Alabama Perinatal Health Act Annual Progress Report for FU 2006 Plan for FU 2007

State and Regional Perinatal Advisory Councils and the Bureau of Family Health Services. Alabama Department of Public Health



Donald E. Williamson, MD
State Health Officer

January 17, 2007

Dear Senators and Representatives.

It is my pleasure to provide you the opportunity to read the current perinatal annual report available at www.adph.org/perinatal. The report describes the activities of the State Perinatal Program during fiscal year 2006.

Alabama's infant mortality rate increased from 8.7 to 9.3 deaths per 1,000 live births, the first increase since 1998. This disappointing increase is evidence that continued support for the State Perinatal Program is needed. Most importantly, we must address the increasing number of premature births in Alabama and subsequent infant morbidities that have long-term consequences for families and society. To this end, the State Perinatal Program developed strategies to address these adverse outcomes of pregnancy. These strategies and the problems they address are described in detail in this report.

The leading perinatal healthcare providers in our state met throughout 2006 to guide the State Perinatal Program. I am pleased with the initiatives under development which will yield long-term benefits as infants grow into healthy children and contributing adults.

I want to thank you for your continued support of the State Perinatal Program. Because of new initiatives of the program, Alabama's families can look forward to improved services for perinatal care.

Sincerely,

Donald E. Williamson, M.D. State Health Officer

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Introduction

Infant mortality is an indicator used to characterize the health status of communities and states. The 2005 infant mortality rate (IMR) increased to 9.3 (561) infant deaths per 1,000 live births from 8.7 (516) in 2004. More significantly, the increase is the first since 1998. The positive trend of the past seven years has been interrupted and Alabama will rank among the highest in the nation. The 2004 national IMR was 6.6 infant deaths per 1,000 live births.

Factors contributing to the increase include maternal chronic health conditions existing prior to pregnancy, short pregnancy intervals, previous preterm births and drug abuse. Low birth weight (LBW) infants accounted for 55 percent of the 2005 infants deaths; however, survivability of these small infants has greatly improved in the past ten years. The increasing survival of very small infants has resulted in an increase in infant morbidity. In 2005, 18.5 percent of the births in Alabama were premature. A comparison to the national percentage of 12.5 in 2004 provides a picture of the severity of the problem. These small infants are at high risk for developing major long-term physical and cognitive problems with consequences that impact families and state resources. An additional concern is the significant racial disparity in premature and LBW births, a significant and major contributor to infant mortality among the black population. Black mothers are 43.3 percent more likely to have a premature birth than white mothers. The 2005 rate of prematurity for black infants is 23.5 compared to 16.4 for whites.

An important indicator of infant morbidity is the number of newborns being admitted to neonatal intensive care units (NICUs). Alabama has seen a ten-year trend of increased NICU admissions. The 2005 NICU admissions increased to 5,243, compared to 4,764 in 2004.

Long-term consequences of adverse outcomes of pregnancy include emotional and financial stress to families, as well as the costs of special education and ongoing healthcare needs of children and adults with disabilities. The purpose of the Alabama Perinatal Program is to identify and recommend strategies that will effectively decrease infant morbidity and mortality. Regionalization of care is a model in which program components in a geographic area are defined and coordinated to ensure that pregnant women and their newborns have access to cost effective healthcare.

The system of regionalized perinatal care needs strengthening in Alabama. Additionally, services must be available to address the entire perinatal continuum that includes the periods of preconception, antepartum, intrapartum, neonatal, postpartum, infancy and interconception. Promotion of healthy lifestyles and behaviors, along with disease prevention, are essential components of a plan that will improve the outcomes of pregnancy.

HISTORY OF ALABAMA=S PERINATAL SYSTEM

Neonatal intensive care and regionalization of perinatal care developed in the late 1970s. In an effort to confront the state=s high infant mortality rate, a group of physicians, other health providers and interested citizens came together and became the impetus behind the passage of the Alabama Perinatal Health Act in 1980 (Appendix A). This statute established the State Perinatal Program and the mechanism for its operation under the direction of the State Board of Health.

The program's functioning body is the State Perinatal Advisory Council (SPAC), which represents Regional Perinatal Advisory Councils (RPACs). The RPACs make recommendations to the SPAC regarding perinatal concerns and strategies to improve the health of mothers and infants.

The State Perinatal Program is based on a concept of regionalization of care, a systems approach in which program components in a geographic area are defined and coordinated to ensure that pregnant women and their infants have access to appropriate care. Availability of neonatal intensive care directed the organization of the regionalized care.

