II. Needs Assessment Table of Contents

II. Needs Assessment of the Maternal and Child Health Population

2.1 Needs Assessment Process and Content

The Title V MCH Needs Assessment process consisted of several methodological principals in order to ensure the ongoing nature of the process and to incorporate the needs assessment results and activities into other portions of the grant application and annual report. Of these methods, national and state performance measures were examined, overall MCH health status was considered and capacity indicators were used to develop the state's top ten MCH priorities and new state performance measures based on the findings of the needs assessment. In order to cycle through the phases of the needs assessment, steps involved the collaboration of a workgroup, conducting of special analyses, analyzing health status and existing data, identifying current activities to address needs, and finally assigning top priorities and developing a plan to address the priorities and monitor progress over the next five years. These steps are described in detail in this section of the needs assessment report.

Mississippi's Title Five MCH Needs Assessment involved a year-long process for Mississippi Department of Health (MDH) staff and its statewide partners. For this needs assessment, a full time staff member of the Health Services Data Unit was assigned to coordinate the assessment. The process began in May 2004 with the commencement of an MCH Needs Assessment Workgroup. The workgroup consisted of stakeholders within MDH, such as office directors and district staff, and stakeholders outside of the agency, such as Medicaid representatives, Department of Human Services, Mississippi Systems of Care, and other social service agency heads.

Data collection was planned at the state, district, and community levels. The state level included the usual MCH data obtained from vital statistics, national performance measures and outcomes, and the previous state performance measures. For each performance and outcome measure, staff examined the projection, the trend in our indicators, and the comparison of our progress with other states in the region. Staff also analyzed the last needs assessment priorities and progress made on these priorities. Most of these data were secondary data.

During the summer of 2004, ad hoc committees were created in order to develop survey tools for primary data collection. Both survey tools were intended to be descriptive and qualitative in nature. Once completed, the Needs Assessment Coordinator and a Graduate Student Intern traveled to six of the nine health districts in order to collect MCH consumer data. Surveys were administered in partnership with the MDH Office of Organizational Quality to obtain data from the remaining three public health districts. Data collected at district and community levels were focused on several questions. When surveying MDH consumers, key questions were asked:

- ✓ What are your barriers to care?
- ✓ What are your public health needs?
- ✓ Are your needs being met?

Another survey developed by the ad hoc committee addressed community wide issues. This survey addressed not only access and barriers to care issues, but also special populations existing around the state. In completing surveys, MDH wanted to address any issues from a strengths-based perspective and asked the professionals completing the surveys to identify major assets in their community. Staff then asked questions with the described purpose or intent:

- ✓ Who has the problem? This question was intended to identify any special subpopulations within communities.
- ✓ What are the major barriers to care? This scale asked the MCH professionals to rate the severity of barriers to care in their community. Such barriers included transportation, access to mental health care, access to dental care, etc.
- ✓ What are possible solutions to these problems? This open-ended question allowed professionals to give feedback as to how challenges in their community could best be addressed.

The second workgroup meeting was also held during the summer. Tasks included protocol for data collection and activities to be led by workgroup members at the kick-off conference. After much deliberation, the workgroup members decided to use the Hanlon Method for state priority selection. At the end of August, the Data Unit held a needs assessment kick-off conference entitled "Uniting to Build Healthier Mississippi Families" (see Attachment A). The Data Unit staff and consultants presented the needs assessment process to state leaders and public health professionals. The conference served two purposes: (1) a statewide forum to kick off the needs assessment process and build collaboration among MCH professionals; and (2) an opportunity for MCH professionals to gain knowledge about birth defects and developmental disabilities. The Centers for Disease Control and Prevention, the National Center for Birth Defects and Developmental Disabilities provided funding for the conference.

During the fall months of 2004, the aforementioned community surveys were completed and returned to the needs assessment coordinator. Programmatic data were collected. The needs assessment coordinator met with MCH program heads to summarize MCH programs over the past five years. Directors submitted data along with descriptions of their programs. In addition to informal data gathering, the needs assessment coordinator compiled formal reports, analyses, and statistics from the past five years reflecting the health status of women, children, and children with special health care needs. Such reports will be later referenced in this report. These reports included, but were not limited to, data gathered from Medicaid, independent studies reflecting child death issues, the uninsured population, and vital statistical information.

An important integration of citizen and family participation in the needs assessment is reflected through the use of reports from focus groups held statewide as well as through a dental screening survey. The Statewide Early Childhood Comprehensive Survey used focus groups to identify key themes and elements in five areas of care for children. This information was shared with the needs assessment coordinator and results were used in the description of services to children and the description of overall health status of the MCH population. The dental survey was another method of collecting primary data. These data

were analyzed by the Data Unit and also used as a means of examining capacity and gathering baseline information on children as it relates to oral health. Other special topics investigated at the state level included: Perinatal Periods of Risk, Asthma Surveillance and Prevention, Prematurity, Infant Mortality, and the Mississippi National evaluation of Camp Noah**.** These special analyses will be further discussed under the appropriate population group.

