A photograph of a young Black baby wearing a white headband and a white shirt, being held up by a person whose back is to the camera. The baby is smiling and looking towards the camera. The person holding the baby is also Black and has their arms raised to support the baby.

ALABAMA PERINATAL HEALTH ACT ANNUAL PROGRESS REPORT FOR FY2020 PLAN FOR FY2021



**ALABAMA
PUBLIC
HEALTH**

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

MESSAGE FROM THE STATE HEALTH OFFICER

Dear Senators and Representatives:

It is my pleasure to share the Alabama Perinatal Report, which describes the Fiscal Year 2019 infant mortality data, leading causes of infant mortality, and strategies for addressing this issue in 2021.

Alabama's infant mortality rate increased from 7.0 infant deaths per 1,000 live births in 2018 to 7.7 infant deaths per 1,000 live births in 2019. This is the third lowest rate Alabama has seen in over five decades. However, it still remains above the U.S. 2019 provisional rate of 5.7 infant deaths per 1,000 live births. Infant deaths increased in both black and white infants; however, the longstanding disparity between birth outcomes for black and white infants remains. We remain dedicated to the continue identification and implementation of evidence-based strategies to reduce health disparities and improve our state's birth outcomes.

The health of a mother and the health of her infant are interwoven. Alabama, like the nation, continues to face an urgent maternal and infant health crisis. With the purpose to improve, promote, and protect health, it is essential that we address the factors that contribute to both maternal and infant poor health outcomes.

To this end, the State Perinatal Program remains dedicated to working collaboratively to accomplish our vision of creating an environment that promotes health equity that results in all Alabama citizens being healthy.

