



Alabama Perinatal Health Act Annual Progress Report For FY2022 Plan For 2023



*"A new baby is like the beginning of all things -
wonder, hope, a dream of possibilities."*

Eda J. LeShan



Scott Harris, M.D., M.P.H.
STATE HEALTH OFFICER

Dear Senators and Representatives:

It is my pleasure to share the Alabama Perinatal Report, which describes the Fiscal Year 2021 infant mortality data, leading causes of infant mortality, and strategies for addressing this issue in 2023.

In 2021, Alabama's infant mortality rate was 7.6 deaths per 1,000 live births, with 443 infants dying during the first year of life. The state's infant mortality rate for 2021 was an 8.6 percent increase over the 7.0 rate of 2020, and was above the U.S. 2021 provisional rate of 5.5 infant deaths per 1,000 live births. The infant mortality rate for white mothers was 5.8, while the infant mortality rate for black mothers was 12.1.¹ Social determinants of health, such as race, poverty, and education play a significant role in the infant mortality rate in our state. We remain dedicated to the continued identification and implementation of evidence-based strategies to reduce health disparities and improve our state's birth outcomes.

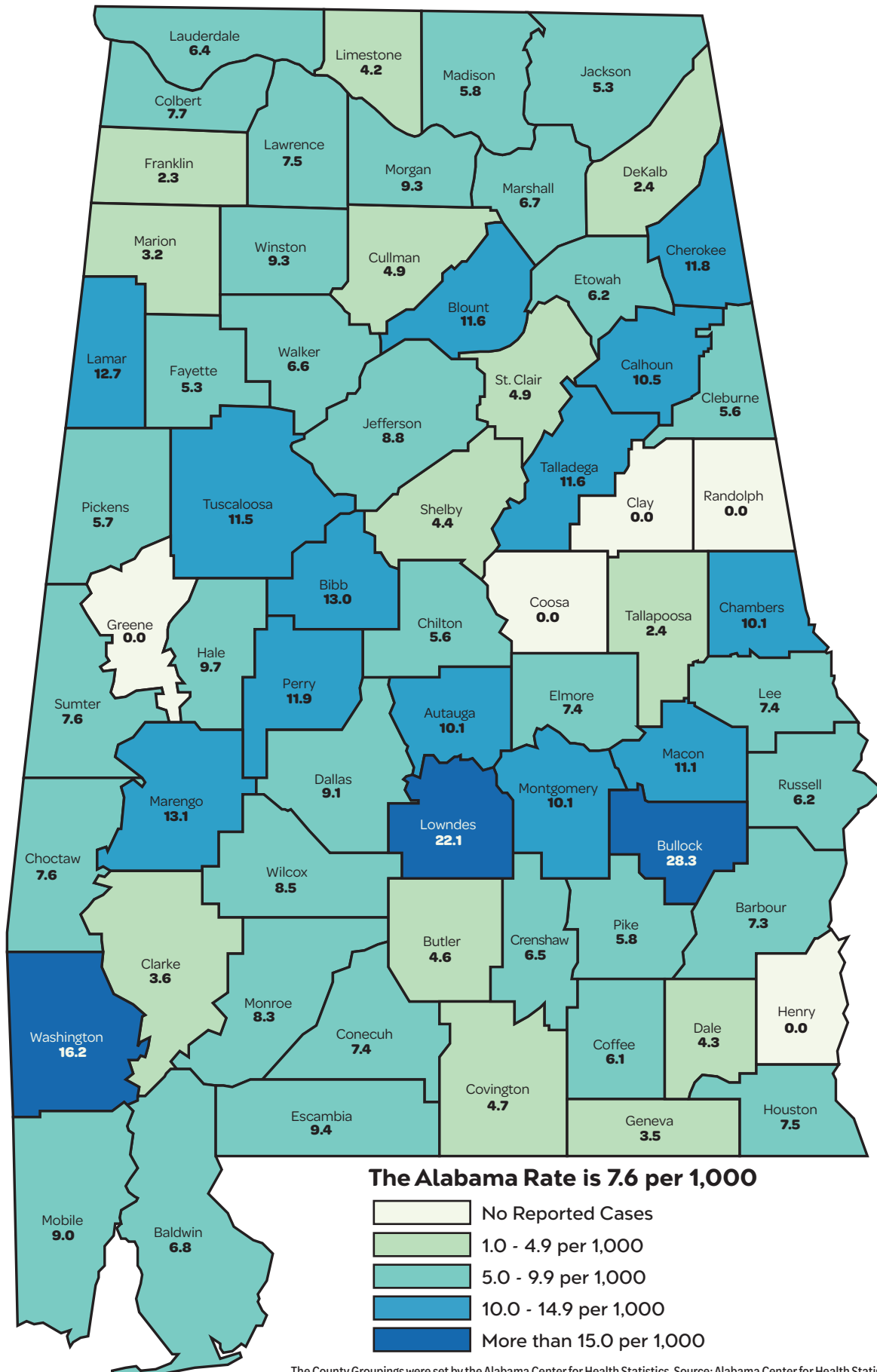
Healthy mothers, babies, and families are the foundation of a healthier Alabama. With the purpose to improve, promote, and protect health, it is essential that we address the factors that contribute to both maternal and infant poor health outcomes. To this end, the State Perinatal Program remains committed to working collaboratively to accomplish our vision of creating an environment that promotes health equity resulting in healthier Alabama families.