Beginning in January 2005, data were analyzed and converted into report and presentation form. In addition to analyzing primary data, the needs assessment and block grant coordinators worked collaboratively to analyze trends over the past five years and summarize special analyses conducted since the 2000 needs assessment.

In late March, a second needs assessment conference was held. During this conference, data and reports were presented to the MCH Needs Assessment Workgroup and MCH stakeholders and professionals throughout the state. The MCH Needs Assessment Workgroup met the following day to set the state's priorities for the next five-year term. During the conference, simply entitled "Needs Assessment Priority Setting Conference" (see Attachment B), data were presented and the MCH Workgroup members established the top priorities. In order to achieve this task and reach consensus, the workgroup used the Hanlon Method of prioritization. By analyzing data collected during the needs assessment process, advisory committee members were able to develop State Performance Measures, suggestions for providing services to target populations, and priorities for the State's 2005 MCH Block Grant Application, all consistent with needs revealed in the Statewide Needs Assessment.

An array of resources was used in the collection, synthesis, and analysis of data for the needs assessment in an effort to assess health status, health care access, delivery systems and insurance needs. Existing data were the most common data used. Data sources were supplemented and updated through recent surveys, such as the community survey, consumer survey, and key informant interviews with individuals in a variety of agencies. Data sources from in-house systems included data from Vital Statistics, the Patient Information Management System (PIMS), the WIC Automated Data Processing System, the Children's Medical Program (CMP) Patient Information System, and other program-specific information sources, both automated and manual. External sources such as the Mississippi Division of Medicaid, Department of Human Services, University of Mississippi Medical Center, Blue Ribbon Task Force, and others were used to augment data. National surveys and data sources were also utilized for the state needs assessment. The Children with Special Health Care Needs (CSHCN) State and Local Area Integrated Telephone Survey (SLAITS) was a major component of assessing the needs of Mississippi's CSHCN population.

Specific documents or publications from which information was drawn included the 2004 Kids Count Data Book-State Profiles of Child Well-Being, independent studies and reports by agencies and universities across the state, Behavioral Risk Factor Surveillance System, (BRFSS) Mississippi Youth Risk Behavior Survey (YRBS—1999, 2001, 2003), Youth Tobacco Survey (YTS), and various state strategic health plans and annual reports. Data were examined relevant to: size, location, and characteristic of target populations; barriers to care; program eligibility, including income, risk status, and payment source; and availability/

accessibility of health care providers. The examination identified major health problems and contributing factors, existing health resources, and gaps between problems and services.

The most obvious limitations relate to fluctuations in health manpower and health facilities. Limitations of primary data collection include individual bias and limitations associated with quantification of qualitative data. Other data limitations relate to challenges in acquiring data from outside MDH. Most often, HIPPA was cited as the reason for inability to share information. Finally, although some items reflect the most recent data available, they are not the most current, specifically with vital statistics. MDH Office of Health Informatics has been improving its computer system and has acquired a new system. Consequently, vital statistic information lags approximately one to two years behind.

Once the health problems with contributing factors and current levels of service and resources were described, existing gaps in services were analyzed. Trends, including positive or negative improvement in health status, were examined. Prioritization of identified needs is based on the efficiency and effectiveness with which objectives can be met, given the current resources and future funding available to address needs. Once priorities were established, formalizing objectives to meet needs was accomplished.

One needs assessment strength was access to an MCH Epidemiologist from the Centers for Disease Control and Prevention (CDC) to assist in the development of Mississippi's 5-year needs assessment. Until the epidemiologist's departure in March 2005, she guided the process of compiling and consolidating data into content and form appropriate for addressing and identifying the needs of the MCH and CSHCN population in Mississippi. A staff member was assigned full time to coordinate the efforts of the needs assessment. Having one staff member to dedicate time to coordination efforts allowed Mississippi to conduct a more thorough, comprehensive needs assessment than in prior years. This change positively affected the needs assessment and will remain intact for the next five year cycle.

Weaknesses identified throughout the process primarily consisted of limited participation from MCH partners outside the Title V agency. Although agencies and MCH leaders expressed a desire for collaboration and support, a changing political environment, state budget issues, and unavoidable scheduling conflicts, kept agency representatives from dedicating time and manpower to the MCH needs assessment workgroup. However, expressions of support were indicated. Another challenge facing the needs assessment is the fragmented data collection system throughout Mississippi. Mississippi lacks a data warehouse for all data related to maternal and child health needs. Additionally, there are serious limitations in gaining access to data from agencies outside the MDH. Partnerships in order to improve data sharing for the purpose of public health research and surveillance are needed to avoid this challenge in the future.

