



Alabama Perinatal Health Act Annual Progress Report For FY2023 Plan For 2024



*"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

January 10, 2024

Dear Senators and Representatives:

It is my pleasure to share the Alabama Perinatal Report, which describes the Fiscal Year 2022 infant mortality data, leading causes of infant mortality, and strategies for addressing this issue in 2024.

In 2022, Alabama's infant mortality rate was 6.7 deaths per 1,000 live births, a decrease from the 7.6 rate in 2021. The 2022 infant mortality and the 3-year infant mortality rate of 7.1 for the years 2020-2022 have decreased to the lowest rate ever. However, Alabama's infant mortality remains higher than the provisional U.S. rate for 2022, which is 5.6. While Alabama's rate improved, the national rate trended upward for the first time in 20 years.¹

Unfortunately, the disparity between birth outcomes for black and white mothers persists. Despite advances in healthcare, the black infant mortality rate is consistently twice the rate for white mothers. We must address the many factors that contribute to the infant mortality, including poverty, educational levels, and access to medical care.

The health of a mother and 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 racial disparities and poor health outcomes in mothers and infants. 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 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

SH/SG

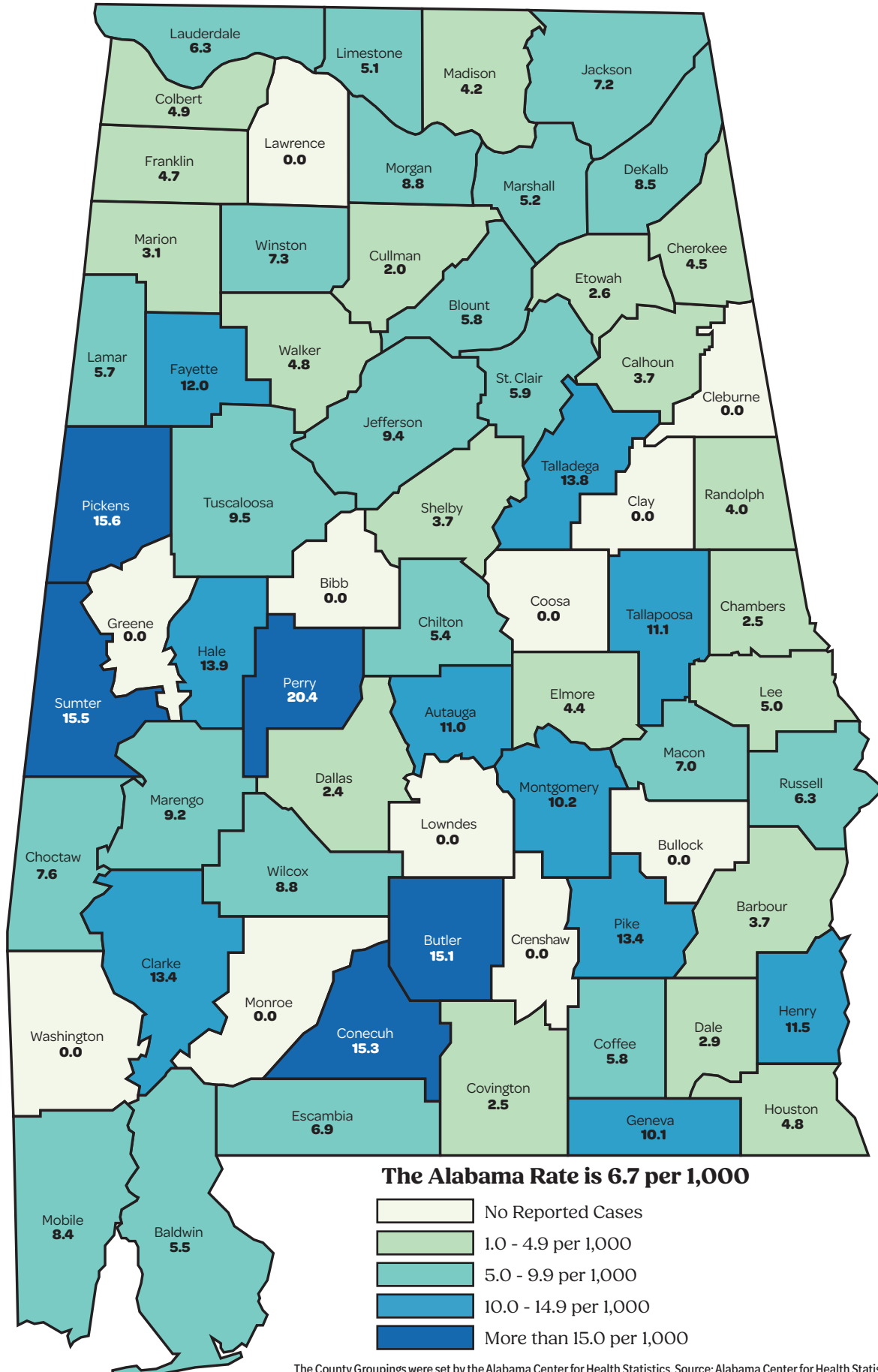
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Map 1:2022 Infant Mortality Rates (IMRs), By County