Initially, Alabama had neonatal intensive care capacity in Birmingham and Mobile. Additional capacity developed in Huntsville, Tuscaloosa and Montgomery. The state adopted a perinatal plan based on six regions, which corresponded to the Health System Agency designations at the time of passage of the Perinatal Act. These regions were also the basis for the Public Health Areas. In 1988, Public Health changed to eight areas and the Perinatal Program followed. In 1995, Public Health reorganized to 11 areas (Appendix B) and continues with this structure today. However, the perinatal system continued with the same eight regions that were designated in the 1988 reorganization.

In 1996, the perinatal program reorganized into the current five regions (Appendix C). The reorganization was based on each region's designated neonatal intensive care unit (NICU). The five designated NICUs are: (1) Region I - Huntsville Hospital in Madison County; (2) Region II - DCH Regional Medical Center in Tuscaloosa County; (3) Region III - University of Alabama at Birmingham (UAB) in Jefferson County; (4) Region IV - University of South Alabama (USA) in Mobile County; and, (5) Region V - Baptist Medical Center South in Montgomery County.

The 2002 SPAC designed a plan to enhance perinatal leadership within each of the five regions. The plan redirected outreach education funds for creation of an Alabama Department of Public Health nurse position in each perinatal region. The purpose of these positions is management of the RPACs and coordination of all regional perinatal activities, including outreach education. The SPAC voted to approve the plan and the regional perinatal nurse positions were filled by August 2002. In FY 2006, these regional perinatal nurses collaborated with perinatal providers and advocates across the state to strengthen each region's system of care for mothers and infants.

CURRENT STATUS OF ALABAMA=S BIRTHS

Birth Rate

Total births for 2005 were 60,262, a rate of 13.2 per 1,000 total population; the 2004 rate was 13.1 (59,170); the 2003 rate was 13.2 (59,356); the 2002 rate was 13.0 per 1,000 population (58,867 births). The 2005 birth rate for white infants was 12.6 (40,895) per 1,000 white population, while the birth rate for the black population was 15.0 (18,018) per 1,000.

Infant Mortality Rate¹

Alabama's 2005 infant mortality rate (IMR) of 9.3 (561) infant deaths per 1,000 live births is

Alabama statistics referred to in this report were obtained from the ASelected Maternal and Child Health Statistics, Alabama, @ by the Center for Health Statistics, Alabama Department of Public Health, 2002 publication under revision.

a disturbing increase when compared to the historical low 2004 rate of 8.7 (516). The highest IMR in 2005 was found in Sumter County with a rate of 22.2 deaths per 1,000 live births.

The difference between Alabama's IMR for black infants and white infants continues to be significant. This disparity is evidence that concerted efforts are needed to address the factors that contribute to poor outcomes of pregnancy for many black mothers. At 14.4, the infant mortality rate for blacks increased from the 13.3 rate of 2004, which is 100.0 percent higher than the rate for white infants. The IMR for white infants, 7.2, increased from the 2004 rate of 6.7.

Infant deaths are sentinel events that indicate overall social, economic and health problems for families and communities. Continued efforts to aggressively identify, plan, and target contributing factors are essential if the health of Alabama's mothers and babies is to be improved.

ISSUES THAT NEED CONTINUED EFFORT

Several factors contributing to Alabama's high rate of infant morbidity and death require continued attention from healthcare leaders and policymakers, including: (1) low birthweight infants; (2) unintended pregnancies; (3) teen pregnancies; (4) preconception status of mothers; (5) smoking status of mothers and (6) availability of health insurance coverage for the mothers at the time of pregnancy. These factors also have a direct impact on each other.

Low Birthweight

Birthweight is a significant factor directly related to infant morbidity and the infant mortality rate. Babies born too soon or too small have significant risks of serious morbidity. Very low birthweight (under 3 lbs. 5 oz.) infants accounted for 301 of the 561 infant deaths in 2005. These very small babies are medically fragile at birth and many become critically ill. Those who survive usually require weeks of medical treatment for life-threatening conditions and/or infections. Medical care provided in the NICUs has had a positive impact on neonatal mortality (the first 28 days after birth); however, the very low and extremely low birthweight survivors are vulnerable to critical illness during the post-neonatal period and many require hospital readmission. Over one-third of the total infant deaths occur in the post-neonatal period (after 28 days).

The definitive cause(s) of prematurity remains unknown; however, the increasing magnitude of the problem has gained attention of medical researchers and scientists. Currently, the one measure that can reduce prematurity is prevention of unintended pregnancies in women who have experienced a previous preterm birth. The probability of preterm birth is 30 percent greater for a woman who has had one previous premature infant and the risk increases to 70 percent for two or more previous preterm births.