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

Sincerely,

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

2021 Infant Mortality Rates, By County



The County Groupings were set by the Alabama Center for Health Statistics. Source: Alabama Center for Health Statistics, 2021

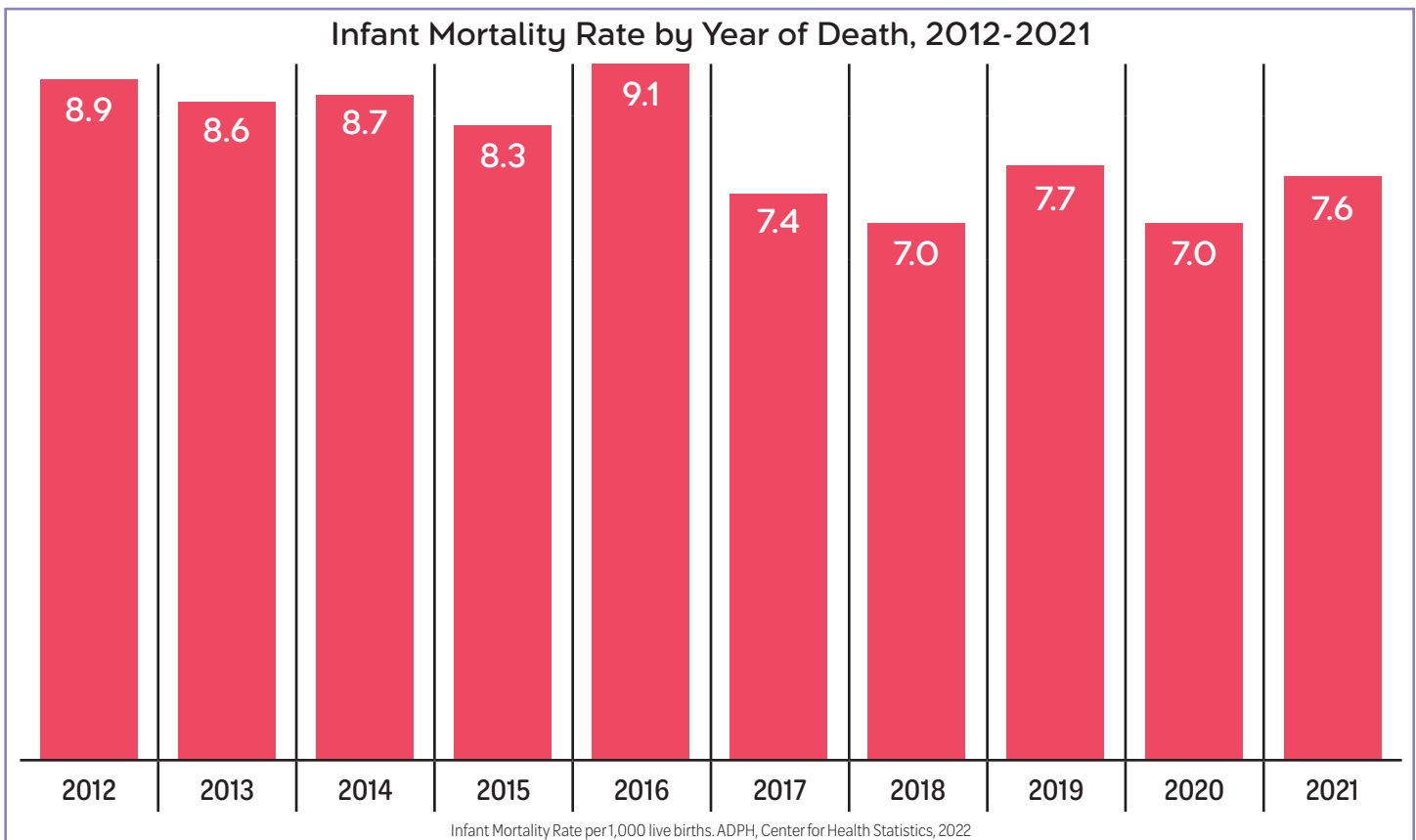
State of Alabama Infant Mortality Report 2021

