFANT
MORTALITY
RATE: 5.9**

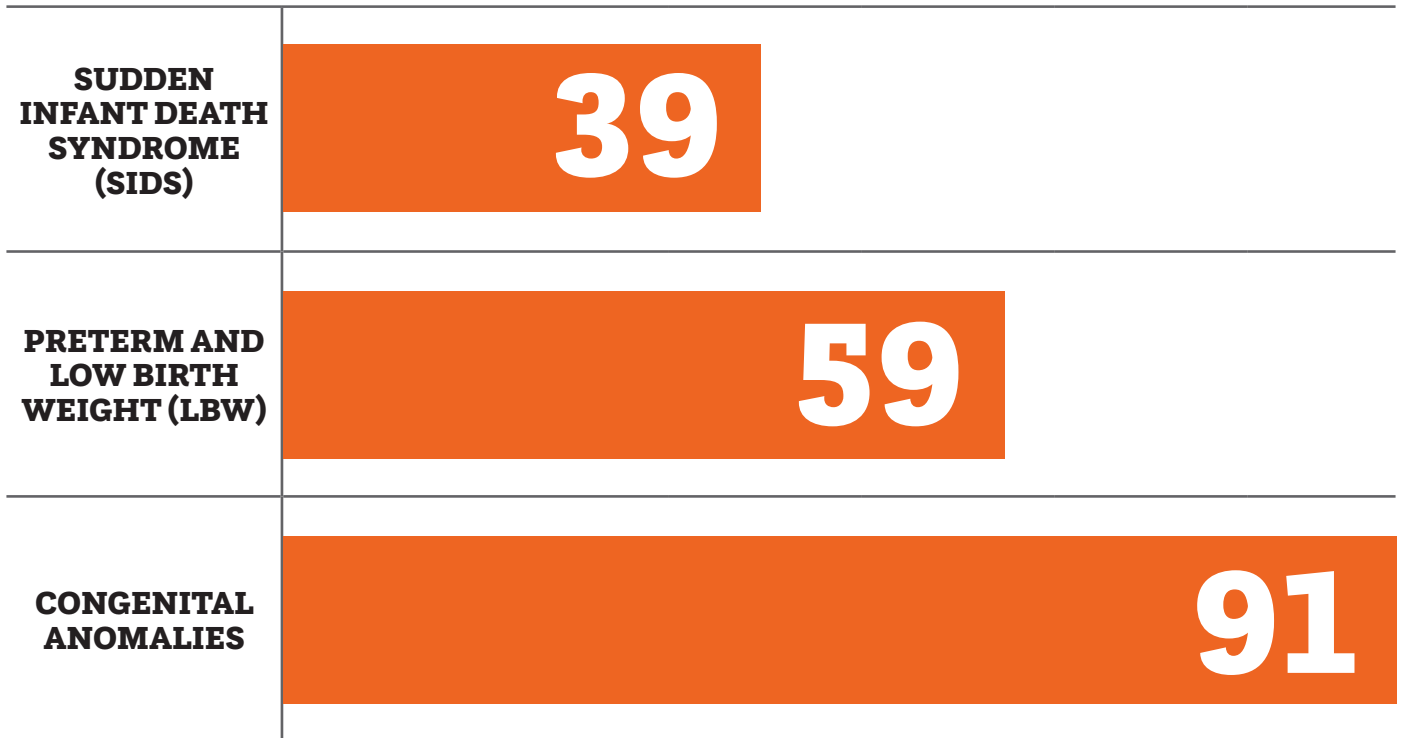
CDC National CHS Data Brief No. 326, November 2018.