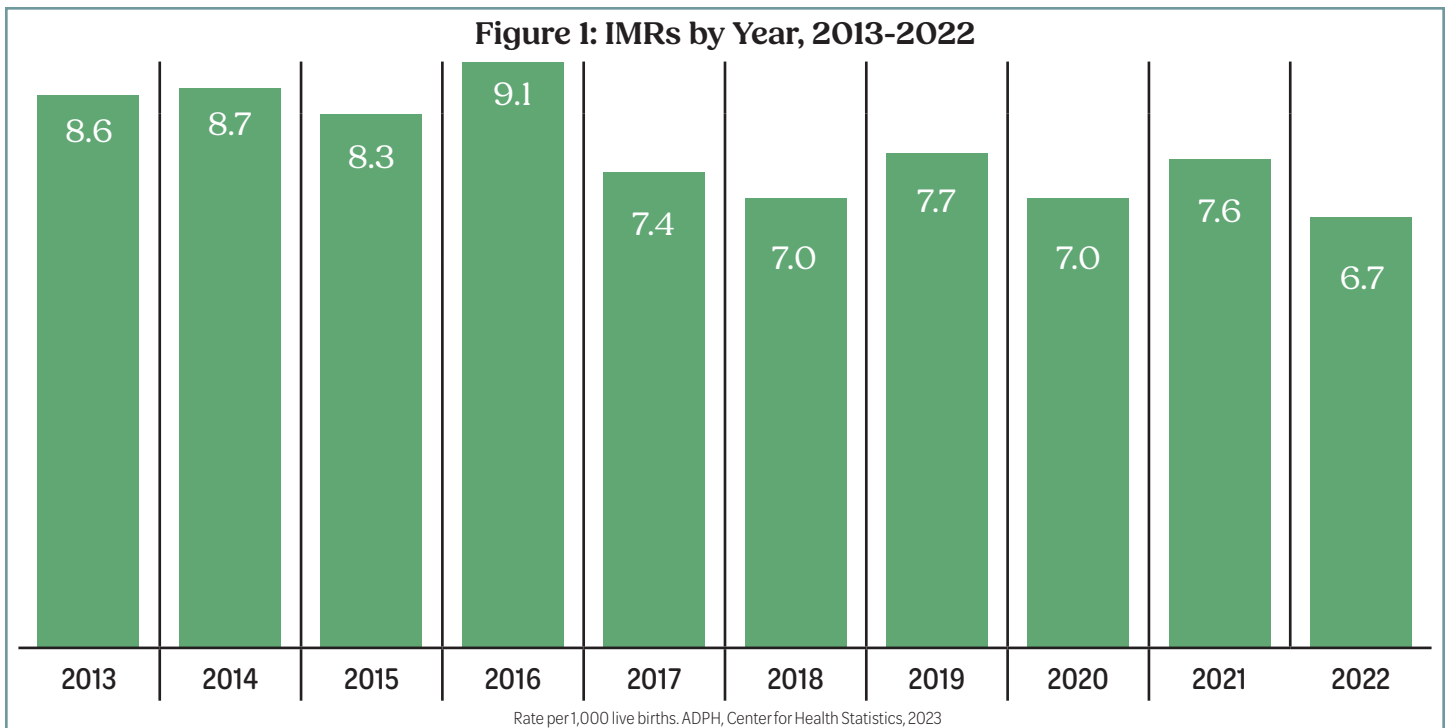
State of Alabama Infant Mortality Report 2022

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)

Infant mortality is defined as the death of an infant before his or her first birthday. The 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 As shown in Figure 1, the 2022 IMR was 6.7 deaths per 1,000 live births. Compared to other years, 2022 had the lowest IMR. A total of 391 infants died before reaching their first birthday in 2022, a decrease from 443 infants in 2021. Although the Alabama 2022 IMR rate has shown a decrease compared to previous years, Figure 2 shows that the state IMR rate of 6.7 deaths per 1,000 live births is higher than the national 2022 provisional rate of 5.6 deaths per 1,000 live births. While Alabama's rate improved, the national rate trended upward for the first time in 20 years.