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

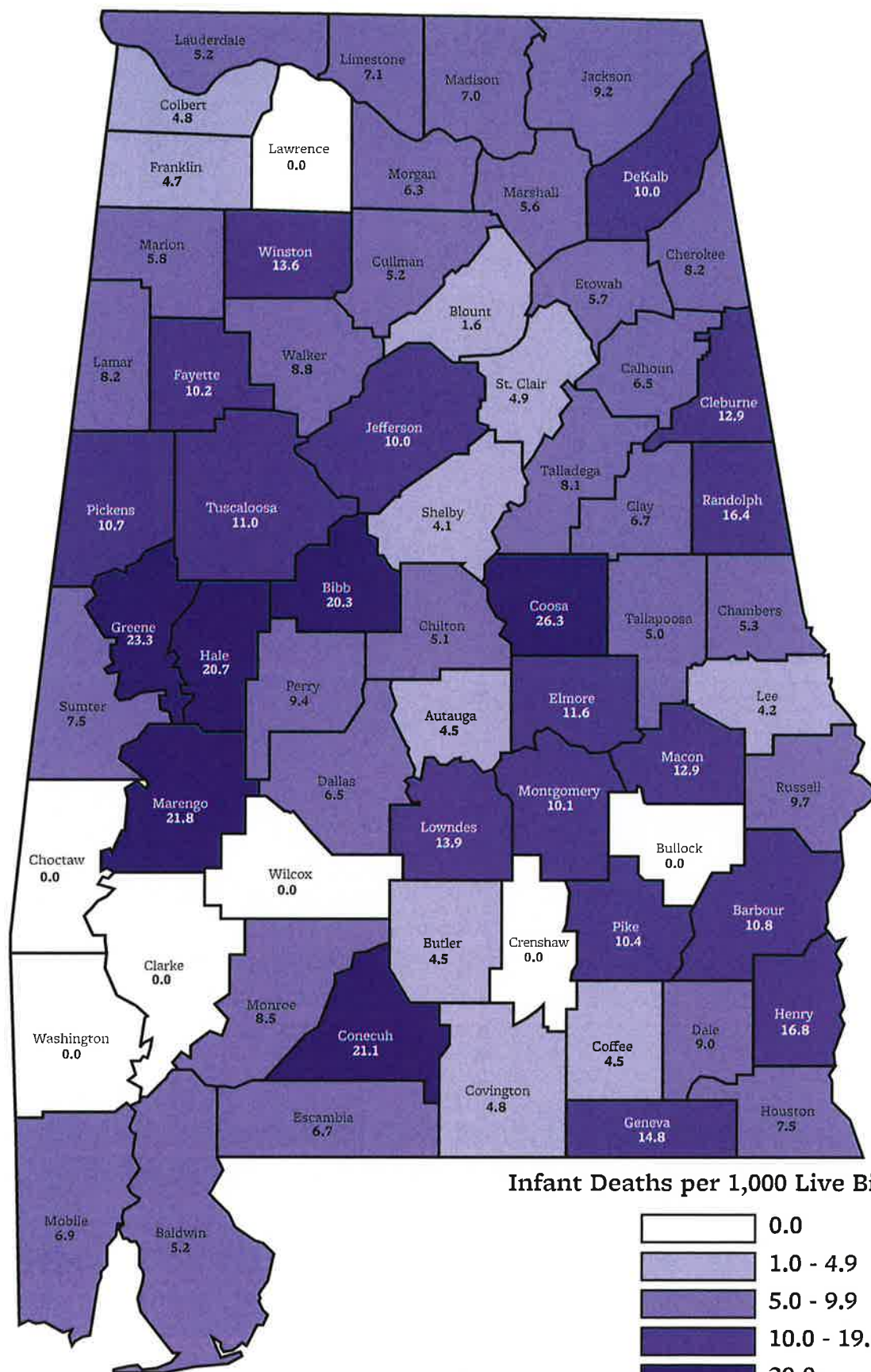


Sincerely,

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

Scott Harris, M.D., M.P.H.
State Health Officer

INFANT MORTALITY RATES BY COUNTY, ALABAMA, 2019





STATE OF ALABAMA INFANT MORTALITY REPORT 2020

ALABAMA
PUBLIC
HEALTH

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.)

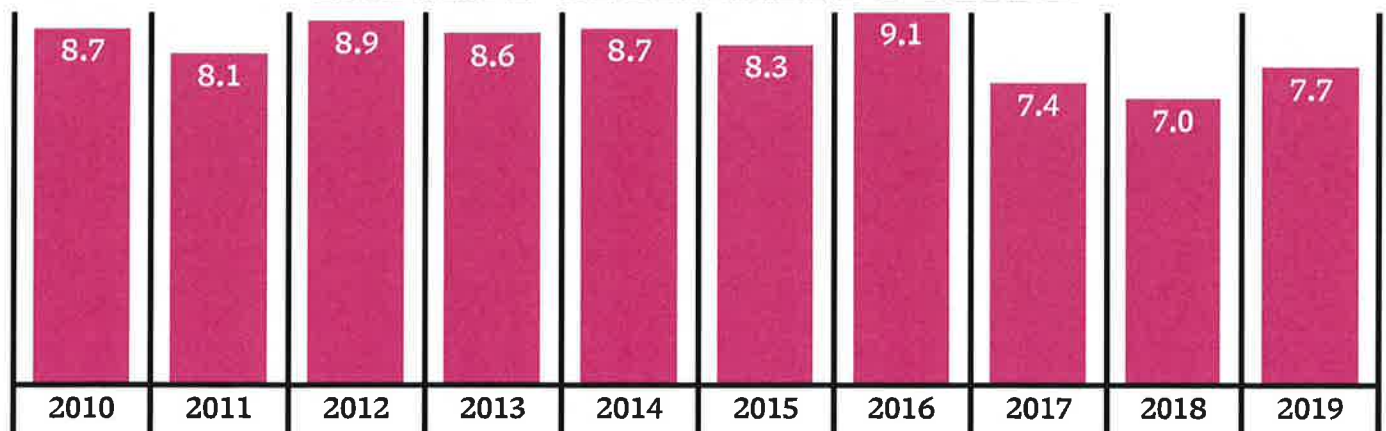
INTRODUCTION

Infant mortality rate (IMR) is defined as the death of an infant before his or her first birthday. The infant mortality rate (IMR) is the number of infant deaths for every 1,000 live births. The IMR provides key information about both maternal and infant health and is an important marker of the overall health of a society.² In 2019, the IMR increased to 7.7 deaths per 1,000 live births and is the third lowest rate ever recorded in Alabama over five decades. A total of 449 infants died before reaching their first birthday in 2019; 405 infants died in 2018; and 435 infants died in 2017. The Alabama rate of 7.7 deaths per 1,000 live births is higher than the national 2019 provisional rate of 5.7. Thus, we must continue the mission to improve the health of mothers and infants in Alabama.

Health outcomes are molded by the environment in which people are born, live, work, play, and age and not simply by health behaviors of the individual. These factors, which contribute to health outcomes, are formed by the historical, social, political, and economic forces in the individual's environment. Thus, addressing the factors that contribute to health outcomes and social determinants of health will improve individual and population health and will also advance health equity within the state. Resources that enhance quality of life can have a significant influence on population health.³