**HEALTHY
PEOPLE 2020
TARGET INFANT
MORTALITY
RATE: 6.0**

Maternal, Infant, and Child Health: Healthy People 2020

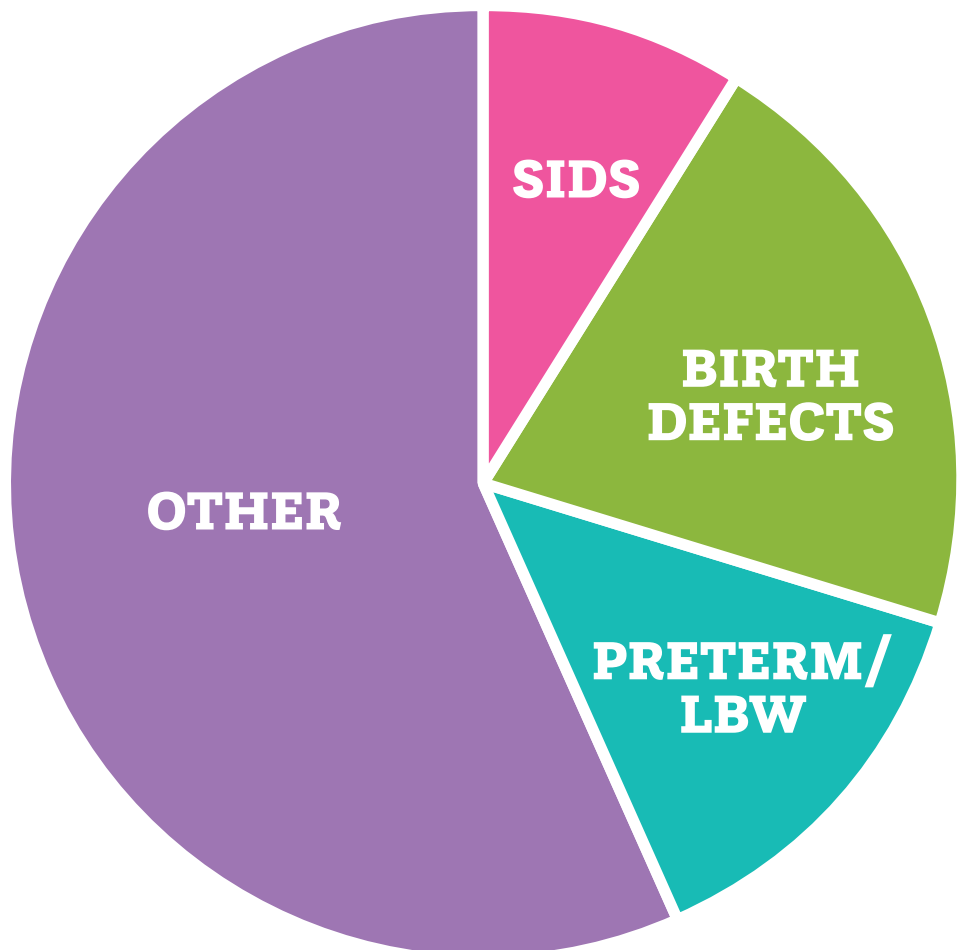


THREE LEADING CAUSES OF INFANT MORTALITY:



ADPH, Center for Health Statistics, 2018

THE THREE LEADING CAUSES ACCOUNTED FOR 43.4 PERCENT OF ALL INFANT DEATHS; A DECREASE FROM 47.0 PERCENT IN 2016.



ADPH, Center for Health Statistics, 2018

THREE LEADING CAUSES OF INFANT MORTALITY IN ALABAMA, 2017

1. CONGENITAL ANOMALIES

Congenital anomalies, also known as birth defects, were the leading cause of infant mortality in 2017. Most congenital anomalies have unknown causes and can vary from mild to severe. Congenital heart defects and chromosomal abnormalities such as Trisomy 18 or 21 are some of the most common birth defects that contribute to high rates of infant mortality. Known risk factors for increasing the risks associated with having a baby with a birth defect are:

- Smoking, drinking alcohol, or using drugs during pregnancy.
- Having certain medical conditions, such as being obese or having uncontrolled diabetes before and during pregnancy.
- Taking certain medications that can cause adverse effects on a growing fetus.
- Having someone in your family with a birth defect.
- Being an older mother, over the age of 35.

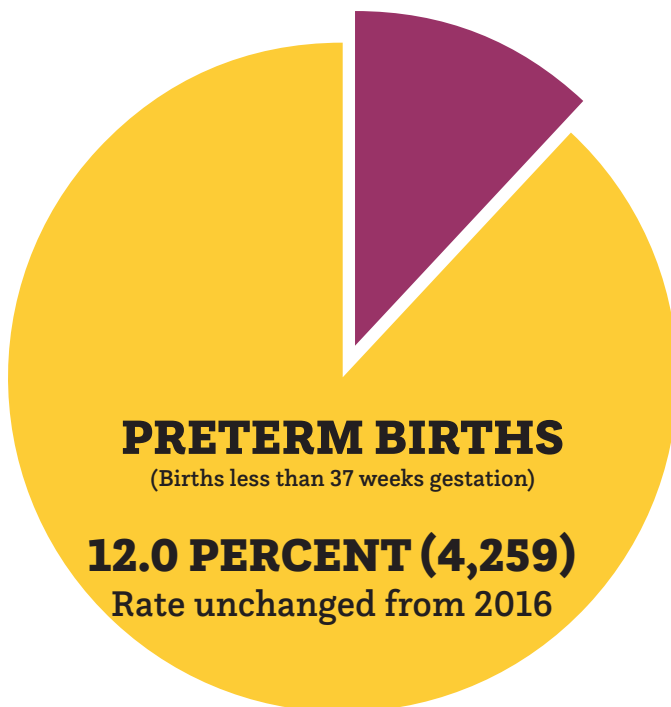
Having one or more of these risks does not mean a pregnancy will be affected by a birth defect. A woman can have a baby born with a birth defect even when there are no risk factors.