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)

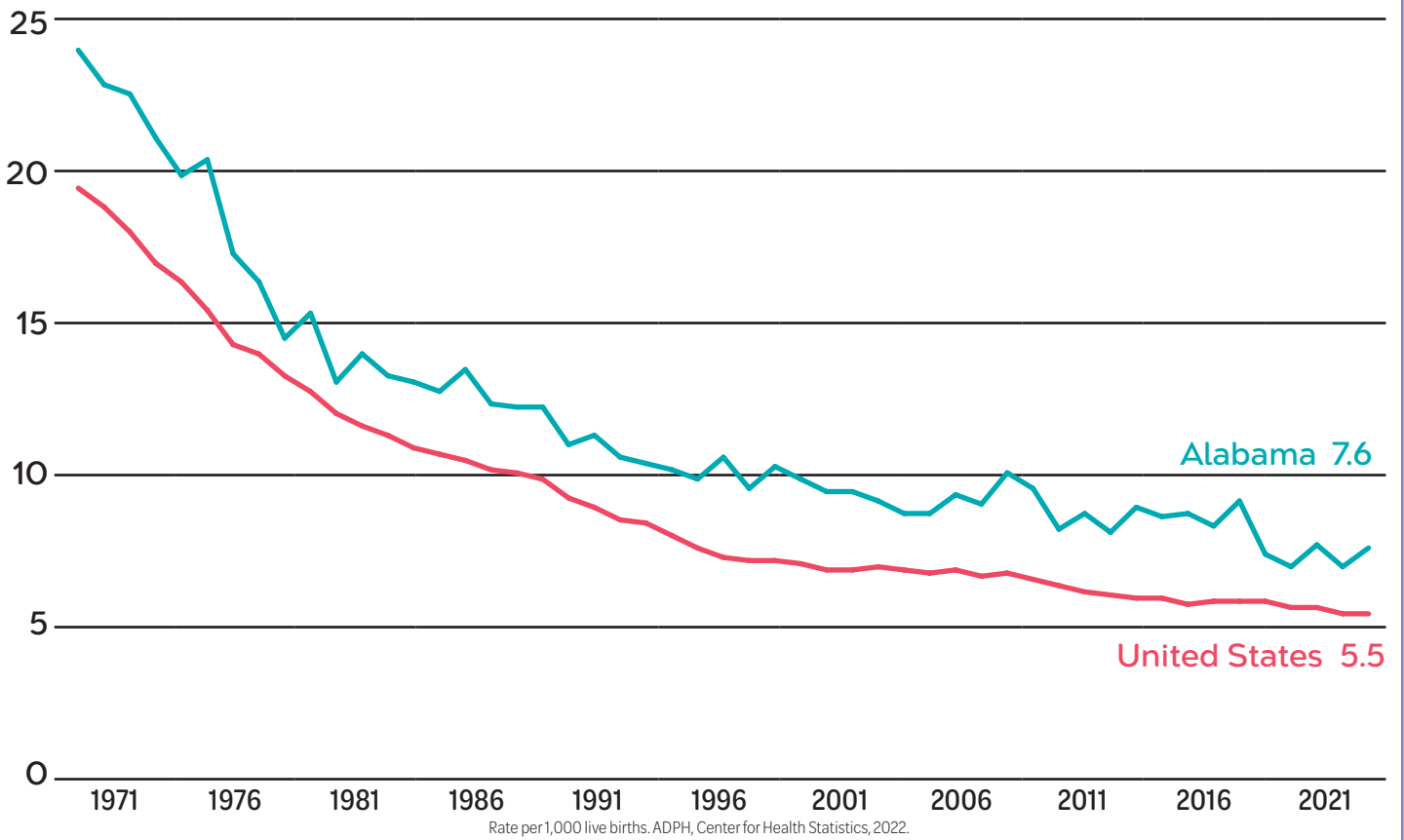
IMR is defined as the death of an infant before his or her first birthday. The infant mortality rate (IMR) is the number of infant deaths for every 1,000 live births. The IMR provides key information about both maternal and infant health and is an important marker of the overall health of a society.² In 2021, the IMR increased to 7.6 deaths per 1,000 live births. A total of 443 infants died before reaching their first birthday in 2021; 404 infants died in 2020; and 449 infants died in 2019. The Alabama rate of 7.6 deaths per 1,000 live births is higher than the national 2021 provisional rate of 5.5. 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

ADPH aims to identify and address any health equity barriers. 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. This 2022 report provides an overview of infant mortality statistics and describes some of the current collaborating strategies to address them.