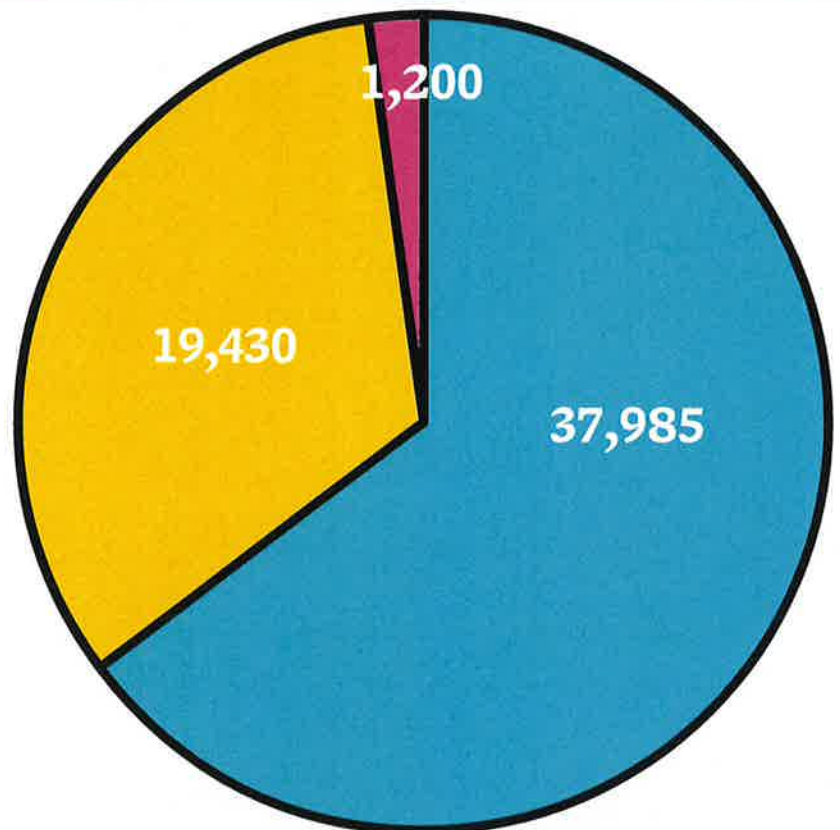
Differences in health outcomes and their causes among groups of people are defined as health disparities.⁴ These differences, health inequities, are reflected in differences in length of life, quality of life, rates of disease, disability, death, severity of disease, and access to treatment.⁵ Health equity is working to reduce and eliminate health disparities and is reached when everyone has the opportunity to achieve optimal health. Eliminating health inequities is crucial in reducing poor birth outcomes for mothers and babies and for building a healthier Alabama. Alabama remains committed to improving birth outcomes for women, infants, and families statewide, even during the COVID-19 pandemic. This 2020 report provides an overview of infant mortality statistics and describes some of the current collaborating strategies to address them.