Health outcomes are impacted by the health behaviors of the individual and social determinants of health, such as access to healthcare, quality education, economic stability, adequate housing, and transportation. Thus, addressing the factors that contribute to health outcomes 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

The ADPH aims to identify and address any health equity barriers, such as high cost of care, inadequate insurance coverage, unavailability of services in a community, and lack of culturally competent care. 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 2023 report provides an overview of infant mortality statistics and describes some of the current collaborating strategies to address them.

Figure 2: IMRs in Alabama and United States, 1972-2022

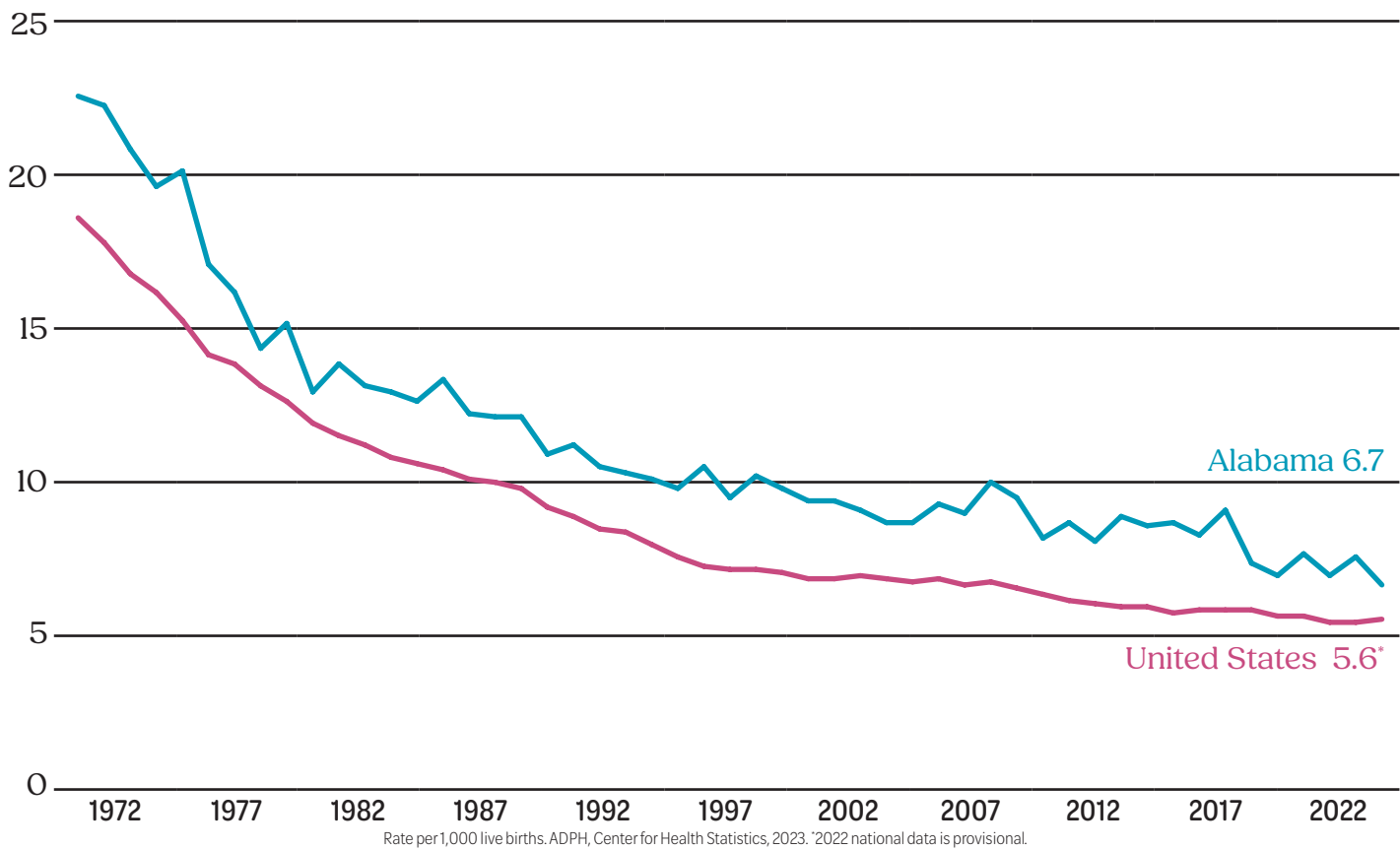
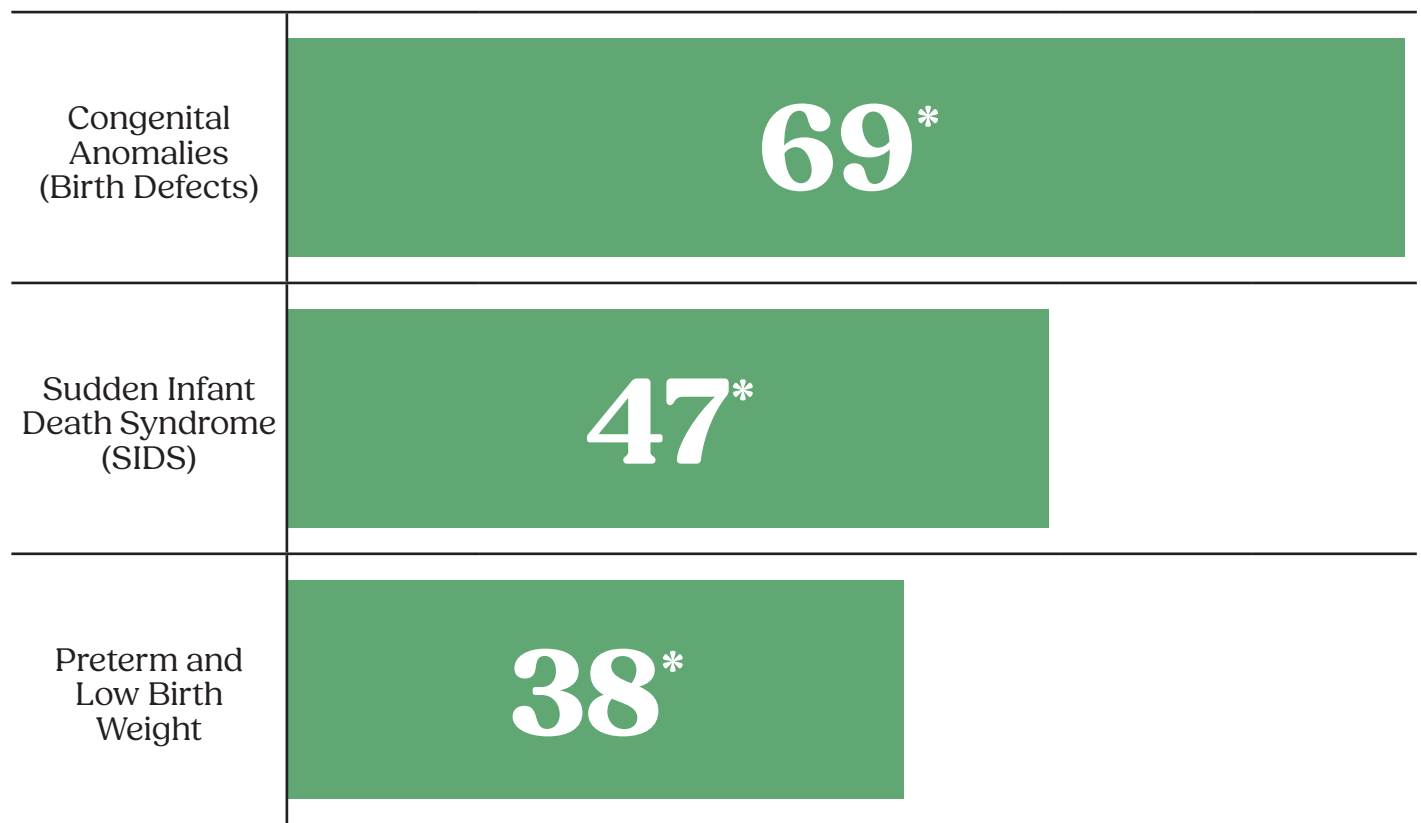