Unintended Pregnancy

The latest data on unintendedness (2004 data) showed that one-half (50.0 percent) of pregnancies in Alabama occurred to women who wanted a later pregnancy or to women who did not want to ever become pregnant. Unplanned pregnancies have serious consequences. Women who experienced an unwanted pregnancy were less likely to have adequate prenatal care and were more likely to have unhealthy lifestyles. Smoking and substance abuse were more likely in women who

had an unplanned pregnancy. Additionally, unintendedness leads to inadequate spacing between pregnancies. Women who have birth intervals of less than two years are more likely to have negative outcomes than mothers who space their pregnancies at longer intervals.

Teenage Pregnancy

The 13.1 percent of births to teens in 2005 is less than the 14.0 percent in 2004. Live births to teens in Alabama were 13.9 percent in 2003, 14.6 percent in 2002, 14.9 percent in 2001, and 15.7 percent in 2000. Focus on efforts to reduce teen childbearing will only serve to positively impact Alabama's IMR. Of the adolescent births, 43.9 percent (3,469) were to black and other teen mothers, and 73.1 percent (5,780) were to unmarried mothers.

Adolescent births produce multifaceted consequences that impact families and society. Teens are more likely to have very low or extremely low birthweight infants and birthweight is the factor most clearly related to infant death. Infant mortality rates are highest for babies of teen mothers at 12.0 per 1,000 live births and lowest for adults at 8.8 per 1,000 live births. Additionally, the low breastfeeding rate among adolescent mothers increases the morbidity risk for these infants.

Preconceptional and Interconceptional Health Status

Poor maternal health prior to pregnancy is a factor that must be taken into account. Prepregnancy weight affects the weight of the infant. Women who are underweight before pregnancy are more likely to have a low birthweight infant than are women who were normal weight before pregnancy. The consequences of obesity, such as diabetes and hypertension, are major causes of perinatal morbidity.

Prenatal Care

Early and adequate prenatal care to mothers remains a crucial factor in reducing infant mortality rates. The IMR among mothers who received no prenatal care or initiated care in the third trimester continues to be two times higher than the mothers who received prenatal care in the first trimester. In 2005, 82.8 percent of the births were to women who began prenatal care in the first trimester; however, there were 987 mothers who received no prenatal care.

Substance Abuse

The use of nicotine, alcohol and drugs during pregnancy are other factors contributing to infant death and low birthweight. In Alabama in 2005, statistics indicate babies of mothers who smoke are 37.5 percent more likely to die than infants of nonsmoking mothers with the rate for smokers being 12.1 per 1,000 live births compared to 8.8 for babies of nonsmokers.

The percentage of births to teenage women who used tobacco decreased to 12.7 in 2005, compared to 13.2 in 2004. There was an increase over the year in tobacco use among women aged 20 or more to 11.5 percent from 10.9 percent. In 2005, white teenage mothers were 6.5 times more likely to smoke than black teen mothers. Smoking is associated with low birthweight, SIDS, and respiratory causes of infant deaths.

Alcohol use during pregnancy can cause serious birth defects. Alcohol consumption during pregnancy is a leading cause of mental retardation and developmental delays. The 2004 data from the Pregnancy Risk Assessment Monitoring System (PRAMS)² survey indicated that 45.4 percent of all new mothers indicated they drank in the three months before pregnancy. In the last three months of pregnancy, only 5.8 percent of mothers reported drinking, a decrease of almost 90 percent. Although, it appears most mothers realize that drinking during pregnancy can have detrimental effects on their babies and curtail their consumption of alcohol, mothers of approximately 3,495 babies continued to use alcohol.

Illicit drug use during pregnancy can cause long-term health problems for the mother and child. Intravenous drug users and their offspring are at particular risk for contracting Hepatitis B, HIV and AIDS. Pregnant women who use cocaine are at risk of pre-term labor and their children are at an increased risk for neurological development. Methamphetamine and methadone are the emerging drugs of choice for many women in Alabama. The fetal effects of these substances on newborns are creating serious challenges for perinatal providers.

Insurance Status

Uninsured pregnant women are less likely than insured women to receive proper health and preventive care. Poor families are most likely to be uninsured. Access to adequate early prenatal care may be determined by the availability of health insurance coverage for the pregnant mother. In 2005, infants of mothers with no insurance coverage and who did not qualify for Medicaid had the highest infant mortality rate at 20.6 percent per 1,000 live births. Medicaid babies had a rate of 10.8 percent and those whose mothers had private insurance had the lowest infant mortality rate at 6.6 percent. During 2005, Medicaid paid for 48.5 percent of births.