INFANT MORTALITY RATE



Rate per 1,000 live births. ADPH, Center for Health Statistics, 2020

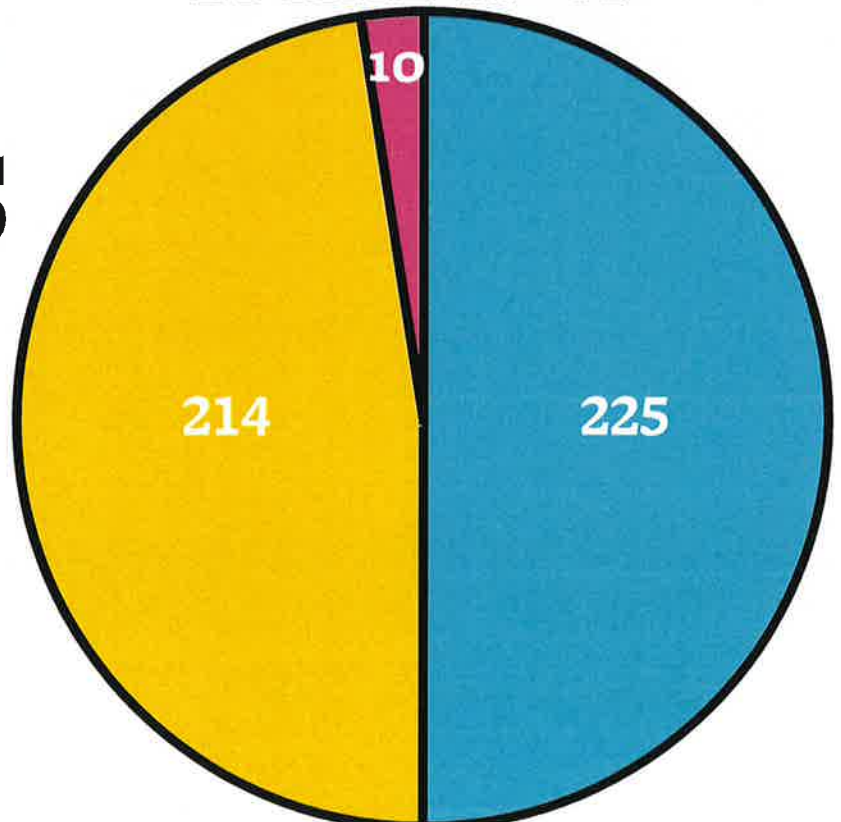
**TOTAL
BIRTHS
IN 2019:**
58,615



■ BLACK ■ WHITE ■ OTHER
ADPH, Center for Health Statistics, 2020

**TOTAL
INFANT
DEATHS
IN 2019:**
449

**TOTAL INFANT DEATHS
BY RACE IN 2019**



■ BLACK ■ WHITE ■ OTHER
ADPH, Center for Health Statistics, 2020

INFANT MORTALITY RATES ALABAMA AND UNITED STATES, 1971-2019



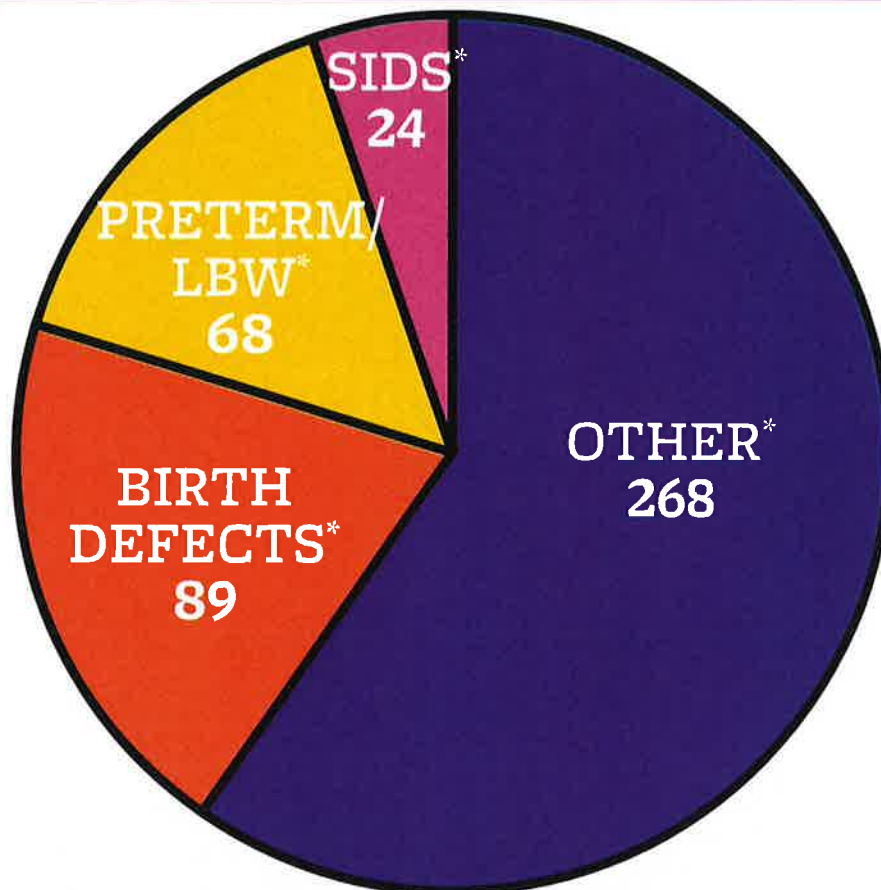
Rate per 1,000 live births, ADPH, Center for Health Statistics, 2020.

THREE LEADING CAUSES OF INFANT MORTALITY

CONGENITAL ANOMALIES (BIRTH DEFECTS)	89*
PRETERM AND LOW BIRTH WEIGHT (LBW)	68*
SUDDEN INFANT DEATH SYNDROME (SIDS)	24*

THE THREE LEADING CAUSES ACCOUNTED FOR 40 PERCENT OF ALL INFANT DEATHS

ADPH, Center for Health Statistics, 2020 *The number of infants who died in various categories



*The number of infants who died in various categories. ADPH, Center for Health Statistics, 2020

THREE LEADING CAUSES OF INFANT MORTALITY IN ALABAMA, 2019

1. CONGENITAL ANOMALIES

Congenital anomalies, also known as birth defects, were the leading cause of infant mortality in 2019. Birth defects are common, costly, and critical conditions.⁶ Annually about 1 in every 33 babies, approximately 120,000, is born in the United States with a birth defect. Birth defects can occur at any stage of pregnancy; however, most occur within the first 3 months of pregnancy when major organs of the baby are forming. The cause is known for some birth defects but for many the cause is unknown. Not all birth defects are preventable; however, there are steps that can be taken to increase the chances of having a healthy baby:

- Plan ahead, take folic acid daily, and see a healthcare provider regularly.
- Avoid harmful substances: alcohol, smoking, marijuana and other drugs, and prevent infections.
- Choose a healthy lifestyle.
- Talk to your healthcare providers about any medications (prescription and over the counter), family history, and vaccinations.