www.cdc.gov/ncbddd/birthdefects/facts.html

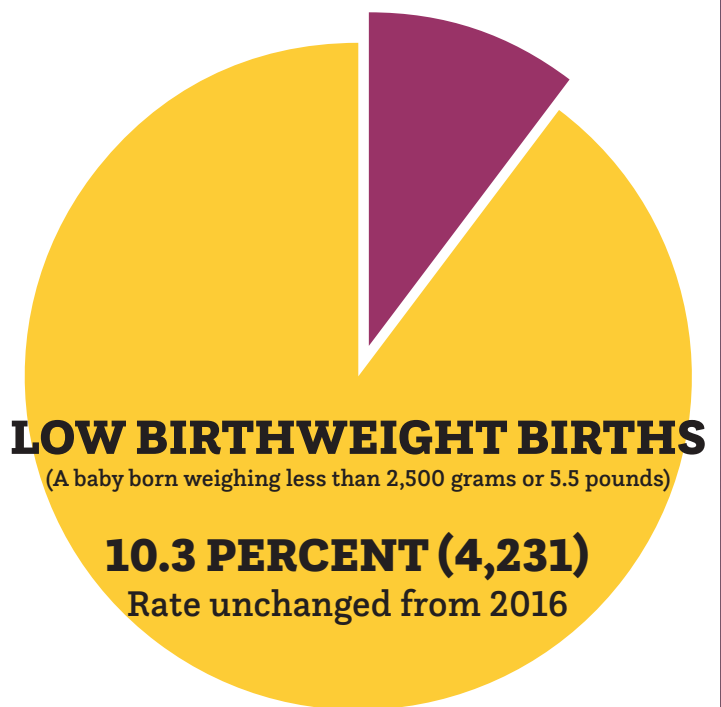
2. PREMATUREITY

Prematurity was the second leading cause of infant mortality in 2017. Infants who are born preterm and survive often face a lifetime of disabilities. In 2017, 12 percent of all live births were born preterm and 13.3 percent of all infant deaths were associated with being born preterm in Alabama. Babies born preterm have an increased risk for the following:

- Breathing problems
- Feeding difficulties
- Developmental delays
- Vision problems
- Hearing problems
- Learning and concentration challenges



ADPH, Center for Health Statistics, 2018



ADPH, Center for Health Statistics, 2018

INFANT DEATHS WITH LOW BIRTHWEIGHTS:

Low birthweight deliveries are infants who weigh less than 2,500 grams or 5.5 pounds at birth. The medical and socio-economic needs that are required by low birthweight infants are significant and the costs are high. Low birthweight infants who survive the first year of life incur medical bills averaging \$93,800. First year expenses for the smallest survivors will average \$273,900.

National Healthy Start Association. http://www.nationalhealthystart.org/healthy_start_initiative/how_much_does_infant_mortality_cost

63.6%

of infants died **before reaching 28 days of life** (Neonatal).

35.4%

of infants died **between the ages of 28 days and one year** (Post-neonatal).

242

infants who weighed less than 2,500 grams (5.5 pounds) at birth died before their first birthday.

171

of the 242 low birthweight infant deaths were extremely low birthweight births (less than 1,000 grams or 2 pounds 3 ounces).

3. SUDDEN INFANT DEATH SYNDROME (SIDS)

Sudden Infant Death Syndrome (SIDS) was the third leading cause of infant mortality. SIDS is classified as a category of Sudden Unexpected Infant Death (SUID). SUID often occurs when an infant is sleeping in an unsafe sleep environment and suffocation, overlay, entrapment, or strangulation occurs. The majority of SUID deaths in infants are preventable. SUID was responsible for 111 of the 435 infant deaths in 2017. Preventing SUID deaths in 2017 would have resulted in an infant mortality rate of 5.5 infant deaths per 1,000 live births.

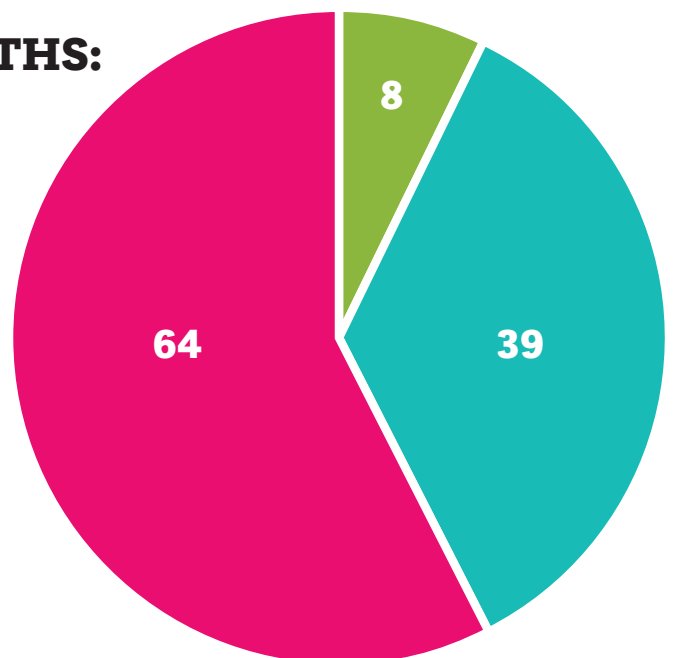
SLEEP RELATED INFANT DEATHS:

111 infant deaths were Sudden Unexpected Infant Deaths (SUID).