PROGRAMS CONTRIBUTING TO IMPROVED PERINATAL OUTCOMES

Alabama Abstinence – Only Education (AAEP)

AAEP is a program funded from FY 1998 to present through Section 510 of Title V of the Social Security Act. Nine community-based projects (CBPs) provided abstinence-until-marriage education to approximately 38,000 participants 10-19 years of age and younger in 38 counties. Project activities were conducted in private healthcare settings, educational facilities and social service organizations. Funds were used to provide direct services and to offer educational, recreational, and peer or adult mentor programs. A statewide media campaign used billboards, newspaper advertisements, and a Web site provided current statistical information, parental guidance and information about the CBPs. A comprehensive, longitudinal evaluation of the CBPs has been conducted over the duration of the grant period.

In FY 2006, Congress extended the "Deficit Reduction Act of 2005" (includes Section 510 of Title V of the Social Security Act). This Act continued federal funding for the AAEP on a quarterly basis through December 31, 2006.

²Obtained from the APRAMS Surveillance Report@ by CHS, ADPH 2003

Alabama Child Health Insurance Program (CHIP)

The Alabama Child Health Insurance Program, Public Law 105-33, was enacted August 5, 1997, under a new Title XXI of the Social Security Act. The law-enabled states to expand Medicaid and create their own children's health insurance program or implement a combination of the two. Initially, funds were allocated to the states based on the state's percentage of uninsured children adjusted for a state cost factor. The plan includes children who are not eligible for Medicaid and are not covered under another health plan. The Alabama State Child Health Insurance Program broadens the health insurance safety net for low-income children, thus improving their healthcare. The impact of better healthcare on infants (birth to one year of age) and coverage of additional pregnant teens was an important step in improving perinatal health in Alabama.

Alabama Newborn Screening Program

The Alabama Newborn Screening Program is a collaborative effort involving the Bureau of Clinical Laboratories and the Bureau of Family Health Services. The program provides laboratory screening and follow-up activities to prevent or minimize the effects of disorders that can lead to death, mental retardation and life-compromising conditions in newborns.

All newborns in Alabama are screened for phenylketonuria (PKU), congenital hypothyroidism, certain hemoglobinopathies (including sickle cell disease), galactosemia, congenital adrenal hyperplasia and biotinindase deficiency. Additionally, Alabama has implemented expanded screening using tandem mass spectrometry. This technology allows screening for amino acids, organic acidemia and fatty acid oxidation disorders in a single process. These disorders are maple syrup urine disease, homocystinuria, tyrosinemia, citrullinemia, medium chain acyl-CoA dehydrogenase deficiency (MCAD), propionic acidemia, methymalonic acidemia, carnitine transport defect, glutaric acidemia and isovaleric acidemia.

Infants identified with these disorders typically appear normal at birth. The testing and follow-up services allow diagnosis before significant, irreversible damage occurs. The Alabama Department of Public Health's Bureau of Clinical Laboratories conducts all screening for the approximately 60,000 infants born annually in the state.

Alabama's Listening Universal Newborn Hearing Screening Program

In 2006, all 58 birthing hospitals continued to have universal newborn hearing screening (UNHS) programs in place. Babies born in 43 of the 58 birthing facilities have been identified with significant hearing loss in 2006. Approximately 200 babies have been identified with significant hearing loss since the tracking program began. More that 95 percent of infants born in Alabama are screened for hearing loss before hospital discharge. Equipment is available through loans to birthing hospitals when needed to limit the number of infants who are not screened for hearing loss before discharge. The goal of this program is to ensure those infants receive appropriate follow up and intervention services.

Breastfeeding Promotion

Breastfeeding is an important public health issue that affects the health of infants and mothers. The United States Department of Health and Human Services has identified breastfeeding as a high priority health objective for the nation for the Year 2010. Healthy People Objectives are that at least 75 percent of women will initiate breastfeeding, 50 percent of those will breastfeed until the infant is six months old, and at least 25 percent will continue breastfeeding for one year. The American Academy of Pediatrics recommends breastfeeding for at least one year and beyond. The Alabama Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) supports and promotes breastfeeding as the preferred method of infant feeding.