After all of the data were considered and shared with the MCH Workgroup, the workgroup successfully reached consensus regarding the state's top ten priorities to address during the next five years. Twenty-five MCH issues identified by the data collected throughout the needs assessment process were presented to the workgroup for consideration. Using the Hanlon Method of Prioritization, the MCH Workgroup rated the twenty-five issues while

working in small breakout sessions. The workgroup then met as a whole to reach consensus using this rating method on the top ten priorities of the needs assessment.

Following the entire process, the needs assessment report was written and submitted for interagency approval. During this time, the needs assessment was amended and critiqued by office and bureau directors. Upon completion, the needs assessment report was submitted to the block grant coordinator for submission to MCHB.

2.2 Needs Assessment Partnership Building and Collaboration

Many initiatives are currently being implemented to build partnerships within the MDH. Over the past few years, the MDH has undergone reorganization at many levels, which has led to the creation of the Health Services Data Unit, which partners with the other areas within Health Services. Partnerships between the Data Unit and other offices within MDH include collaborative efforts with the Offices of Child and Adolescent Health, Dental Health, and Preventive Health in order to work with the Youth Risk Behavior Surveillance System (YRBSS), a statewide elementary school oral health needs assessment, and the Preventative Health Services Block Grant, respectively.

One grant that emphasizes collaboration among MCH programs is the Closing the Gap on Infant Mortality (CTG) grant. CTG addresses infant mortality in high risk areas of Mississippi through a holistic approach to care, intervention, and surveillance. Because the grant calls for work with mothers and babies, as well as surveillance of maternal and infant mortality, it promotes collaboration between the Health Services Data Unit, the Office of Child and Adolescent Health, and the Office of Women's Health.

Initiatives for partnerships with governmental agencies and non-governmental agencies continue to flourish in Mississippi. The Office of the Governor has developed task forces to address selected priority needs in Mississippi. For example, the Council on Obesity investigates and initiates activities surrounding obesity in the state. The Governor's Office also appoints members to the Infant Mortality Task Force, thus encouraging collaboration between state political leaders, public health professionals, medical professionals, and social service agencies.

The methodology for supporting and initiating such collaborations comes from different sources. Many times the directives for the collaborations come from political leaders and state agency heads. Where the needs assessment is concerned, partnering methods are developed through strong networking and seeking out nontraditional partners to bring to the table. These partnerships have led to a stronger needs assessment with more comprehensive input throughout the year. The state Title V agency intends to maintain such collaboration in between needs assessment cycles to facilitate implementation of activities, ongoing monitoring of progress and continued examination of statewide capacity.

2.3 Assessment of the Needs of the MCH Population

Mississippi is a predominately rural state with approximately three-quarters of the 2.8 million state residents living in non-metropolitan areas. The racial composition of Mississippi residents is mixed, with three fifths of the residents Caucasian and about two-fifths African-American. Mississippi has the largest portion (nearly 40 percent) of African-American residents among all the states. The Hispanic and non-citizen immigrant populations are small but growing, as Cubans and Central Americans have been brought in to work for the poultry, forestry, and construction industries in the state. The rural nature of Mississippi makes it very important that health care resources be appropriately targeted to the areas of greatest need. Less than 20 percent of Mississippians reside in one of the eight cities with a population of 25,000 or more, and only one-third live in cities of 10,000 or more residents. The state has three standard metropolitan statistical areas (SMSAs): Biloxi-Gulfport (Hancock and Harrison counties), Jackson (Hinds, Madison, and Rankin counties), and Pascagoula-Moss Point (Jackson county). Desoto county is included in Memphis SMSA.

Mississippi is, and has been for many years, one of the poorest states in the nation. The state has a high poverty rate and inadequate resources exist statewide for women and children to access medical care. Lack of available services was identified by consumer and community surveys, primary data collection. Issues surrounding access to care, whether it be medical care, dental care, or specialty care, were prominent themes in the data. Transportation access and shortages contribute to the difficulties many people encounter in obtaining care. Urban transit systems serve the Jackson, Hattiesburg, and Biloxi/Gulfport areas, where taxi service is also available. Rural transit systems consist of elderly/handicapped buses operated by a variety of community agencies. There are special transit services for specific services, but none encompass all needs of the MCH population.

Community assets were reported as people, schools, and the medical community. The medical community was identified as an asset since prominent practitioners work toward bridging gaps in services. However, even in areas where the medical community is strong, there is still a severe shortage in providers who care for indigent patients or who accept Medicaid. With medical costs continuing to rise, it is not plausible to assume that a few can carry the load of many. Other barriers to adequate health care include a shortage of providers in rural areas, lack of cultural competency, inadequate health coverage, and general lack of funding for services. Possible solutions include promoting cultural competency and health education for providers, funding services and programs targeting identified populations, and evaluating the effectiveness of these services and programs.