2. PRETERM and LOW BIRTH WEIGHT (LBW)

Preterm and LBW were the second leading cause of infant mortality in 2019. Preterm birth are infants that are born too early before 37 weeks of pregnancy have been completed.⁷ LBW births⁵ are defined as infants weighing less than 5 pounds 5 ounces at delivery. Preterm births comprised 12.5 percent and low birth weight 10.5 percent of the births in 2019. They accounted for about 15 percent of all infant deaths in 2019.

3. SUDDEN INFANT DEATH SYNDROME (SIDS)

Sudden Infant Death Syndrome (SIDS) was the third leading cause of infant mortality. SIDS is the sudden unexplained death of an infant less than 1 year of age that does not have a known cause after a complete investigation including a complete autopsy, examination of the death scene, and medical review of the clinical history.⁸ SIDS is sometimes called “crib death” because of its association with the time when the infant was sleeping. SIDS deaths can occur anytime during the first year of life. Most SIDS death occur between 1 month and 4 months of age with 90 percent of SIDS deaths occurring before an infant reaches 6 months of age.

SUDDEN UNEXPECTED INFANT DEATH (SUID) is defined as the death of an infant less than 1 year of age who suddenly or unexpectedly dies. These deaths often occur during sleep or in the infant’s sleep area.⁸ SUID includes SIDS, accidental suffocation in a sleeping environment, and other undetermined causes. In 2019, there was a 4.7 percent increase in SUID from 17.3 percent in 2018. In 2014, Alabama increased efforts to address SUID through collaboration, education, and outreach activities statewide. SUID was responsible for 99 of the 449 infant deaths in 2019.

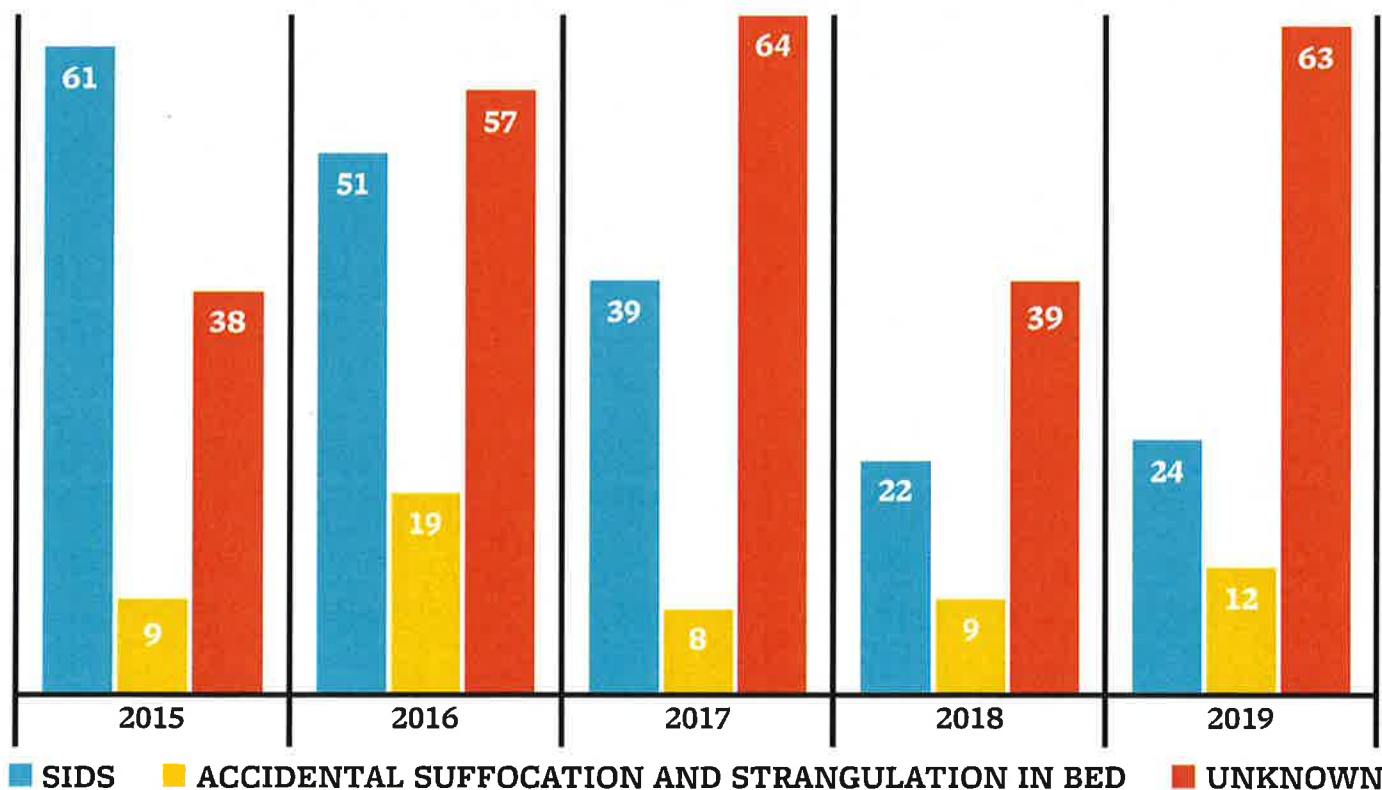
99 INFANT DEATHS WERE SUDDEN UNEXPECTED INFANT DEATHS (SUID).