Research has indicated that there are multiple health benefits for babies and mothers. Human milk provides infants with immunological protection against a variety of chronic illnesses and changes to meet the growing infant's nutritional needs. Infants who are breastfed have reduced incidence and severity of ear infections, pneumonia, diarrhea, urinary tract infections and necrotizing enterocolitis (NEC). Studies have shown that infants who are breastfed are less likely to develop diabetes mellitus, obesity, Celiac Disease, asthma, allergies, and Sudden Infant Death Syndrome (SIDS). Osteoporosis is reduced in mothers who breastfeed. Research indicates that breast, uterine and ovarian cancers are also reduced. Emerging research suggests that exclusive breastfeeding lowers the risk of diabetes mellitus for both the mother and infant through the lifespan.

In September 2005, WIC initiated a Breastfeeding Peer Counseling Program with funding from USDA. Blount, Mobile and Montgomery counties were selected as pilot programs. The program employs present or former WIC participants who have breastfed their infants for at least six months. The Peer Counselors provide support to pregnant and postpartum mothers regarding basic breastfeeding information. Research indicates that Breastfeeding Peer Counselor Programs help to increase breastfeeding initiation and duration rates. In 2006, Alabama WIC breastfeeding rates increased in each of the peer counseling clinics. In August and September 2006, Breastfeeding Peer Counseling Train the Trainer Programs were held for WIC staff. In early 2007, three more clinics will be added to the Peer Counseling Program. Public awareness activities regarding the importance of breastfeeding continued in 2006. Included in these activities were billboards in rural areas of Mobile, Montgomery and Birmingham for three months in 2006.

Child Death Review

The Alabama Child Death Review System (ACDRS) continued reviewing unexpected and unexplained child deaths that occurred in the state. Program effectiveness was strengthened by strategic partnerships and collaborative efforts with various advocacy groups, including the Children First Trust Fund, Gift of Life, Voices for Alabama's Children, and the Alabama Suicide Prevention Task Force. ACDRS continues to develop public education and awareness strategies such as the written and broadcast materials developed on all terrain vehicle safety and the prevention of youth suicide.

ACDRS made further progress improving case review completion rates and overall participation of the local teams. A second statewide conference was conducted in August 2006. The conference was conducted to ensure that everyone involved in the ACDRS understood the purpose, mission, procedures, and operations of the program and was a huge success.

ACDRS published the fifth Annual Report in 2006 that included covered analysis of 2003 data. A revised set of recommendations for prevention strategies to lower child death rate were developed and submitted to the Governor.

Family Planning

Direct patient services were provided to approximately 100,083 family planning clients in FY 2006. Plan *first*, a joint venture between the Alabama Medicaid Agency and Alabama Department of Public Health (ADPH), is an 1115 (A) Medicaid Research and Demonstration Waiver expanding Medicaid eligibility for family planning services to women age 19-44 at or below 133 percent of the federal poverty level. The program completed its fifth year of implementation and because of its overall success, was granted a three-year renewal. Plan *first* services include a psychosocial assessment to determine one's risk for an unplanned pregnancy. Care Coordination services were offered by a social worker or a nurse to those who were identified as "high risk" for an unplanned pregnancy. As of September 2006, 80,272 women statewide were enrolled in Plan *first*. Also, the ADPH continued the toll-free hotline receiving more than 5,700 calls regarding Plan *first*.

Healthy Child Care Alabama (HCCA)

Healthy Child Care Alabama is a collaborative effort between the ADPH and the Alabama Department of Human Resources (ADHR). During FY 2006, the HCCA Program received funding to expand services to 61 counties. Three additional nurses were hired for a total of ten registered nurse consultants. Services offered by the HCCA Program include child development, health and safety classes, coordinating community services for special needs children, identifying community resources to promote child health and safety.

Quality childcare is promoted by collaboration with community agencies and organizations to reduce injuries and illnesses. The nurse consultants perform health and safety assessments of child care facilities and assist the childcare provider in developing and completing a corrective action plan, if a problem is identified.

During fiscal year 2006, the nurse consultants documented 1,276 health and safety trainings and educational sessions for 4,208 providers, 557 site visits and distributed 5,269 support services resource information. The nurse consultants also provided health and safety programs for 12,683 children in the childcare setting.

Pregnancy Risk Assessment Monitoring System (PRAMS)

The Alabama Pregnancy Risk Assessment Monitoring System (PRAMS) started collecting data in 1992. It is designed to help state health departments establish and maintain a surveillance system of selected maternal behaviors. The Centers for Disease Control collaborated with Alabama, other states and the District of Columbia, to implement the system. PRAMS is an ongoing, population-based surveillance system designed to generate state-specific data for planning and assessing perinatal health programs. Maternal behavior and pregnancy outcomes have been strongly associated, thus the impetus for seeking to improve efforts to understand contributing factors to infant mortality and low birthweight. The information provided includes topics ranging from

obstetrical history and prenatal care to maternal stress factors and pregnancy intentions.