Infant Mortality Rates in Alabama and United States, 1971-2021



Three Leading Causes of Infant Mortality in 2021

<p>Congenital Anomalies (Birth Defects)</p>	<p>69*</p>
<p>Preterm and Low Birth Weight</p>	<p>65*</p>
<p>Sudden Infant Death Syndrome (SIDS)</p>	<p>39*</p>

ADPH, Center for Health Statistics, 2022 *The number of infants who died in various categories

The three leading causes of infant deaths accounted for 39.1 percent of all infant deaths.

1. Congenital Anomalies

Congenital anomalies, also known as birth defects, were the leading cause of infant mortality in 2021. Birth defects are common and costly. Annually, about one in every 33 babies, approximately 120,000, is born in the United States with a birth defect.⁴ 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. There are steps that can be taken to increase the chances of having a healthy baby:

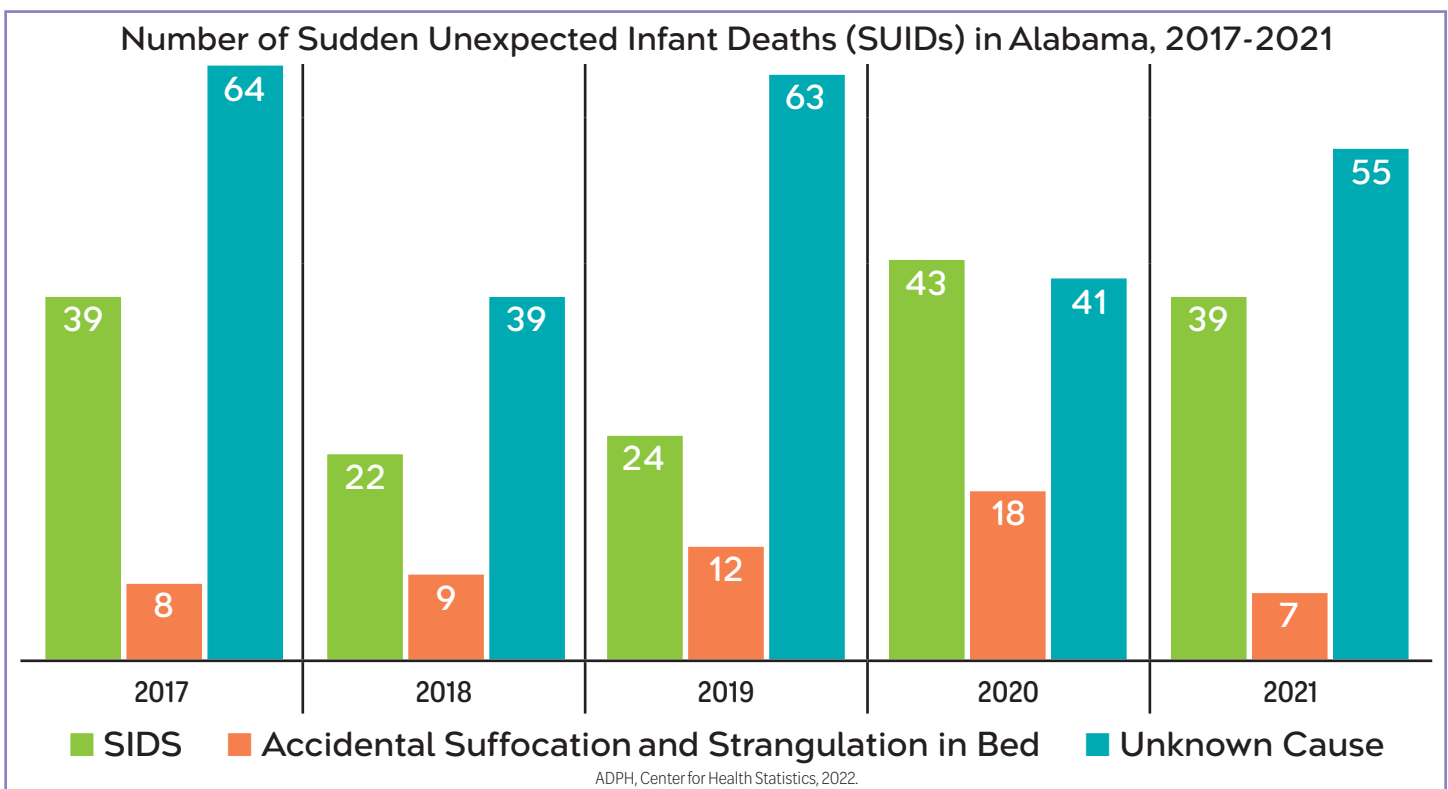
- Plan ahead, take folic acid daily, and see a healthcare provider regularly
- Avoid harmful substances: alcohol, smoking, marijuana, and other drugs
- Choose a healthy lifestyle
- Talk to your healthcare providers about any medications (prescription and over the counter), family history, and vaccinations.