THE THREE COMMONLY REPORTED TYPES OF SUID INCLUDE:

- **SUDDEN INFANT DEATH SYNDROME (SIDS).**
- **UNKNOWN CAUSE.**
- **ACCIDENTAL SUFFOCATION AND STRANGULATION IN BED.**

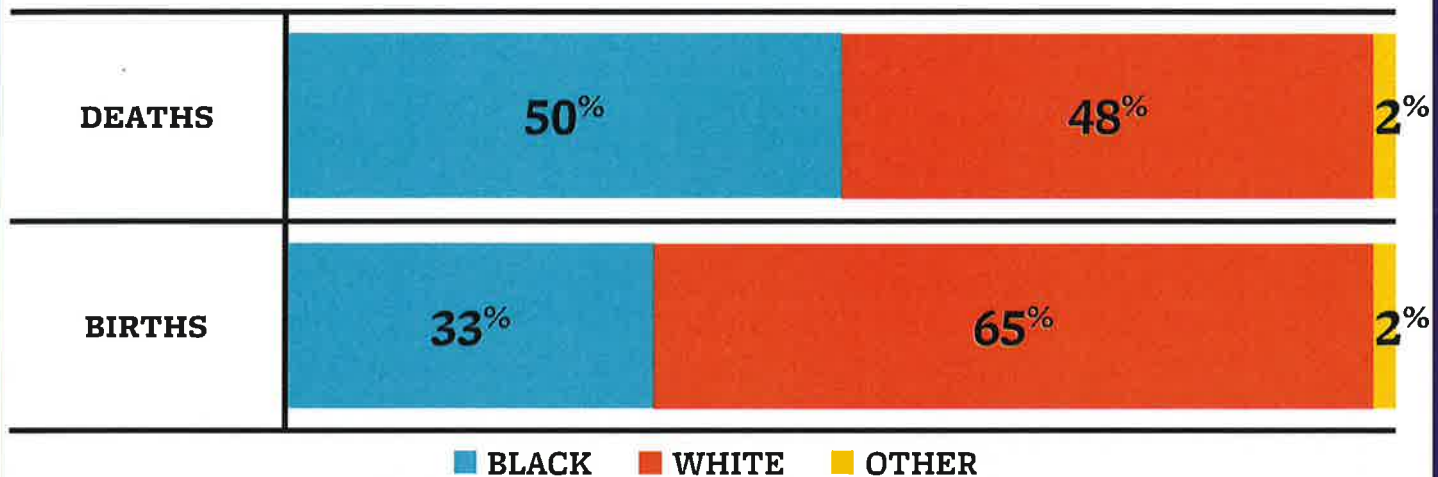
SUID DEATHS ACCOUNTED FOR 22.0% OF THE TOTAL INFANT MORTALITY RATE IN 2019.