Figure 3: Three Leading Causes of Infant Mortality in 2022



ADPH, Center for Health Statistics, 2023 *The number of infants who died in various categories

As shown in Figure 3, the three leading causes of infant mortality are congenital anomalies, sudden infant death syndrome, and preterm and low birth weight. The three leading causes accounted for **39.4 percent** of all infant deaths.

1. Congenital Anomalies

Congenital anomalies, also known as birth defects, were the leading cause of infant mortality in 2022. Birth defects are common and costly. Annually about 1 in every 33 babies, approximately 120,000, are 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:

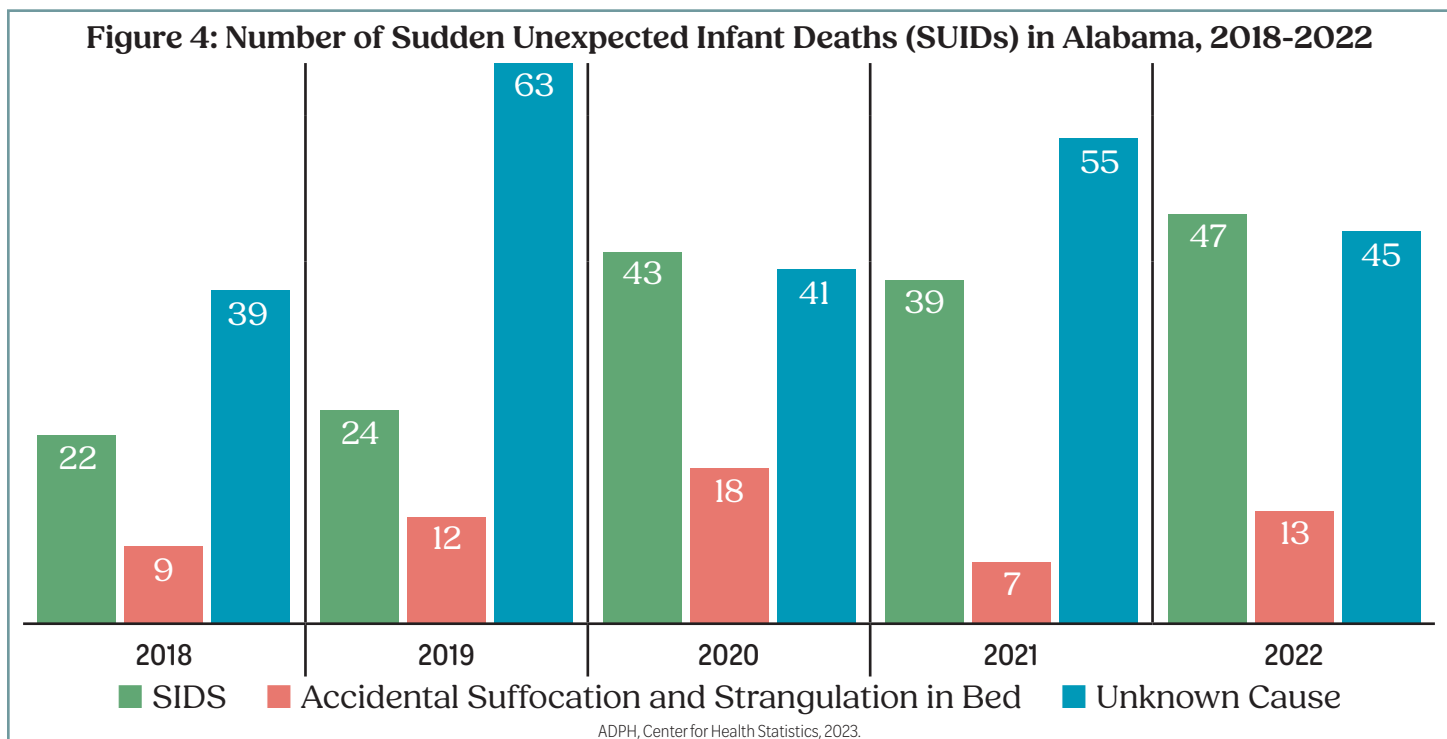
- Plan ahead, take folic acid daily, and see a healthcare provider regularly.
- Avoid harmful substances: alcohol, smoking, marijuana, and other drugs.
- Choose a healthy lifestyle.
- Talk to your healthcare providers about any medications (prescription and over the counter), family history, and vaccinations.

2. Sudden Infant Death Syndrome (SIDS)

SIDS was the second 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 an autopsy, examination of the death scene, and medical review of the clinical history.⁵ 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 deaths occur between 1 month and 4 months of age with 90 percent of SIDS deaths occurring before an infant reaches 6 months of age.

3. Preterm and Low Birth Weight (LBW)

Preterm and LBW were the third leading cause of infant mortality in 2022. Preterm births are infants that are born too early before 37 weeks of pregnancy have been completed.⁶ LBW births are defined as infants weighing less than 5 pounds and 8 ounces at delivery.⁷ Preterm births comprised 12.8 percent and low birth weight 10.4 percent of the births in 2022. They accounted for about 9.7 percent of all infant deaths in 2022.



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 There was a 4.1 percent increase in SUID from 22.8 percent in 2021 to 26.9 percent in 2022. 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.

As shown in Figure 4, **105** infant deaths were Sudden Unexpected Infant Deaths (SUID).