Mississippi citizens rely heavily on public benefits for health care coverage. Medicaid pays for approximately fifty percent of all births. Approximately seventy-five percent of all children ages 0-5 are served by WIC. This speaks of incredible poverty in Mississippi. Inadequacies in health care coverage limit access to providers and facilities. Medical malpractice insurance rates have driven many providers from the state. Nonwhites use hospital emergency rooms and clinics much more often than do whites. African-Americans are more likely to be Medicaid recipients and more likely to be uninsured, due largely to their employment status. Rural areas, particularly those with a high concentration of poor African-

Americans, often have very few medical resources. This fact further limits access to primary health care. Throughout Mississippi, many counties or portions of counties are designated as health professional shortage areas (HPSAs) for primary medical care.

With so much poverty and unemployment, there is reduced access to health care in Mississippi. Individuals do not have funds to pay for health insurance nor are there sufficient opportunities to obtain health insurance through employment or publicly funded programs such as Medicaid. Compounding this problem is the fiscal troubles of the Medicaid system in general. For several years, Medicaid has had a budget shortfall. In 2004, the shortfall approached the $250 million mark. Because of the high proportion of the state's population living below the poverty level, their dependence on transfer payments, and the high number of unemployed, Mississippi's tax base has not expanded sufficiently to meet the needs of low-income citizens. Mississippi has the lowest tax capacity index among southern states.

High quality health care services depend on the availability of competent health personnel in sufficient numbers to meet the population's needs. Mississippi is traditionally a medically underserved state, particularly in sparsely populated rural areas and areas containing large numbers of poor people, elderly people, and minorities. Data on health manpower show that among southeastern states, Mississippi ranks lowest in physician to population ratio. There is only one primary care physician for every 1,572 persons.

2.3.A. Maternal Health

Pregnancy and Birth Data: In 2003, the fertility rate was 67.9 live births per 1,000 women aged 15-44 years. Table 1 below provides information on Mississippi live birth rates by race over the most recent four years.

Table 1
Number of Births, Mississippi, 2000-2004

	2000	2001	2002	2003	2004
Live Births (all races)	44,075	42,277	41,511	42,321	42,310
White	23,540	22,798	22,620	23,118	23,114
Nonwhite	20,535	19,479	18,891	19,203	19,196

Mississippi has one of the highest percentages of births to teenagers in the nation, with 16 percent of all live births to Mississippi teens in 2003. Of those, nearly one-quarter of the births were to teens that had already had at least one previous birth. Every year in Mississippi many babies are born to "at risk" mothers. "At risk" factors include mothers:

1. under 17 years or above 35 years of age;
2. who are unmarried;
3. have completed less than eight years of school;
4. have had fewer than five prenatal visits;
5. who began prenatal care in the third trimester;
6. with prior terminations of pregnancy; or
7. with short inter-pregnancy intervals (prior delivery within 11 months of

conception for the current pregnancy).

In 2003, teenagers delivered 16% of the total 42,321 births. Girls aged 14 or younger gave birth to 154 infants, 83% of which were minority teens. Although persistent, this type of statistic has slightly declined over the past five years. Very young mothers are at risk both biologically and behaviorally.

According to 2003 data from the Office of Health Informatics, 86.3% of women with a live birth during the reporting year received adequate prenatal care as stated by the Kotelchuck index. This represents a steady growth in women receiving adequate prenatal care. Over the past five years, mothers seeking prenatal care in the first trimester have improved (see Table 2 below). Of note is the continuing disparity in white and nonwhite mothers receiving early prenatal care. On average, ten to fifteen percent more white mothers receive early care than nonwhite. Using the Kotelchuck Index to measure the quantitative adequacy of care, approximately 14% of Mississippi mothers did not receive adequate care. Nonwhite women were about two times more likely to have received inadequate care than whites. The percent of women receiving no prenatal care is small, ranging between 1.0% and 1.5% over the five-year span.

Table 2
Percentage of Mississippi Women Receiving Prenatal Care in First Trimester

	2000	2001	2002	2003
All Races	80.8%	82.2%	83.1%	84.3%
White	88.4%	88.8%	89.3%	90.0%
Non-White	72.2%	74.5%	75.7%	77.4%

Women, Infants, and Children—WIC: Mississippi's WIC program is an incentive for early entrance into the expanded maternal and child health delivery system, and is an important component of comprehensive preventive health service. Infants and children are eligible if they show signs of poor growth, anemia, obesity, chronic illness, or nutrition-related diseases. Pregnant and postpartum women are considered at risk if they are younger than 18 or older than 35, have a poor obstetrical history, are anemic, or gain weight at an undesirable rate.