The three commonly reported types of SUID include:

- Sudden Infant Death Syndrome (SIDS).
- Unknown Cause.
- Accidental suffocation and strangulation in bed.

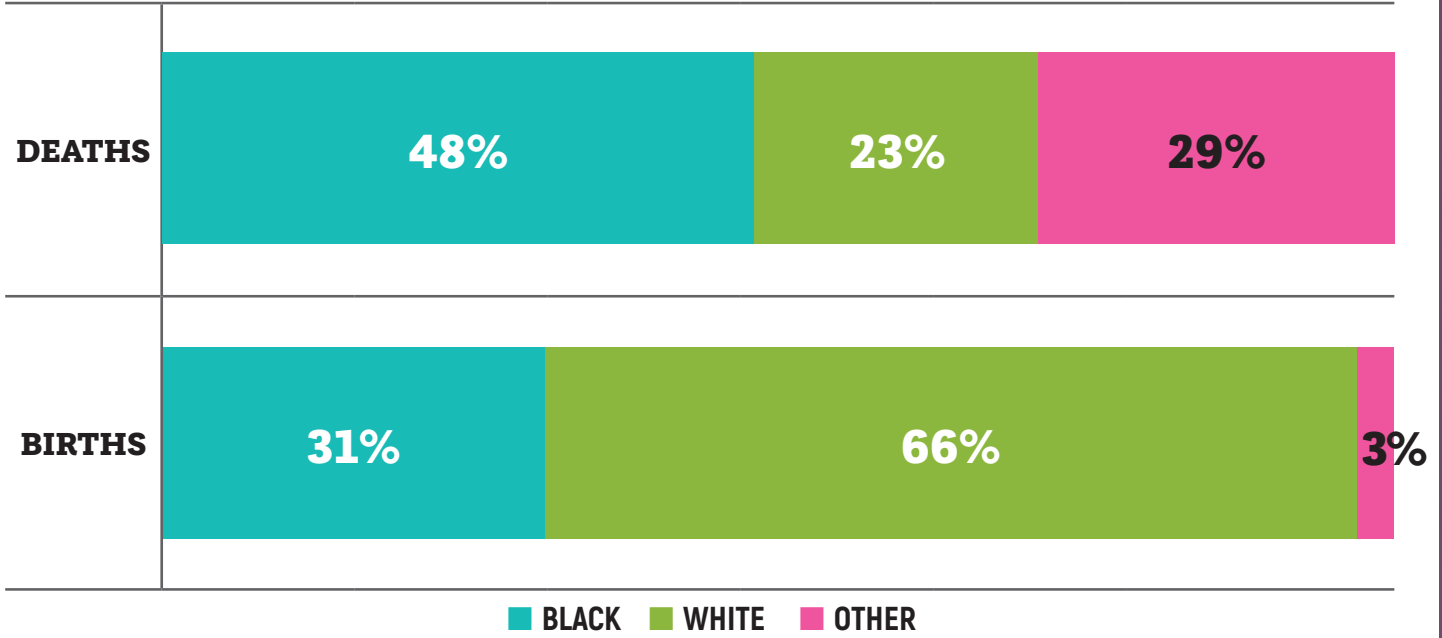
SUID deaths accounted for **25.5%** of the total Infant Mortality Rate in 2017.