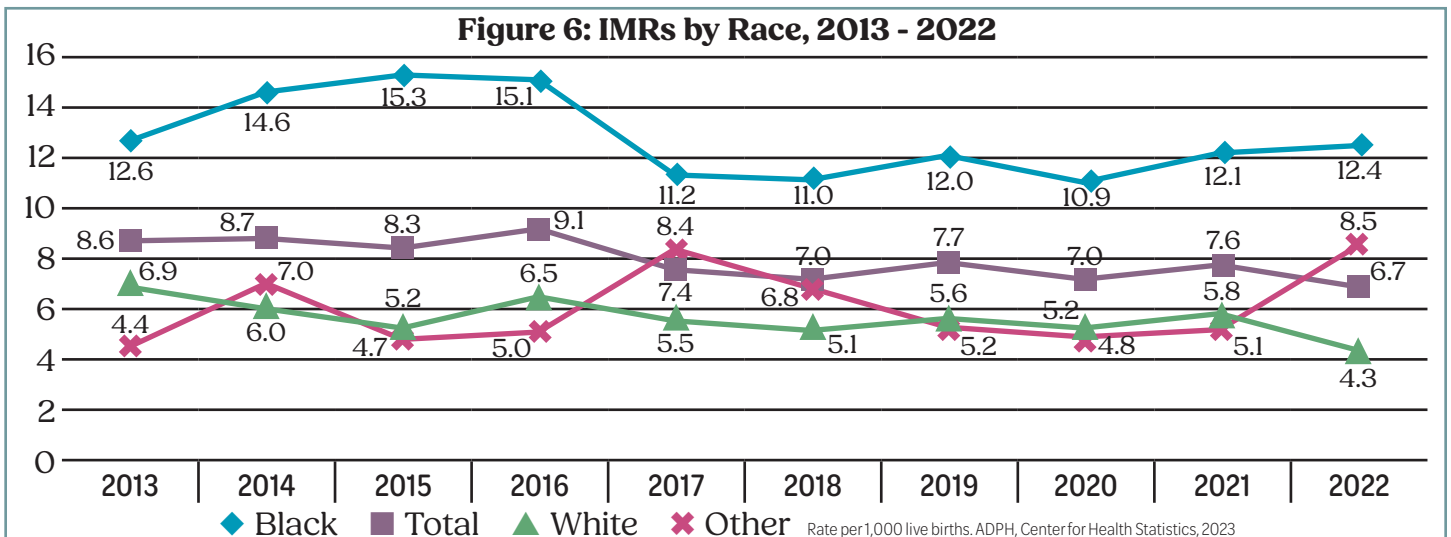
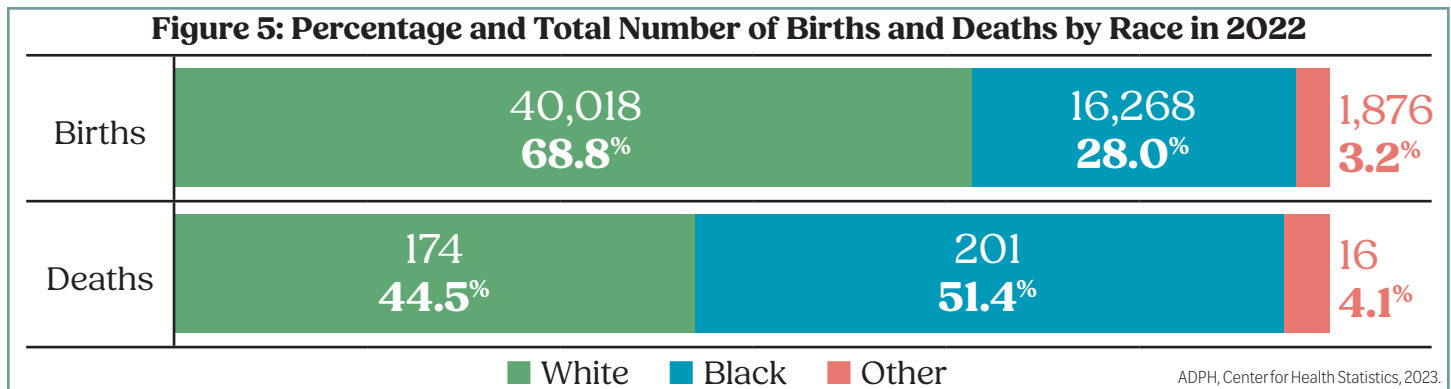
The three commonly reported types of SUID in Alabama 2022 include:

- SIDS (47)
- Accidental suffocation and strangulation in bed (13)
- Unknown cause (45).