The WIC program, in its effort to improve pregnancy outcomes; reduce health problems associated with poor nutrition during pregnancy, infancy, and early childhood; reduce infant mortality; and provide special supplemental food and nutrition education to low-income pregnant, postpartum, and breast-feeding women, infants and preschool children who have nutrition-related risk conditions serves many of Mississippi's women, infants and children. The WIC foods are especially high in protein, iron, calcium, and vitamins A and C.

During FY 2004, the WIC program served an average of 102,548 women, infants and children per month. WIC served 100 percent of eligible babies, age one year and under, representing 74 percent of all babies in the state. The WIC participation rate exceeded 95%. Monthly averages of 23,817 pregnant, postpartum and breastfeeding women and 47,981

children ages one to five were served throughout the year.

Breastfeeding is an important component of WIC, just as it is an important topic for new mothers and public health. Research supports breastfeeding for newborns. Since the WIC program serves about three quarters of the state's infants, therein lies an opportunity to promote healthy behaviors through breastfeeding. The USDA Food and Nutrition Services have recognized the Mississippi Breastfeeding Promotion and Support Program as a national model. A formal evaluation of the Loving Support Breastfeeding Campaign reflects that the state has an overall breastfeeding initiation rate of 52.4% and a WIC specific rate of 42.9%.

PHRM/ISS—The Perinatal High Risk Management/Infant Service System: The Perinatal High Risk Management/Infant Service System (PHRM/ISS) provides a multidisciplinary team approach to high-risk mothers and infants statewide. Enhanced services include nursing, nutrition, and social work. A team of professionals provides risk screening assessments, counseling, health education, home visiting, and monthly case management. As stated in the state narrative in the block grant application, PHRM/ISS is a valuable source of service delivery for high-risk women and infants in Mississippi and served 24,546 women in FY 2004. Of those served, 13,385 were African American and 10, 427 were white.

A better description of the perinatal risks for Mississippi may be derived from the PHRM/ISS data than birth certificates, since the data are collected on enrollment into prenatal care. It is especially true if the PHRM screening tool is used by all providers of perinatal care and is more comprehensive than data obtained from birth certificates. Data may be useful in better defining the epidemiology of perinatal outcomes in Mississippi, and the Health Services Data Unit intends on creating studies with these data in the near future.

Domestic Violence and Rape Crisis Programs: Over the past twenty years, MDH has overseen various domestic violence and rape crisis programs, offering funding to non-profit agencies throughout the state. The Domestic Violence and Rape Crisis Programs fit the mold of the MDH mission statement in that the safety and well being of underserved are priority and protected through funding provided by the MDH. Through contracts with 13 domestic violence shelters and 8 rape prevention and crisis intervention programs, direct services to victims and their children are provided. A public education and awareness campaign is ongoing, while special target populations include college students, senior citizens groups, the disabled, adult survivors, and children. A Sexual Assault Nursing Examiners program also provides education and training in hospital emergency departments and communities statewide. Through these activities, the program coordinator represents MDH in task forces and to external partners such as the Department of Public Safety, Department of Human Services, and the Office of the Attorney General.

In the past five years, there have been major successes in the program. The Youth Public Awareness Campaign focused on teaching elementary and middle school students respect and responsibility in violence prevention. During the reporting period, over 2,200 children participated. During evaluation, it was determined that youth improved their overall knowledge of respect, personal rights, violence prevention and anger management. A second success has been the Sexual Assault Nurse Examiners (SANE) program. This program is

designed to educate nurses to sit for the certification exam. In 2002, the SANE program was used as a model at the International Association of Forensic Nurses Scientific Assembly and in national training videos and international training courses.

In FY 2004, domestic violence shelters across the state assisted over 4,000 women and children in escaping violent situations. Of new and reopened women's cases providing shelter, over half were to women that were of extremely low socioeconomic status (>$5,000/year income). There did not seem to be a large disparity between Caucasians and African-Americans seeking help at shelters, with the largest age group being 19-40 year olds. That same year, 62,286 crisis calls were fielded from staff throughout the state; 35,422 of those calls resulted in information and referrals. The 2004 data are indicative of slightly declining, but stable rates of assistance to those affected by domestic violence, rape, and sexual assault.

Pregnancy Risk Assessment Monitoring System (PRAMS): PRAMS is part of the Centers for Disease Control and Prevention initiative to reduce infant mortality and low birth weight. PRAMS is an on-going, state specific, population-based surveillance system designed to identify and monitor selected maternal behaviors and experiences before, during and after pregnancy. The Mississippi PRAMS project has been underway for approximately three years. The first year of data collection in Mississippi for PRAMS was 2002. During that year, the project surveyed 1,167 women who had given birth in 2002, yielding an overall response rate of 61 percent. Because this response rate is lower than the 70 percent required, the report could not include population weighting. Therefore, results cannot be generalized to the maternal population of Mississippi. All PRAMS reports and raw data for 2003 births have been submitted to CDC. An overall response rate of 73% shows a vast improvement in survey collection. Weighted data will be obtained and analyzed for 2003.