In 2005 the project continued to operate as a population-based surveillance system. The goals of PRAMS include the following: (a) describe maternal behaviors during pregnancy and early infancy; (b) analyze relationships between behaviors, pregnancy outcomes (i.e., low birthweight and prematurity) and early infancy morbidity; (c) serve as a resource for the development and implementation of intervention programs, as well as effectively targeting existing programs; and (d) evaluate intervention efforts.

PERINATAL PROGRAM ACTIVITIES

Regional perinatal nurse positions were created by the ADPH in 2002 for each of the perinatal regions across the state. The positions were designed to strengthen statewide efforts to maximize perinatal health by coordinating a regional system of perinatal care for improved access and quality of services for pregnant women, mothers and infants. The State Perinatal Program has partnered with March of Dimes since 2004 to address the problem of premature births. The perinatal staff has provided education to physicians and their office staff, in addition to maternity hospital staff, regarding preconception, prenatal and infant care patient education to improve perinatal outcomes. Included in these trainings were: smoking cessation counseling, importance of preconception ideal body weight; effects of alcohol and substance abuse on pregnancy; importance of folic acid supplementation for all women of childbearing age; breastfeeding promotion and support; and safe infant sleep environment. Collateral functions of the perinatal staff included managing the respective RPAC activities and implementing policies and guidelines of the SPAC.

ASSESSMENT OF THE MATERNAL/INFANT POPULATION

ADPH, through the Bureau of Family Health Services (BFHS), was the lead agency for assessing needs pertaining to pregnant women, mothers and infants. The Director of the Bureau=s Epidemiology/Data Management Branch coordinated the Bureau=s needs assessment.

An increase in Hispanic births was a major change in Alabama=s demographics. Based on birth certificate data, the number of live births to Hispanic residents had increased ten-fold in 14 years: from 346 in 1990 to 3,375 in 2004. The rise in Hispanic population is impacting the services being provided to families by the ADPH. Translators, bilingual staff and appropriate written literature are factors that must be addressed. The BFHS continues to assess the ever-changing needs of Alabama=s population and develop strategies to address it.