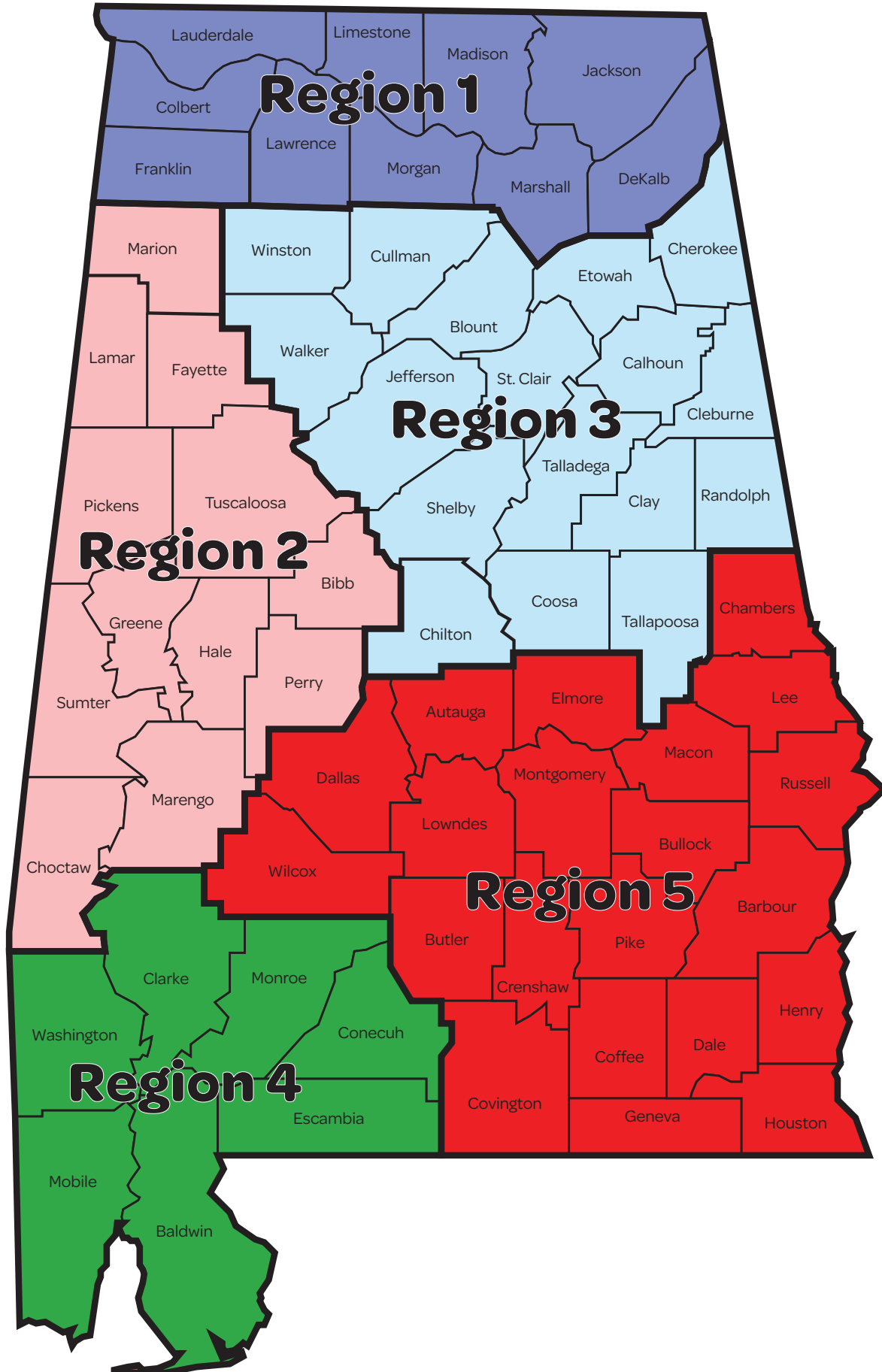
SUID deaths accounted for **26.9 percent** of the total IMR in 2022.