Phase five of the PRAMS survey began in January 2004. The staff collaborated with the MDH Dental and STD/HIV programs to ask state specific questions of concern to the survey. Also, the MDH's PRAMS staff submitted a poster presentation entitled "A Year in Review: Making the Program Work" at the Tenth Annual Maternal and Child Health Epidemiology Conference in Atlanta, Georgia.

Even though the report has not yet been generalized, it is important to note that the information collected was valuable in suggesting what risk factors pregnant women may have in Mississippi. These clues will be helpful in addressing high-risk mothers in the near future. Data from this report suggest that Mississippi should continue addressing disparities and improve programs related to disparities in health care and health education and should focus efforts toward minority women, women of low socioeconomic status, and selected environmental factors.

Consumer Satisfaction: During the summer of 2004, the needs assessment coordinator conducted a survey to assess the satisfaction of MCH services to MDH consumers (n = 341). This was a convenience survey. It should be stated that respondents were consumers of MDH services, not the general public. However, recipients of services provided a wealth of information concerning the needs of women and children in health department settings. The

majority of respondents were patients seeking family planning, immunization, WIC, and maternity services. Some of the needs voiced by respondents included:

- Long waiting times/difficulty getting speedy appointments
- Wanting after hours and weekend services
- Privacy at front counters
- Have things to do in the waiting room
- Have things for kids to do in the waiting room to control noise, etc.
- Hire more staff
- Change aesthetics of lobby/waiting room

The respondents were also asked to identify the positive aspects of obtaining services at health department clinics. The following were most often identified:

- Friendly staff
- Clean, like the environment
- Cost (free or inexpensive)
- Information provided to consumer
- WIC

Transportation is consistently described as a barrier to care in Mississippi, especially since it is such a rural state. Of surveys distributed in the health department clinics, 94 percent of respondents stated that they had no trouble getting to the clinic. However, it must be said that there was no way for the coordinator to survey consumers who did not keep their appointment or access services. Because of this, it is noteworthy to examine the responses of the 6% that stated they have difficulty getting to the clinic. Of these respondents, their needs were described as better transportation and different clinic hours. This supports the notion that transportation is a major factor in accessing health care.

Community Survey: To complement the consumer survey, a community survey was developed to interview professionals throughout the state. The purpose of this survey was to identify special populations throughout the state, gaps in services, and possible solutions. The survey was distributed throughout the public health districts in order to gain a snapshot of communities across the state. Of approximately 500 surveys distributed, 194 were returned containing valuable information. The results are distributed throughout subsequent report sections.

Special Sub-Populations: The ethnic and racial makeup of Mississippi is rapidly changing. Many districts report a growing Hispanic population related to the poultry, farming and forestry industries. The majority of clients seen in local health department clinics are of childbearing age and undocumented. They are usually pregnant or seeking family planning services. Because they are undocumented, they do not qualify for Medicaid benefits except emergency Medicaid to cover delivery only. Many refuse to apply for emergency Medicaid because they fear being reported to immigration services. Similarly, parents do not apply for Medicaid for the newborn who qualifies for Medicaid as a United States citizen. This places hardship on county staff trying to access services for this population. Financial and language

barriers exist. To reduce language barriers, several districts have hired translators through special grants such as Title X Special Initiatives. Some districts have Spanish-speaking staff. Others use community volunteers as interpreters.

The Choctaw population is primarily concentrated in one of the nine public health districts. Indian Health Services (IHS) largely provides services on the reservation. Most deliveries take place at the University of Mississippi Medical Center in Jackson. The Choctaw Health Center has developed an effective clinic for women and children in coordination with the University of Mississippi Medical Center to handle high-risk patients. Data indicate that the Choctaw MCH population needs are being met through IHS.

Several districts report an increase in the college/international population at larger universities in the state. Language is a barrier as well as cultural practices, such as being seen only by female practitioners. These students are not eligible for Medicaid except emergency Medicaid. They are not citizens and have no social security card. They possess special issues such as inadequate finances and insurance.

Adolescents were also described as a special population. Due to the unique nature of this age group, they are perceived as more difficult to serve. Certain laws prohibit teenagers from accessing services without parental consent, while allowing them to access other services of their own accord. Because of the health challenges facing Mississippi teens, further action is necessary to address this population. Mississippi consistently ranks worst in teen pregnancy, unhealthy behaviors, and unintentional injuries for youth and adolescents. Public health workers in all districts throughout the state recognize this problem.