2. Preterm and Low Birth Weight (LBW)

Preterm and LBW were the second leading cause of infant mortality in 2021. Preterm birth are infants that are born too early before 37 weeks of pregnancy have been completed.⁵ LBW births are defined as infants weighing less than 5 pounds and 8 ounces at delivery.⁶ Preterm births comprised 13.1 percent and low birth weight 10.5 percent of the births in 2021. They accounted for about 14.7 percent of all infant deaths in 2021.

3. Sudden Infant Death Syndrome (SIDS)

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.⁷ 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.



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.⁷ In 2021, there was a 2.4 percent decrease in SUID from 25.2 percent in 2020. ADPH continues to address SUID through safe sleep education, training of medical personnel and community workers, and distribution of cribs to families without a safe sleep environment.

101 infant deaths were SUIDs.

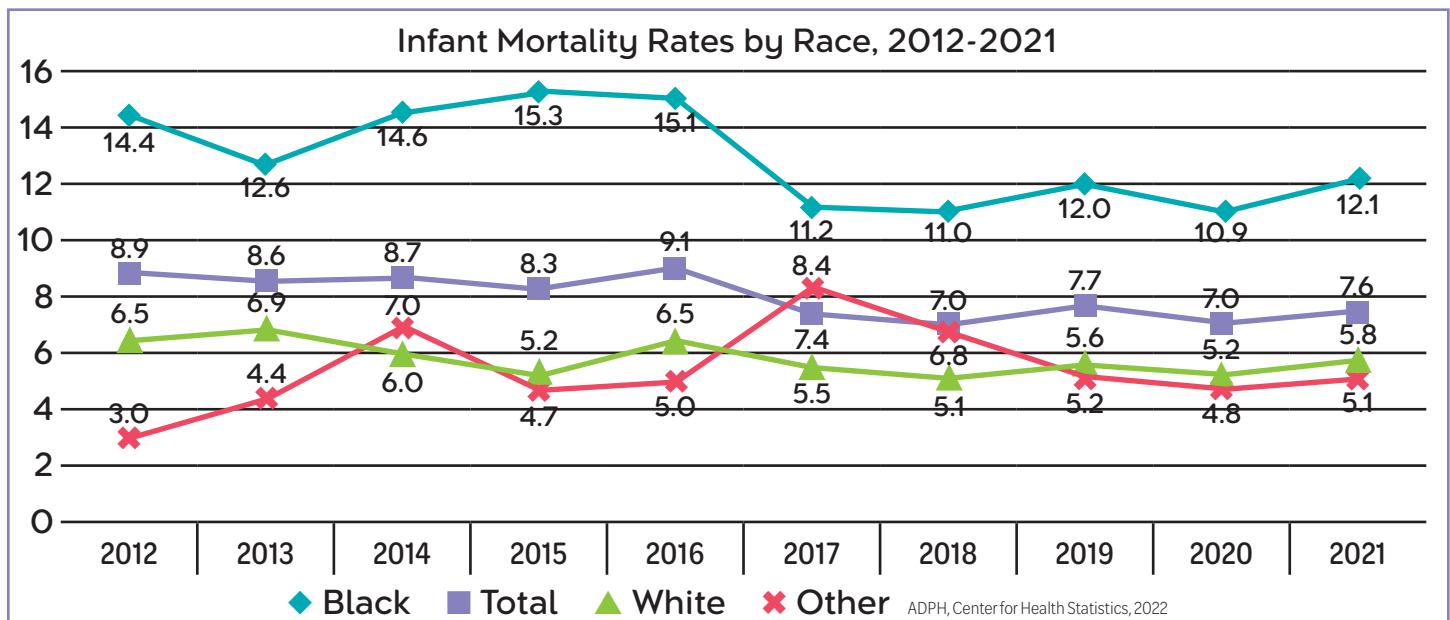
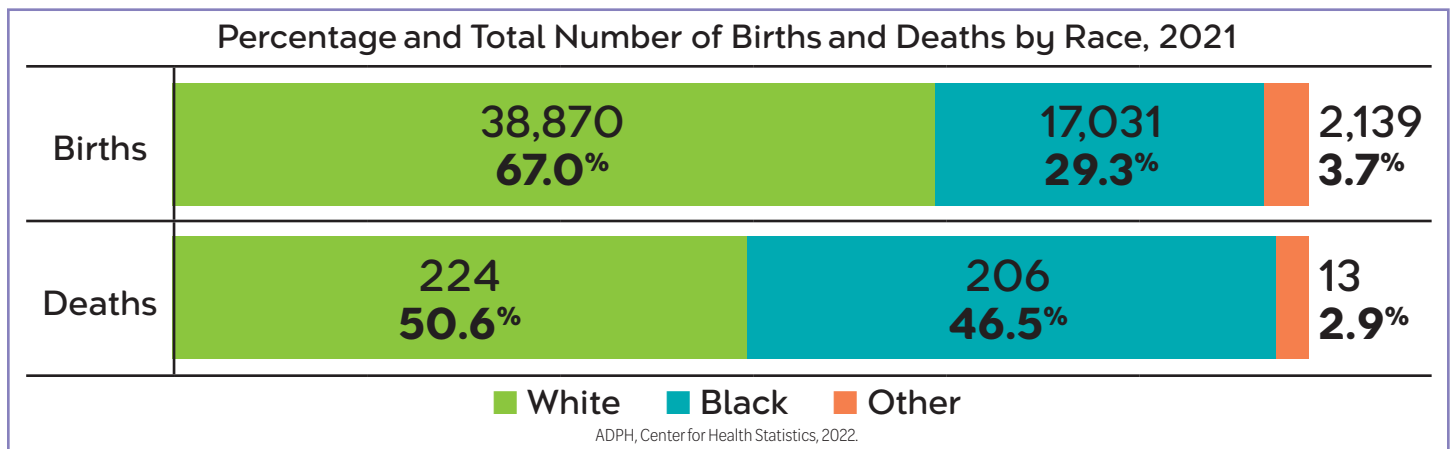
The three commonly reported types of SUID include:

- SIDS
- Unknown Cause
- Accidental suffocation and strangulation in bed

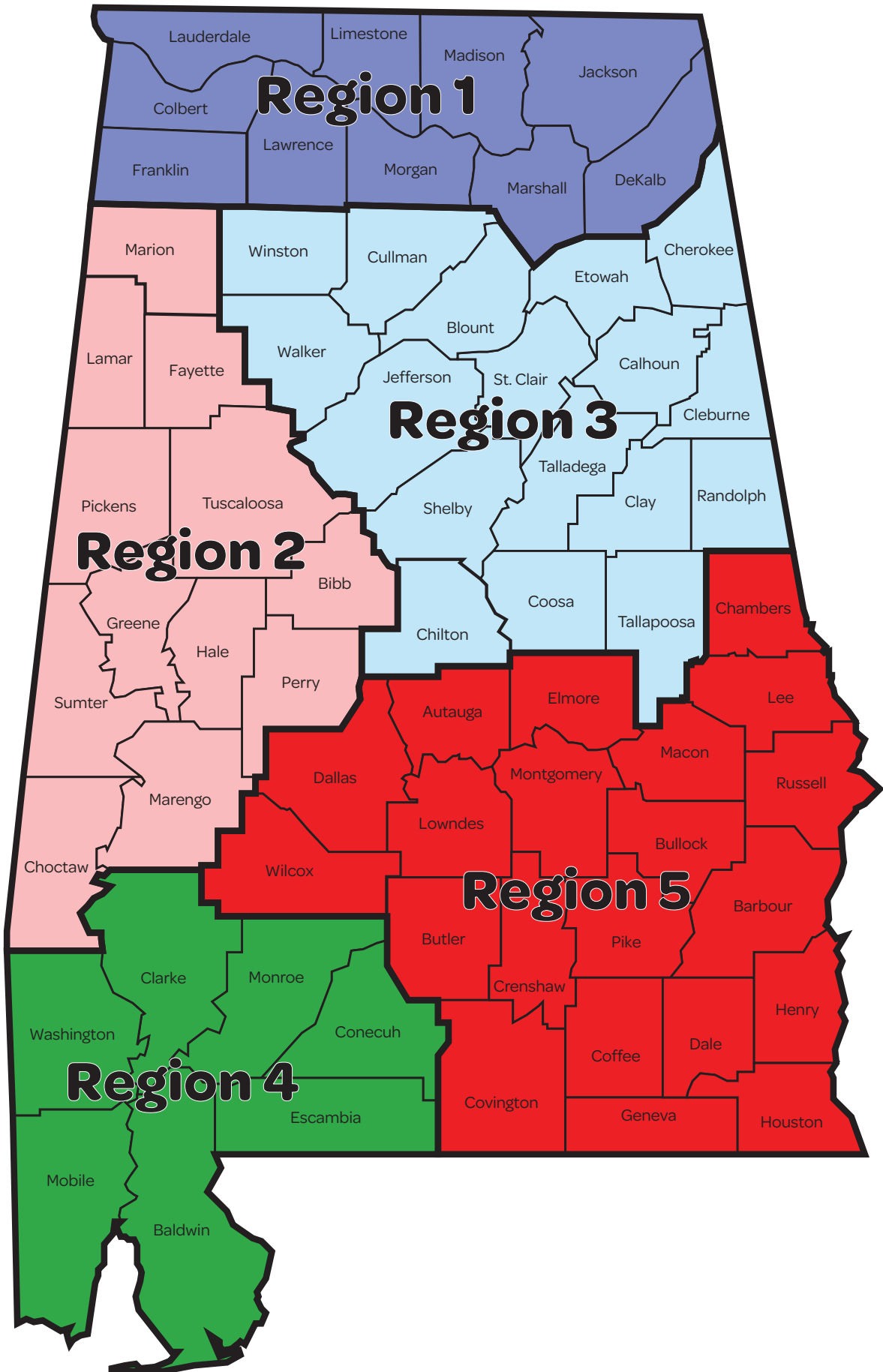
SUID deaths accounted for **22.8 percent** of the total Infant Mortality Rate in 2021.