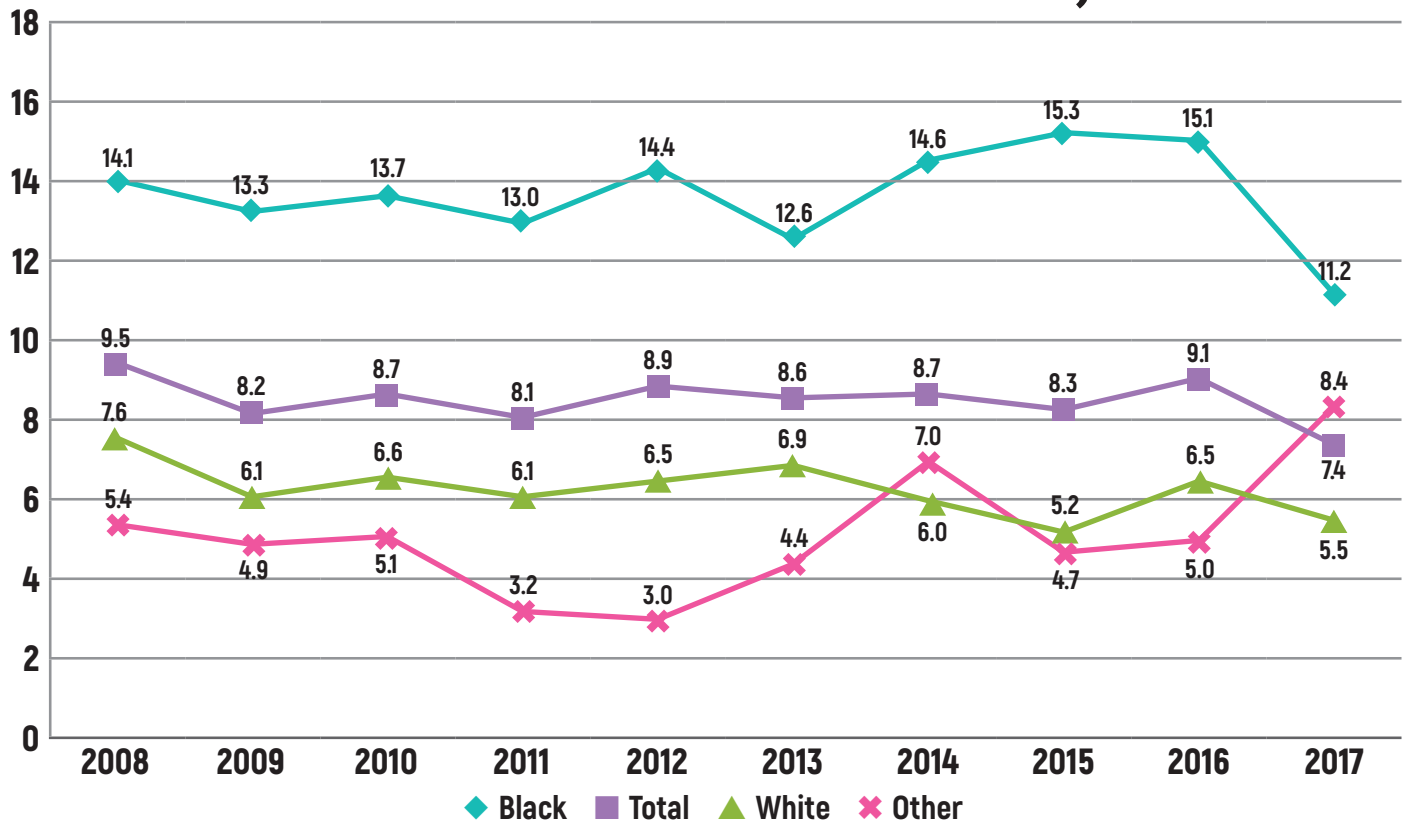
■ SIDS ■ UNKNOWN ■ ACCIDENTAL SUFFOCATION/STRANGULATION

DISPARITY:

Racial disparities in Alabama's infant mortality persist. In 2017, black infants died at a rate of 11.2 infant deaths per 1,000 live births, while deaths among other infants and white infants occurred at rates of 8.4 infant deaths and 5.5 infant deaths per 1,000 live births, respectively. It is important to note that only 31 percent (18,419) of live births were to black mothers and 3 percent (1,789) to other mothers, while 66 percent (38,728) were to white mothers. Thus, the infant mortality rates for black and other infants are significantly higher than for white infants.