NUMBER OF SUID DEATHS IN ALABAMA FROM 2015-2019

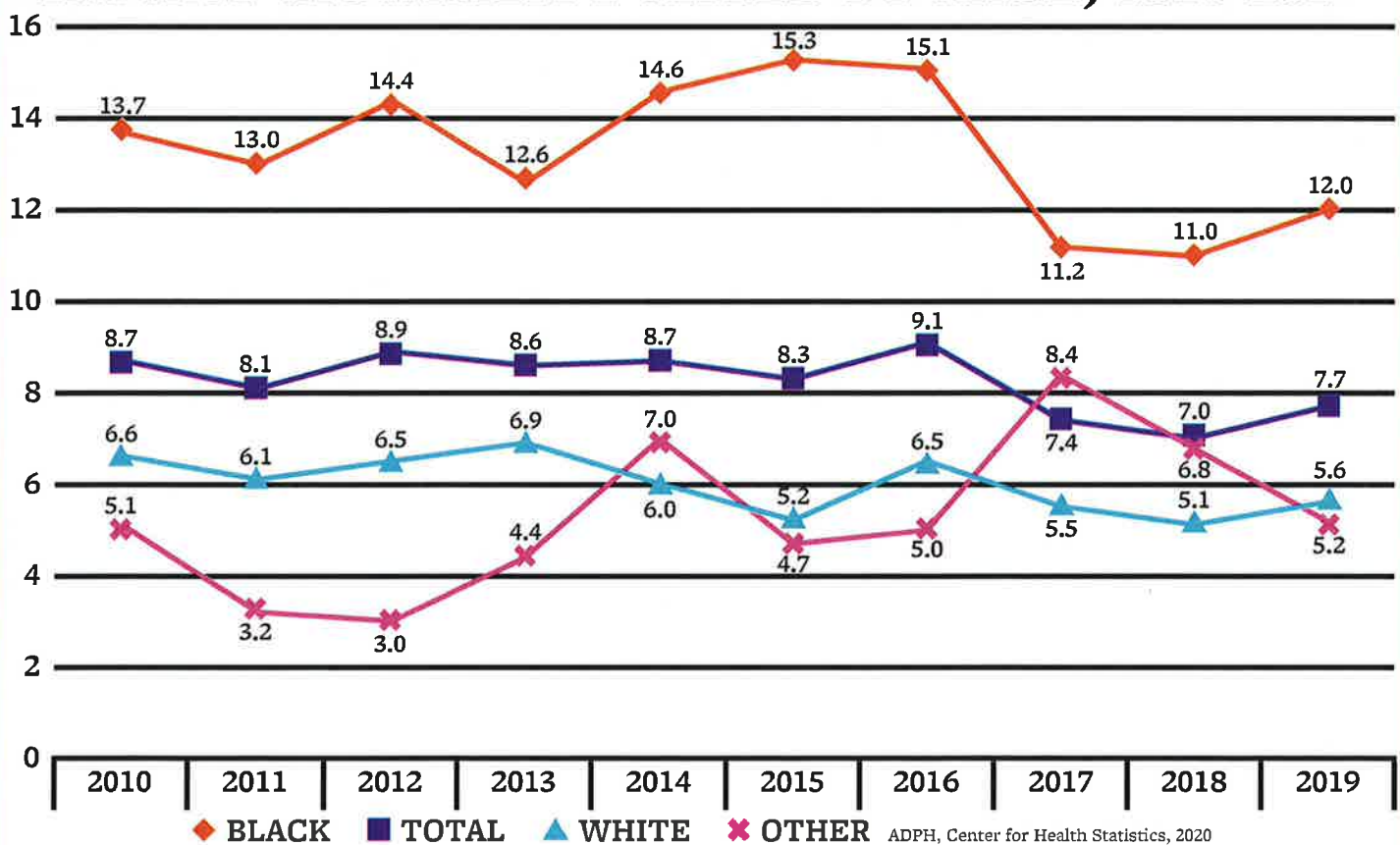


RACIAL DISPARITIES

In 2019, infant mortality increased in Alabama, and racial disparities continued to persist. In 2019, black infants died at a rate of 12.0 infant deaths per 1,000 live births, while deaths among other infants and white infants occurred at rates of 5.2 infant deaths and 5.6 infant deaths per 1,000 live births, respectively. It is important to note that only 33 percent (19,430) of live births were to black mothers and 2 percent (1,200) to other mothers, while 65 percent (37,985) were to white mothers. Thus, the infant mortality rates for black infants are significantly higher than for white infants. Incorporating evidence-based efforts will help address factors impacting health outcomes such as poverty, unemployment, education, urban/rural, access to health.