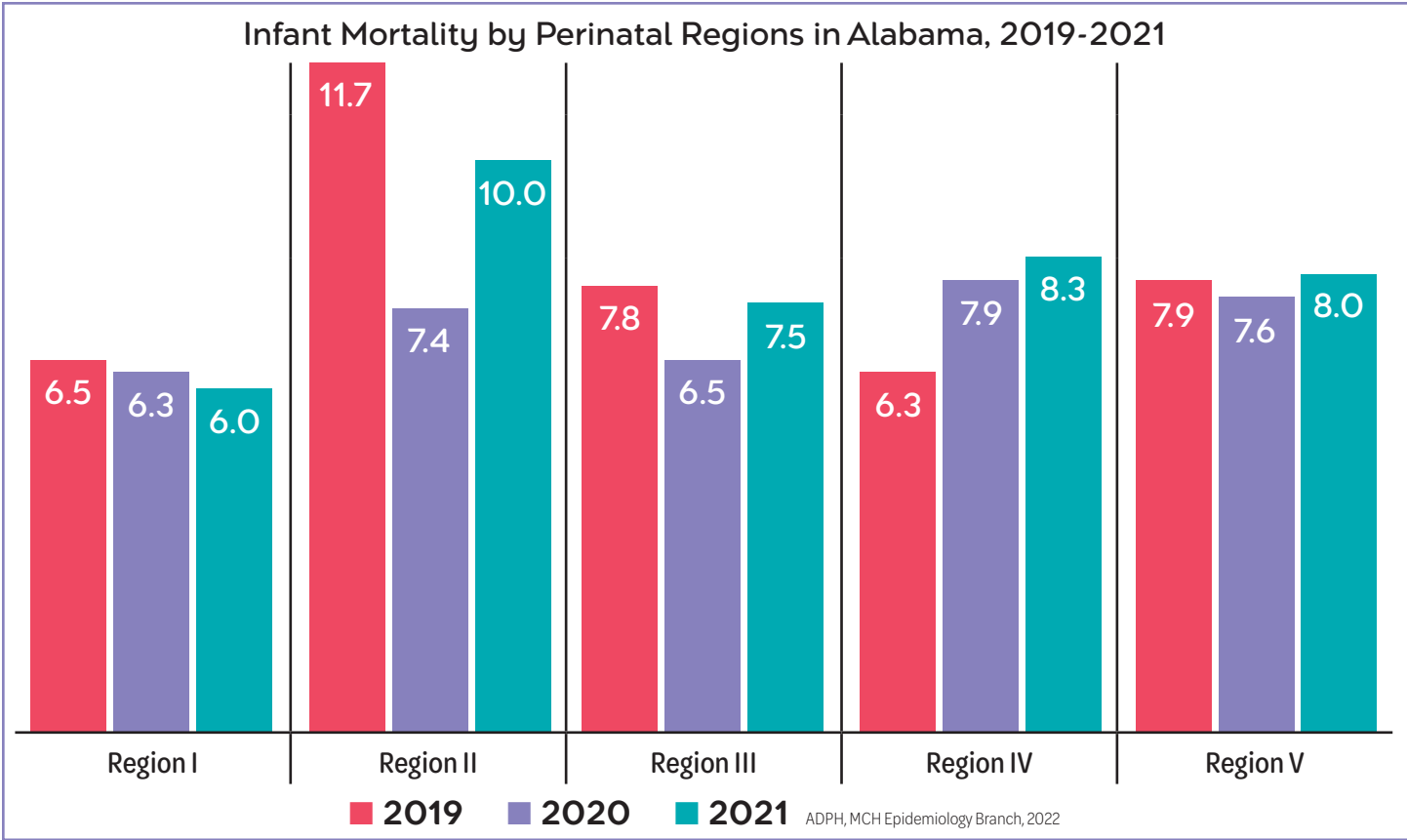
Racial Disparities

Although infant mortality increased in Alabama in 2021, racial disparities continue to persist. In 2021, black infants died at a rate of 12.1 infant deaths per 1,000 live births, while deaths among other infants and white infants occurred at rates of 5.1 infant deaths per 1,000 live births, respectively. It is important to note that only 29.3 percent (17,031) of live births were to black mothers and 3.7 percent (2,139) to other mothers, while 67.0 percent (38,870) 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.



Alabama, By Perinatal Regions





Fetal and Infant Mortality Review Program

The Fetal and Infant Mortality Review (FIMR) Program was established to identify critical community strengths and weaknesses as well as unique health and social issues associated with poor outcomes of pregnancy. The program is a community-based statewide initiative designed to enhance the health and well-being of women, infants, and families through the review of unidentified cases of fetal (stillbirth) and infant deaths and voluntary maternal interviews.

The FIMR Program consists of Perinatal Nurses based at the largest delivering hospitals in five regional areas across the state. All Alabama counties are represented in one of the five regions. In addition to completing a review of cases of fetal and infant deaths, the Perinatal Nurses present the findings of their reviews to a multidisciplinary team consisting of a broad range of professional organizations and public and private agencies that provide services and resources for women, infants, and families. The team reviews case summaries, identifies issues, and makes recommendations for community change.

The regionalization of the FIMR Program provides an opportunity to create solutions from identified needs at the local level to reduce infant mortality and improve the health of Alabama families.

2023 Plans to Reduce Infant Mortality in Alabama

- Continue the FIMR Program to abstract and review 100 percent of infant deaths statewide, and collaborate with community partners within each Perinatal Region to address causes of infant deaths.
- Continue the Maternal Mortality Review Program in Alabama to abstract and review maternal deaths that occur during pregnancy or within 1 year of the end of pregnancy regardless of outcome.
- Increase the percentage of autopsies performed on maternal deaths with the implementation of the Maternal Autopsy Program.