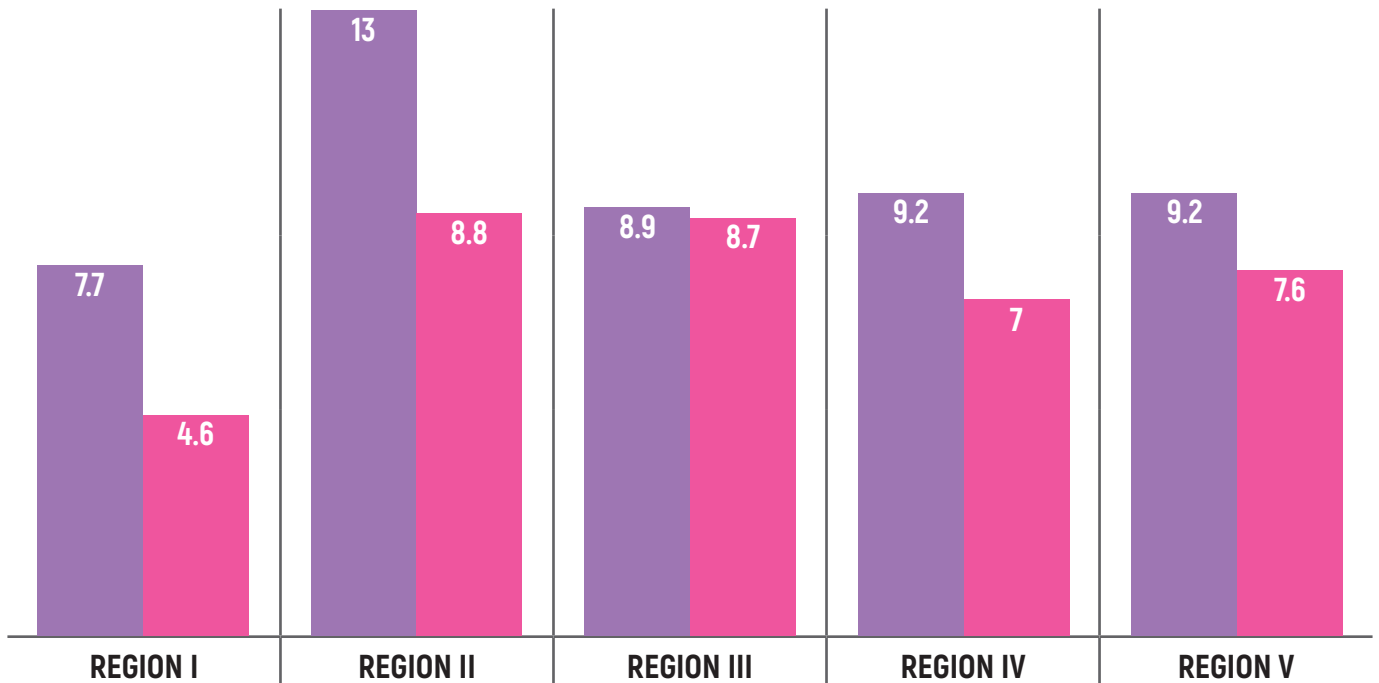


INFANT MORTALITY RATES BY RACE, 2008-2017

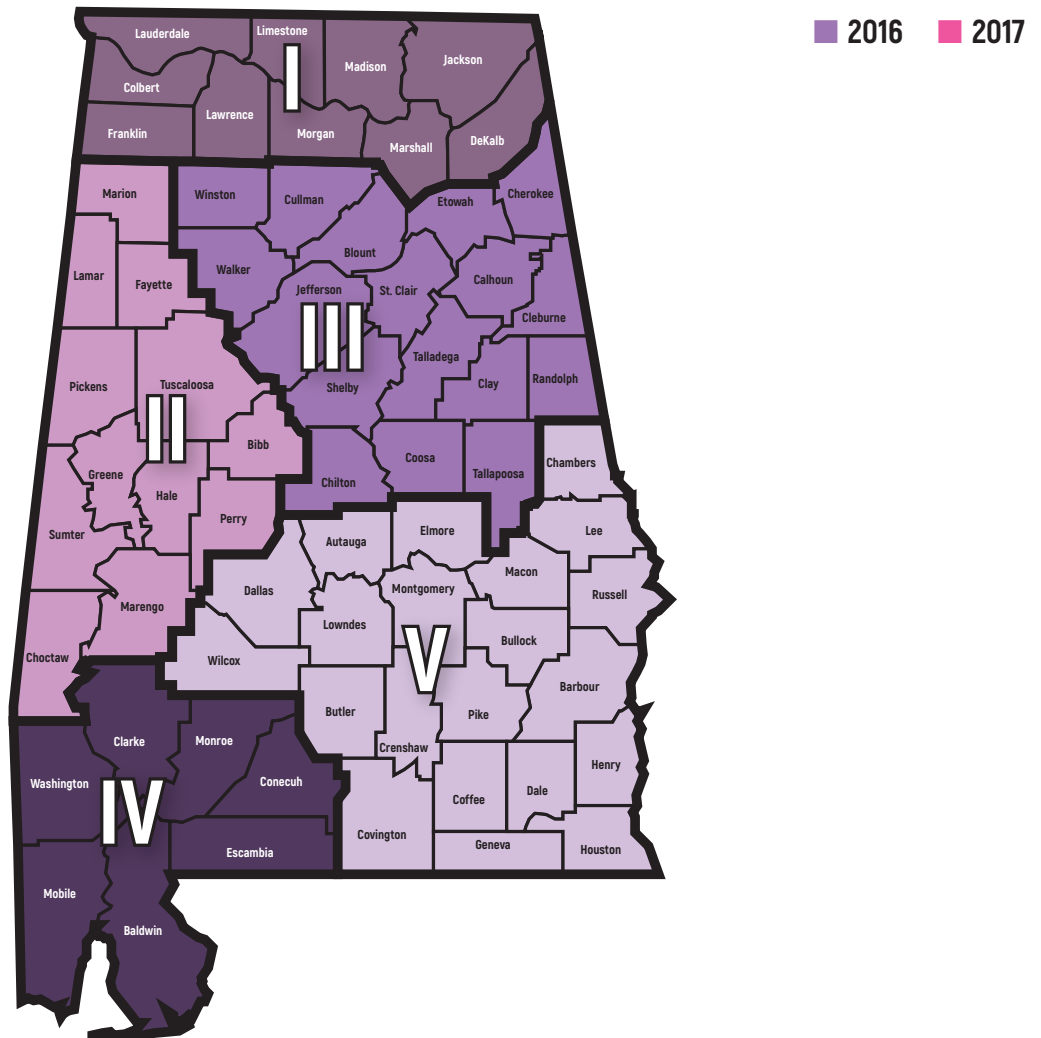


ADPH, Center for Health Statistics, 2018

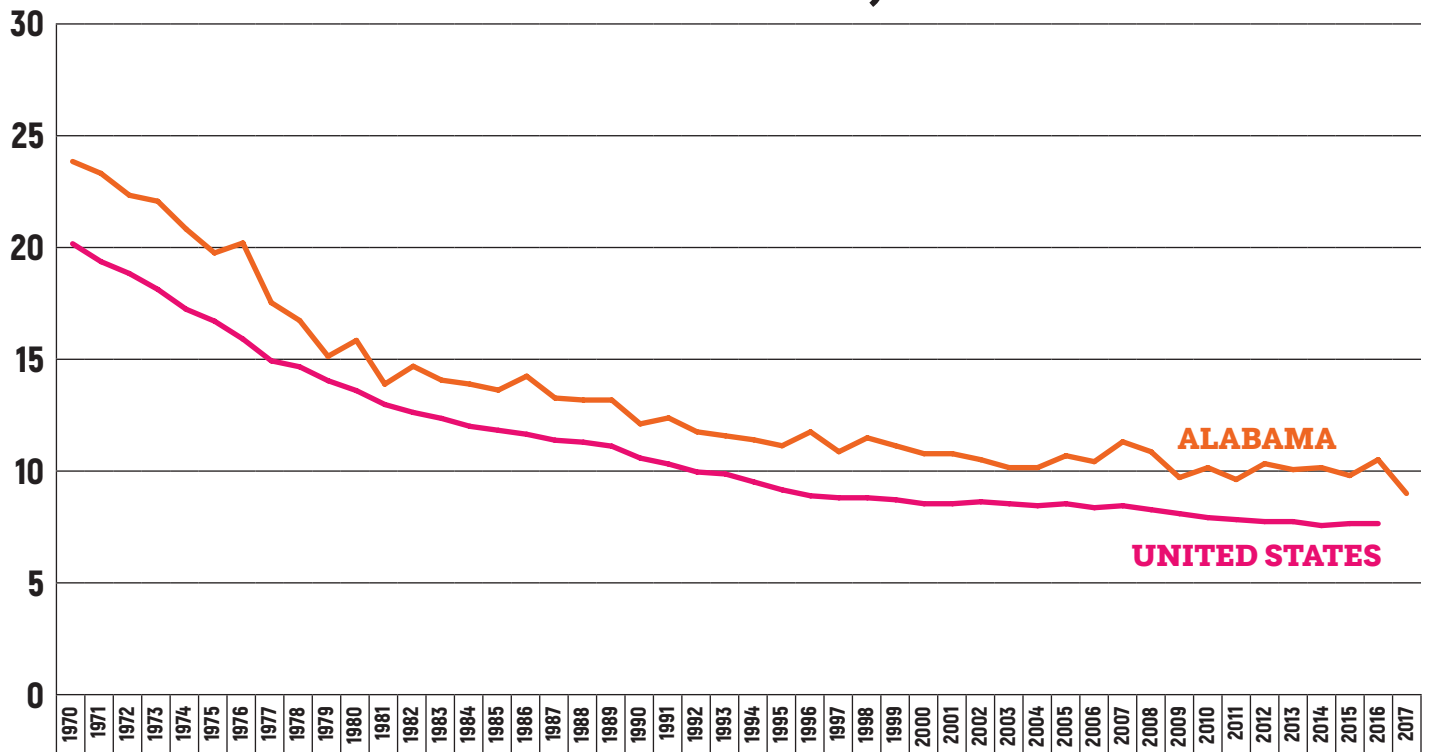
INFANT MORTALITY BY PERINATAL REGIONS IN ALABAMA, 2016-2017



ADPH, MCH Epidemiology Branch, 2018