Gaps in Services: In order to address gaps in services, it is important to discuss what community MCH partners identified as needs of the previously described special populations. The most frequently identified needs were:

- Abstinence / Family Planning programs
- Counseling / Mental Health / Peer counseling
- Health Services
- Transportation
- Insurance / coverage
- Education (health and formal)
- Parenting skills

When associating challenges with gaps in service delivery, the following ranked as most severe for the MCH population:

- Access to medical/dental care
- Employment
- Housing (affordable, appropriate, and available)
- Affordable health care
- Transportation

To address these challenges and identified needs, community survey respondents stated that the following comprised the most substantial gaps:

- Lack of social services
- Transportation
- Poor health care / health insurance

Proposed solutions included:

- Better access to services
- More funding
- Targeted public health education
- Collaboration / communication

Most of the nine public health districts listed transportation as a problem. The city of Jackson has public transportation, but that district also has transportation problems in the rural areas. There is Medicaid non-emergency transportation, but Medicaid recipients have experienced problems accessing this resource. Problems occur when drivers are not available or patients find the system difficult to navigate. In many cases, patients are only able to access this service through social workers or case managers, another limited resource for Medicaid recipients.

Other gaps in services include:

- No after hour or weekend prenatal clinics
- No local childbirth or parenting classes in rural areas
- Limited low income housing available
- Employers not allowing women time to come to prenatal appointments
- Lack of funds or medical insurance for working poor and sub-populations
- Lack of services for uninsured women $\geq$ 45 years of age or who have had a bilateral tubal ligation and no longer qualify for family planning services.

2.3.B. Infants, Children, and Adolescents

Fetal, Newborn, and Infant Health: The infant mortality rate for Mississippi is historically one of the worst in the nation. According to 2004 Kids Count Data, Mississippi ranked 50th among the states and the District of Columbia. This is the same ranking Mississippi received during the last needs assessment cycle. The top three causes of infant deaths were congenital anomalies, disorders relating to short gestation and low birth-weight, and Sudden Infant Death Syndrome (SIDS).

Consistent with the high rate of infant mortality is the high percentage of infants born under 2,500 grams, low birth-weight (LBW). In 2003, the LBW rate in Mississippi was 11.5 percent, whereas five years ago it was 10.1 percent. A little over two percent of all births in 2003 were very low birth-weight (under 1,500 grams). As in infant mortality, a disparity exists between white and nonwhite mothers. During the 1999-2003 period, rates of infant

mortality and low birth-weight were higher for teenage mothers, especially those under 15 years of age.

Closing the Gap on Infant Mortality—An African American Focus: Table 3 illustrates statewide data supporting the development of the Closing the Gap (CTG) program. According to the study to link infant deaths with birth cohorts completed during this needs assessment cycle, it is shown that African American babies are at higher risk of infant death, preterm birth and SIDS than white babies. Table 3 illustrates this by comparing African American infants to white infants over a five-year period. Because of the findings, Mississippi has been identified as a state that ranks highest in infant deaths and disparities between infant deaths among different races. For example, African American infants are up to fifteen times as great a risk as white infants to die from low birthweight.

Table 3

1996—2000 Birth Cohort Linked with Infant Deaths

	Total	African American	White
Age ≤ 15	3,898	1.6% (n=3,090)	0.4% (n=808)
Age 16 - 19	37,135	11.7% (n=22,907)	7.2% (n=14,228)
Age 20 - 34	141,982	32.1% (n=63,068)	40.1% (n=78,914)
Age ≥ 35	13,589	2.7% (n=5,380)	4.2% (n=8,209)
Total	196,604	48.0% (n=94,445)	52.0% (n=102,159)

Low Birth Weight (LBW)	**Actual**	**Rate ***	**Total Births**
African American	12,431	131.6	94,445
White	7,216	70.6	102,159

Pre Term Birth (PTB)	**Actual**	**Rate ***	**Total Births**
African American	21,611	228.8	94,445
White	13,579	132.9	102,159

Infant Death – LBW	**Actual**	**Rate ***	**Total Births**
African American	802	64.5	12,431
White	314	43.5	7,216

Infant Death – PTB	**Actual**	**Rate ***	**Total Births**
African American	818	37.9	21,611
White	307	22.6	13,579

SIDS	**Actual**	**Rate ***	**Total Births**
African American	146	1.5	94,445
White	94	0.9	102,159

* Rate is per 1,000 births.

Considerable disparity exists between white and African American infant mortality in Mississippi. Through a combination of medicinal, behavioral, educational, and service system enhancement risk reduction interventions, Health Services desires to accelerate the rate of change among African American populations and reduce significant disparity in infant mortality for African Americans related to low birth-weight, preterm birth and SIDS. By employing a mixture of quantitative and qualitative research methods in two critical pilot regions of the state, HS will strengthen the science regarding evidence-based interventions to reduce infant mortality. Cultural competence and program stability will be maintained by partnering with local service providers, educational institutions, and a variety of maternal and infant advocacy organizations.