- 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 Crib 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.
- Educate and raise awareness, through community partnerships, of health inequities and disparities and their impact on health outcomes within the state.
- Host an Infant Mortality Reduction Summit.
- Continue to collaborate with multiple state agencies to execute the State of Alabama Infant Mortality Reduction Plan as a means to reduce infant mortality by 20 percent over a 5 year period in Macon, Montgomery, and Russell Counties. The plan, now in its fifth year, includes partnerships with the Alabama Department of Early Childhood Education, Alabama Department of Human Resources, Alabama Department of Mental Health, and Alabama Department of Public Health. The plan includes the following strategies:
 - o Expanding evidence-based home visitation services.
 - o Increasing utilization of the Screening, Brief Intervention, and Referral to Treatment 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 childbearing age receive preconception and interconception healthcare 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 Increase access to healthcare for pregnant women through Group Prenatal care.

Sources

¹ Data for this report have been made available by the Center for Health Statistics and the Maternal and Child Health Epidemiology Branch.
<https://www.alabamapublichealth.gov/healthstats/assets/infantmortality2021.pdf>

² Centers for Disease Control and Prevention: Infant Mortality.
<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm>

³ Centers for Disease Control and Prevention: Social Determinants of Health: Know What Affects Health.
<https://www.cdc.gov/about/sdoh/index.html>

⁴ Centers for Disease Control and Prevention: What are Birth Defects.
<https://www.cdc.gov/ncbddd/birthdefects/facts.html>

⁵ Percentages of Babies Born Low Birthweight By State.
https://www.cdc.gov/nchs/pressroom/sosmap/lbw_births/lbw.htm

⁶ Centers for Disease Control and Prevention: Preterm Birth.
<https://www.cdc.gov/reproductivehealth/MaternalInfantHealth/PretermBirth.htm>

⁷ National 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. Special acknowledgment is extended to staff of the Perinatal Health Division, Regional Perinatal Advisory Committees, and the State Perinatal Advisory Committee, whose participation and cooperation help make this publication possible.