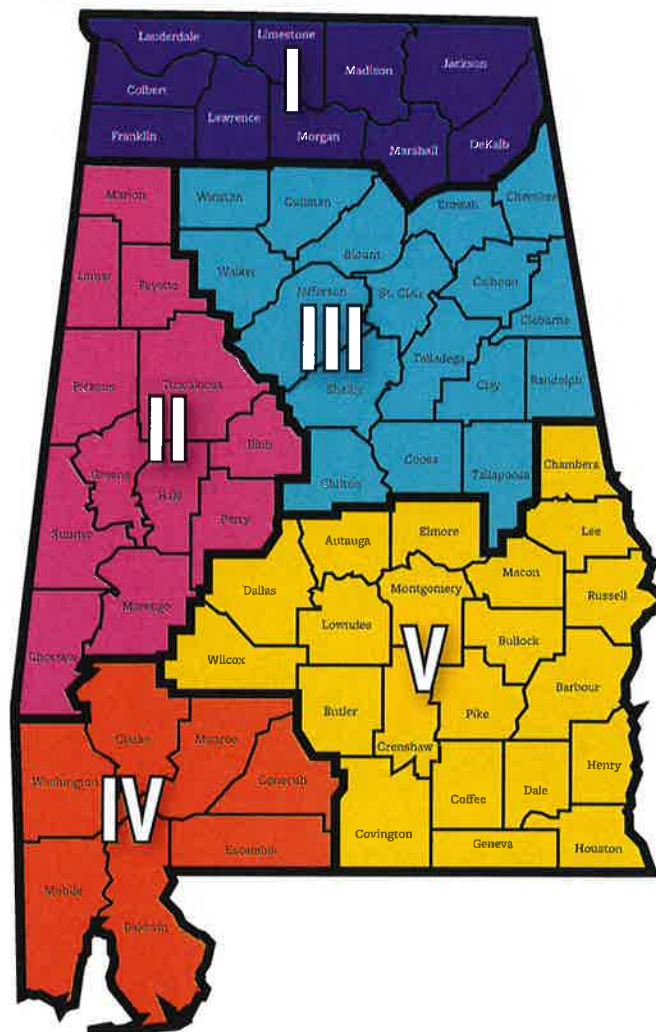


INFANT MORTALITY RATES BY RACE, 2010-2019



Region	2018 (%)	2019 (%)
REGION I	5.2	6.5
REGION II	7.1	11.7
REGION III	7.3	7.8
REGION IV	7.7	6.3
REGION V	7.7	7.9

ADPH, MCH Epidemiology Branch, 2020



2021 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.
- Expand Community Action Teams statewide to implement FIMR recommendations.
- Continue the Maternal Mortality Review (MMR) Program in Alabama to abstract and review maternal deaths that occur during pregnancy or within 1 year of the end of a pregnancy regardless of pregnancy outcome.
- Continue the partnerships with agencies statewide to improve birth outcomes for moms and babies.
- Continue to 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.
- Continue to promote the Alabama Cribs for Kids® Program to ensure all infants under the age of 1 have a safe sleep environment as a means to reduce the risk of SUID deaths.
- Educate and raise awareness, through community partnerships, of health inequities and disparities and their impact on health outcomes within the state.
- Host a Maternal and Infant Mortality Reduction Summit.
- Continue to 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 5 years. The plan includes partnerships with the following agencies:
 - Alabama Department of Early Childhood Education.
 - Alabama Department of Human Resources.
 - Alabama Medicaid Agency.
 - Alabama Department of Mental Health.
 - Governor’s Office of Minority Affairs.
 - Alabama Department of Public Health.

The plan includes continuing the seven strategies:

- Expanding evidence-based home visitation services.
- 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.
- Promoting safe sleep awareness through education and collaboration.
- Expanding the Well-Woman Program so that women of child-bearing age receive preconception and inter-conception health as a means to address chronic health conditions before and between pregnancies.
- Providing education to women and families on the benefits of breastfeeding for both mom and baby.
- 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.
- Implement efforts to combat prematurity.

SOURCES

- ¹Data 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_18.pdf.
- ²Centers for Disease Control and Prevention: Infant Mortality. <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm>
- ³Centers for Disease Control and Prevention: Social Determinants of Health: Know What Affects Health. <https://www.cdc.gov/socialdeterminants/faqs/index.htm>
- ⁴Centers for Disease Control and Prevention: Health Equity. <https://www.cdc.gov/healthequity>
- ⁵Centers for Disease Control and Prevention: Chronic Disease: Health Equity. <https://www.cdc.gov/chronicdisease/healthequity>
- ⁶Centers for Disease Control and Prevention: What are Birth Defects. <https://www.cdc.gov/ncbddd/birthdefects/facts.html>
- ⁷Centers for Disease Control and Prevention: Preterm Birth. <https://www.cdc.gov/reproductivehealth/MaternalInfantHealth/PretermBirth.htm>
- ⁸National Institute of Child Health and Human Development: SIDS. <https://www.nichd.nih.gov/health/topics/sids>

ACKNOWLEDGEMENTS

The State Perinatal Program acknowledges the families touched by infant death in Alabama. The production of this document would not be possible without the efforts of Julie Nightengale of the Maternal and Child Health Epidemiology Branch. Special acknowledgment is extended to staff of the Perinatal Health Division, Regional Perinatal Advisory Committees, and State Perinatal Advisory Committee, whose participation and cooperation help make this publication possible.