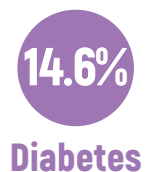
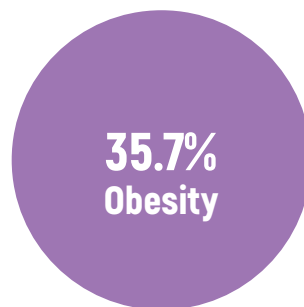
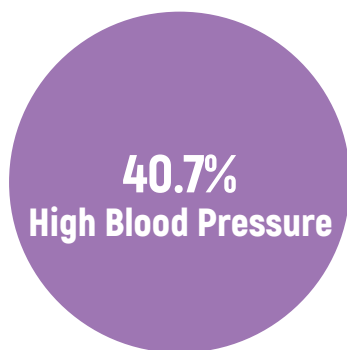
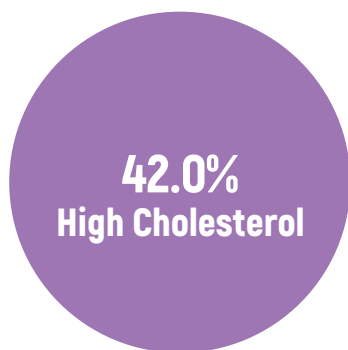


INFANT MORTALITY RATES ALABAMA AND UNITED STATES, 1970-2017



Rate per 1,000 live births. Most current national data is for year 2016.