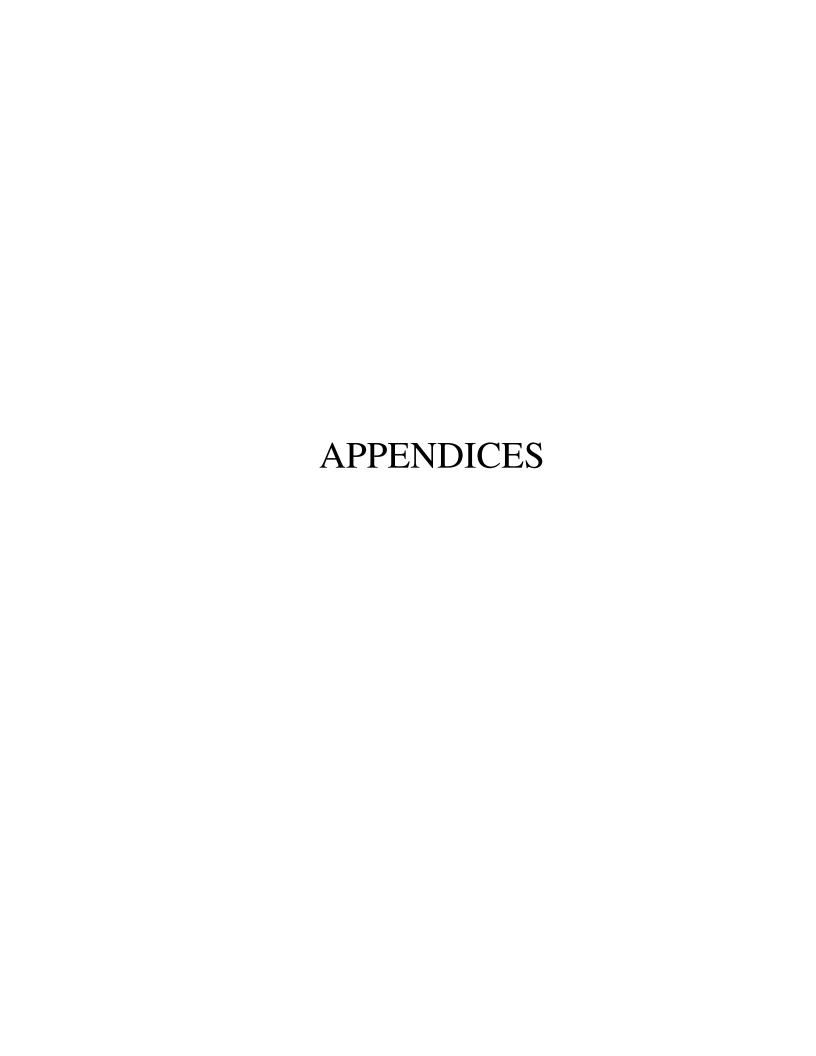
FY 2007 GOALS

- 1. Reduce infant morbidity and mortality by identifying the contributing factors and implementing steps to mitigate those factors.
- 2. Improve healthcare services for mothers and infants through facilitation of state, regional and local/community collaboration, interest and action regarding healthcare needs and services.

FY 2007 OBJECTIVES

- Identify factors that contributed to 25% (140) of the infant deaths in 2005 (Total of 561 births in 2005; source ADPH, Center for Health Statistics).
- 2. Reduce the percent of births to women who received no prenatal care to 1.0 percent by expanding the State Children's Health Insurance Program to cover unborn infants (Alabama Baseline: 1.64 percent in 2005; source ADPH, Center for Health Statistics).
- 3. Expand the Newborn Screening Program to include 29 disorders, as recommended by the American College of Medical Genetics.
- 4. Reduce the incidence of low birthweight to no more than 10.0 percent (AL&HP Objective, Alabama Baseline: 10.5 percent in 2004; source ADPH, Center for Health Statistics).
- 5. Decrease the percent of women who smoke during pregnancy to 10.0 percent (AL&HP Objective, Alabama Baseline: 11.2 percent in 2004; source ADPH, Center for Health Statistics).
- 6. Decrease the percent of adolescents age 10-19 who smoke during pregnancy to 13.0 percent (AL Objective, Alabama Baseline: 13.2 in 2004; source ADPH, Center for Health Statistics).
- 7. Increase to 87 percent the proportion of pregnant women who receive adequate prenatal care in the first trimester, and receive risk-appropriate care, including an opportunity for screening and counseling for fetal abnormalities (AL&HP Objective, Alabama Baseline: 84.0 in 2004; source ADPH, Center for Health Statistics).
- 8. At least 87 percent of babies with birthweights of 500-1499 grams will be born at Perinatal Class A or B hospitals (AL&HP Objective, Alabama Baseline: 85.3 in 2004; source ADPH, Center for Health Statistics).
- 9. Increase the percent of mothers who place their infants on their back for sleeping to 90 percent (AL Objective, Alabama Baseline: 54.4 percent in 2003 [2004 rate unavailable to date] source ADPH, Center for Health Statistics).

10.	Increase the percent of mothers who breastfeed their infants for one week or longer to 53 percent (AL Objective, Alabama Baseline: 51.9 in 2003; [2004 rate unavailable to date] source ADPH, Center for Health Statistics).



APPENDIX A

Alabama Perinatal Healthcare Act (1980)

CHAPTER 12A. PERINATAL HEALTHCARE.

Sec.

22-12A-l. Short title.

22-12A-2. Legislative intent; "perinatal" defined.

22-12A-3. Plan to reduce infant mortality and

handicapping conditions; procedure, contents, etc.

22-12A-4. Bureau of maternal and child

Sec.

health to develop priorities, guidelines, etc.

22.12A-5. Bureau to present report to legislative committee; public health funds not to be used.

22.12A-6. Use of funds generally.

§22-12A-l. Short title.

This chapter may be cited as the Alabama Perinatal Health Act. (Acts 1980, No.80-761, p. 1586, § 1.)

§22-12A-2. Legislative intent; "perinatal" defined.

- (a) It is the legislative intent to effect a program in this state of:
 - (I) Perinatal care in order to reduce infant mortality and handicapping conditions;
- (2) Administering such policy by supporting quality perinatal care at the most appropriate level in the closest proximity to the patients' residences and based on the levels of care concept of regionalization; and
- (3) Encouraging the closest cooperation between various state and local agencies and private healthcare services in providing high quality, low cost prevention oriented perinatal care, including optional educational programs.
- (b) For the purposes of this chapter, the word "perinatal" shall include that period from conception to one year post delivery. (Acts 1980, No.80-761, p. 1586, § 2; Acts 1981, 3rd Ex. Sess., No.81-1140, p. 417, § 1.)