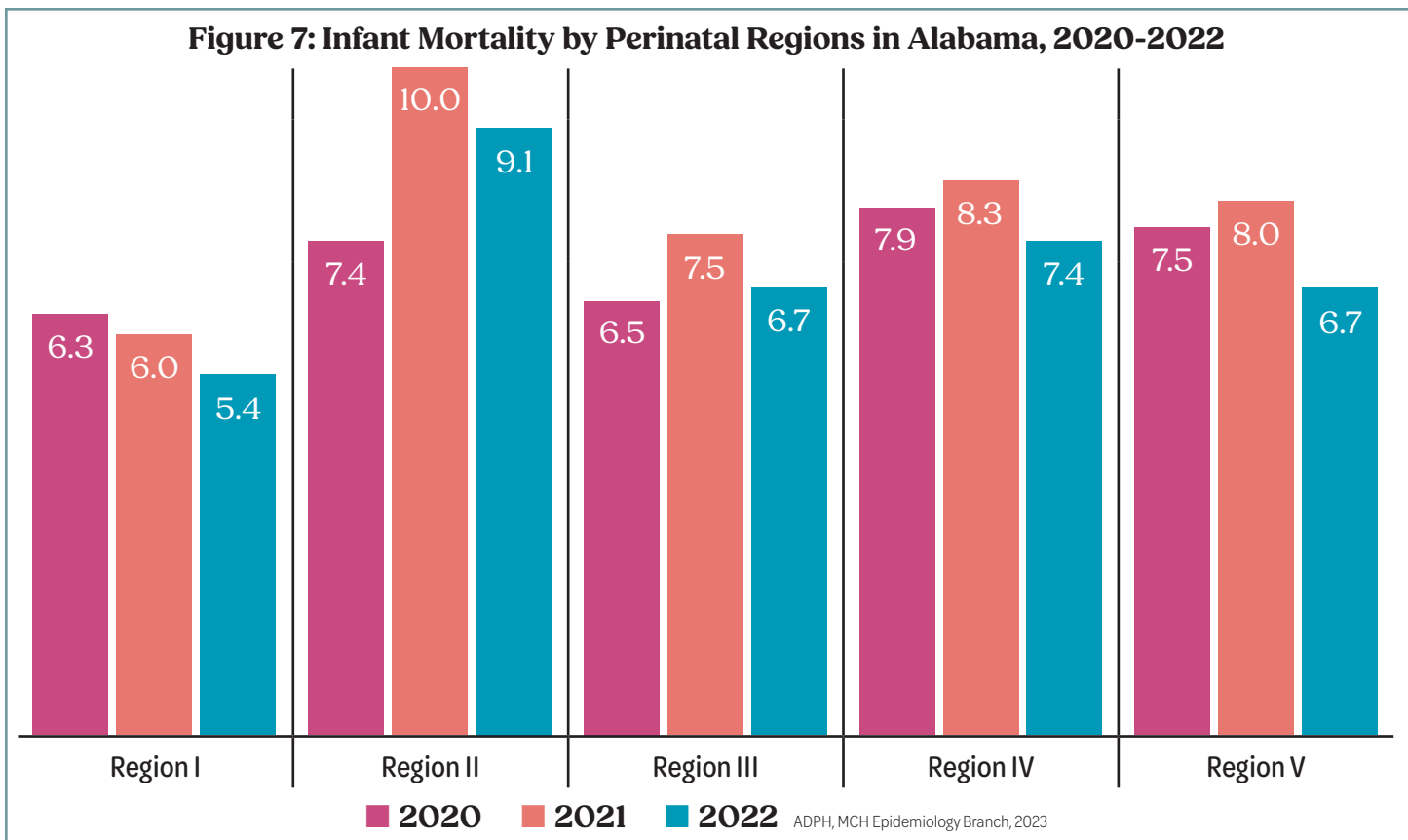
Racial Disparities

Although infant mortality decreased in Alabama in 2022 to a record low, racial disparities continue to persist. Figure 5 looks at the racial breakdown among live births and infant deaths reported in 2022. In 2022, 68.8 percent of the live births were white, while 31.2 percent of the live births were either black or other. Blacks had the highest number of reported infant deaths. In Figure 6, a trend analysis looked at 2013-2022 IMRs among these racial groups. Black infants died at a rate of 12.4 infant deaths per 1,000 live births, while deaths among other infants and white infants occurred at rates of 8.5 infant deaths and 4.3 infant deaths per 1,000 live births, respectively. Thus, the IMRs 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, and access to health.



Map 2: Alabama, By Perinatal Regions





Fetal and Infant Mortality Review (FIMR) Program

The 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 as shown in Map 2. 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. Using Health Statistics data, Figure 7 looks at IMR for these regions between 2020 and 2022.

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 the outcome, and present case reviews to the Maternal Mortality Review Committee to develop recommendations to prevent future maternal deaths.
- Increase the percentage of autopsies performed on maternal deaths through the Maternal Autopsy Program.
- Continue to promote the Alabama Cribs for Kids® Program to ensure all infants under age 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 an Infant Mortality Reduction Summit.
- Through partnerships with state agencies and community partners, develop initiatives to increase access to prenatal care in rural areas.
- Continue the Well Woman Program so that women of childbearing age receive preconception and interconception health as a means to address chronic health conditions before and between pregnancies.
- Increase 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.
- Promote safe sleep awareness through education and collaboration.
- Provide education to women and families on the benefits of breastfeeding for both mom and baby.
- Promote and improve 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.

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/infantmortality2022.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 National Institute of Child Health and Human Development: SIDS.

<https://www.nichd.nih.gov/health/topics/sids>

⁶ Percentages of Babies Born Low Birthweight By State.

https://www.cdc.gov/nchs/pressroom/sosmap/lbw_births/lbw.htm

⁷ Centers for Disease Control and Prevention: Preterm Birth.

<https://www.cdc.gov/reproductivehealth/MaternalInfantHealth/PretermBirth.htm>

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 State Perinatal Advisory Committee, whose participation and cooperation help make this publication possible.