DIAGNOSED CHRONIC MEDICAL CONDITIONS IN WOMEN OF CHILDBEARING AGE



America's Health Rankings: Annual Report, Alabama, 2017. <https://www.americashealthrankings.org/explore/annual/state/AL>

The health of women and men before and between conception plays a role in birth outcomes and infant mortality. The Centers for Disease Control and Prevention recommend the following as ways to influence birth outcomes:

1. Improve knowledge, attitude, and behaviors of men and women related to preconception and interconception health.
2. Ensure that all women of child-bearing age receive preconception care services that will enable them to enter into pregnancy in optimal health.
3. Address any previous adverse pregnancy outcomes during the interconception period; discuss with healthcare providers ways in which to prevent or minimize health problems for mom and her future children.
4. Improve health equity and disparities that increase risks associated with poor pregnancy outcomes.

2019 PLANS TO REDUCE INFANT MORTALITY IN ALABAMA

- Continue the Fetal and Infant Mortality Review (FIMR) Program to abstract and review 100 percent of infant deaths statewide.
- Continue the Maternal Mortality Review (MMR) Program in Alabama to abstract and review maternal deaths that occur during pregnancy or within one year of the end of a pregnancy regardless of pregnancy outcome.
- Continue the partnership established with the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development Safe to Sleep® Campaign to improve safe sleep efforts at the state, regional, and community levels.
- Provide “Sleep Baby Safe and Snug” books to every new family at all delivering hospitals statewide to improve safe sleep education and promote infant literacy and bonding.
- Promote the Alabama Cribs for Kids® Program to ensure all infants under the age of one have a safe sleep environment as a means to reduce the risk of SUID deaths.
- Address health inequities and disparities through community partnerships.
- Collaborate with multiple state agencies to execute the State of Alabama Infant Mortality Reduction Plan in Macon, Montgomery, and Russell counties as a means to reduce infant mortality by 20 percent in these counties over the next five years. The Plan includes partnerships with the following agencies:
 - o Alabama Department of Early Childhood Education.
 - o Alabama Department of Human Resources.
 - o Alabama Medicaid Agency.
 - o Alabama Department of Mental Health.
 - o Governor’s Office of Minority Affairs.
 - o Alabama Department of Public Health.

The Plan includes seven strategies:

- o Expanding evidence-based home visitation services.
- o Increasing utilization of the Screening, Brief Intervention and Referral to Treatment (SBIRT) tool to identify and refer women at risk for alcohol, substance abuse, domestic violence, and post-partum depression for treatment and services.
- o Promoting safe sleep awareness through education and collaboration.
- o Expanding the Well-Woman Program so that women of child-bearing age receive preconception and interconception health as a means to address chronic health conditions before and between pregnancies.
- o Providing education to women and families on the benefits of breastfeeding for both mom and baby.
- o Promoting and improving the system of perinatal regionalization which is designed to ensure women have access to hospitals equipped to provide the most appropriate level of care for their pregnancy needs.
- o Educating healthcare providers and women who have experienced a spontaneous preterm birth about benefits, processes, and access to 17P (Hydroxyprogesterone Caproate), a hormone treatment prescribed to reduce the risk of a subsequent spontaneous preterm birth.

ACKNOWLEDGEMENTS

The State Perinatal Program acknowledges the families touched by infant death in Alabama. This report is generated with the goal of preventing future tragic losses.

Thank you to Governor Kay Ivey, the State Perinatal Advisory Committee, the Regional Perinatal Advisory Committees, the State Committee of Public Health, the Center for Health Statistics, and the Maternal and Child Health Epidemiology Branch for helping tell the story about infant mortality and for working to improve the lives of women, infants, and families in Alabama. This report would not be possible without each of you.

REFERENCES

Data for this report have been made available by the Center for Health Statistics and the Maternal and Child Health Epidemiology Branch. http://www.alabamapublichealth.gov/healthstats/assets/IM_17.pdf.

Data for United States Ranking and Healthy People 2020 Infant Mortality Rate made available by the Centers for Disease Control and Prevention. https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_01.pdf.

Centers for Disease Control and Prevention: What are Birth Defects.
<https://www.cdc.gov/ncbddd/birthdefects/facts.html>

Data for Chronic Maternal Medical Conditions made available by Behavioral Risk Factor Surveillance System data collected in the Bureau of Health Promotion and Chronic Disease.
<http://www.alabamapublichealth.gov/brfss/data.html>.

America's Health Rankings: Annual Report, Alabama, 2017.
<https://www.americashealthrankings.org/explore/annual/state/AL>.

How Much Does Infant Mortality Cost the Nation? National Healthy Start Association.
http://www.nationalhealthystart.org/healthy_start_initiative/how_much_does_infant_mortality_cost