§ 22-12A-3. Plan to reduce infant mortality and handicapping conditions; procedure, contents, etc.

The bureau of maternal and child health under the direction of the state board of health shall, in coordination with the state health planning and development agency, the state health coordinating council, the Alabama council on maternal and infant health and the regional and state perinatal advisory committees, annually prepare a plan, consistent with the legislative intent of section 22-12A-2, to reduce infant mortality and handicapping conditions to be presented to legislative health and finance committees prior to each regular session of the legislature. Such a plan shall include: primary care, hospital and prenatal; secondary and tertiary levels of care both in hospital and on an out-patient basis; transportation of patients for medical services and care and follow-up and evaluation of infants through the first year of life; and optional educational programs, including pupils in schools at appropriate ages, for good perinatal care covered pursuant to the provisions of this chapter. All recommendations for expenditure of funds shall be in accord with provisions of this plan. (Acts 1980, No.80-761, p. 1586, § 3; Acts 1981, 3rd Ex. Sess., No.81-1140, p. 417, § I.)

§ 22-12A-4. Bureau of maternal and child health to develop priorities, guidelines, etc.

The bureau of maternal and child health under the direction of the state board of health, and the state perinatal advisory committee representing the regional perinatal advisory committees, shall develop priorities, guidelines and administrative procedures for the expenditures of funds therefore. Such priorities, guidelines and procedures shall be subject to the approval of the state board of health. (Acts 1980, No. 80-761, p. 1586, § 4.)

§ 22-12A-5. Bureau to present report to legislative committee; public health funds not to be used.

The bureau of maternal and child health under the direction of the state board of health shall annually present a progress report dealing with infant mortality and handicapping conditions to the legislative health and finance committees prior to each regular session of the legislature. No funds of the state department of public health shall be used for the cost of any reports or any function of any of the committees named in section 22-12A-3. (Acts 1980, No. 80-761, p. 1586, § 5.)

§ 22-12A-6. Use of funds generally.

Available funds will be expended in each geographic area based on provisions within the plan developed in accordance with section 22- 12A-3. Funds when available will be used to support medical care and transportation for women and infants at high risk for infant mortality or major handicapping conditions who are unable to pay for appropriate care. Funds will only be used to provide prenatal care, transportation, hospital care for high risk mothers and infants, outpatient care in the first year of life and educational services to improve such care, including optional educational programs, for pupils in schools at appropriate ages but subject to review and approval by the local school boards involved on an annual basis. (Acts 1980, No.80-761, p. 1586, § 6; Acts 1981, 3rd Ex. Sess., No.81-1140, p. 417, § I.)

APPENDIX B

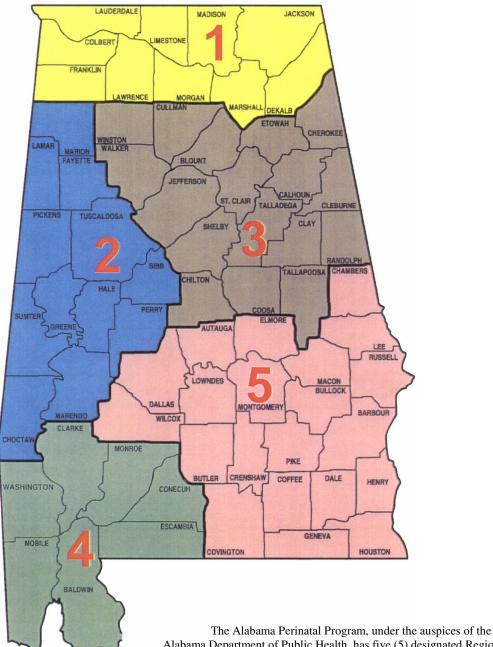
Alabama Public Health Areas Map



APPENDIX C

Perinatal Regions Map

Perinatal Regions



Alabama Perinatal Program, under the auspices of the Alabama Department of Public Health, has five (5) designated Regional Perinatal Centers. These centers serve as the central perinatal centers for the populations within the designated geographical areas. The designated Perinatal Regions based on their Neonatal Intensive Care Units (NICUs)

- (1) Huntsville Hospital, Madison
- (2) DCH Regional Medical Center, Tuscaloosa
 - (3) University of Alabama at Birmingham, Jefferson
 - (4) University of South Alabama, Mobile
 - (5) Baptist Medical Center, Montgomery