Sudden Infant Death Syndrome (SIDS): SIDS is the 3rd leading cause of infant mortality in Mississippi. SIDS deaths have decreased significantly since 1992. Eighty-three infants (1.9 per 1,000 births) died from SIDS in 1992, which decreased to 55 infants (1.3 per 1,000 births) in 2002. Since 1992, two organizations, Mississippi SIDS Coalition and Mississippi SIDS Alliance, have formed to increase SIDS awareness in Mississippi. Through a series of community awareness campaigns and trainings and dissemination of Back to Sleep campaign materials, these organizations have worked to convey the SIDS risk reduction message to communities. Recently, the Mississippi 1st Health Partners, a regional-based organization formed in 2003 that focuses on a variety of health issues, chose the SIDS/Back to Sleep message as one of their main campaigns during 2003 and 2004.

Child Health

Statewide Early Childhood Comprehensive Systems (SECCS): In FY 2002, the Maternal Child Health Bureau (MCHB) developed its Strategic Plan for Early Childhood Health. The plan builds on recent scientific evidence regarding the relationship between early experience, brain development, and long-term developmental outcomes. It complements current White House initiatives to ensure that children enter school healthy and ready to learn. The plan calls upon MCH agencies to use their leadership and convening powers to foster the development of cross-agencies early childhood systems development planning.

The MCHB Strategic Plan for Early Childhood Health specifies goals to provide leadership to the development of cross service systems integration partnerships in support of children in early childhood in order to enhance their ability to enter school healthy and ready to learn and to support States and communities in their efforts to build early childhood service systems that address the critical program components. The components are access to comprehensive pediatric services and medical homes, social-emotional development of young children, early care and education, parenting education, and family support.

SECCS common mission is to ensure every child in the State has the greatest potential to achieve his or her optimal level of development through coordination of activities that enhance the delivery of developmental, educational, health, mental health, and social programs for the child in the context of the family through home and community based services. Mississippi's goal is to develop a SECCS strategic plan that can serve as a framework for future systems development and define the roles of many agencies in the state

who share a responsibility to improve outcomes for families and children in the state. Components of the Mississippi SECCS Plan include:

- consumer needs assessment,
- development of indicators to track early childhood outcomes,
- strategic plan development,
- interagency agreements,
- assuring effective plan implementation,
- and analysis of indicator and outcome data.

During 2004, Health Systems Research, Inc. (HSR) conducted focus groups of Mississippi families to find out about their experiences accessing resources and services for children ages 0-5. These focus groups, funded through MCHB, were conducted in order to contribute to the State Early Childhood Comprehensive Systems Initiative. The key findings were highlighted in a preliminary report.

Focus groups consisted of a diverse population with teen parents, parents of CSHCN, foster parents, single and married parents, and parents of diverse racial and socioeconomic backgrounds. The six primary subjects explored with focus group participants were:

- Health insurance and access to care;
- Preventative health care and developmental screening;
- Early intervention and preschool special education services;
- Parenting education;
- Family support services;
- Child care and early education.

A summary of the highlighted findings included several key issues. Many parents found it difficult to apply or qualify for Medicaid. It was cited in part due to excessive and confusing paperwork and in part due to the lack of assistance from Medicaid or other program staff in the application process. Parents also said that the staff is perceived as disrespectful and lacks knowledge about program requirements and availability.

Another limitation to access to health care is the shrinking number of Medicaid providers, which seemed to be especially problematic for CSHCN. Even though these issues were cited as barriers, most parents were able to access primary health care for their children and were able to see their primary health care provider when needed, although seeing the primary provider may entail a lengthy wait. It was reported that continuity of care was hard to maintain because of issues with Medicaid reimbursement and reductions in provider participation in Medicaid.

Parents of CSHCN reported that their primary care providers often lacked knowledge of community resources and that the parents did not receive assistance with coordination of their child's care. It appears that care coordinators are underutilized throughout the state, even though they are available.

There is a severe lack of specialty health services, parenting education classes, and family support programs. This claim made by the focus group participants corroborates what has been said in the consumer and community surveys conducted during the needs assessment as well as what has been documented in other parts of this assessment. In rural areas and small towns, the lack of services is more profound. Families often have to travel long distances for assistance and specialty services. Mental and oral health services were quoted as being the most difficult to access.

Finally, affordable, quality child care was determined to be a need of parents with young children. Parents of CSCHN find this to be especially problematic because of the need for their child to be in an environment that can tend to the special needs. With each key problem identified through the focus groups, the theme of lack of publicity for programs and special services was evident. Parents stated over and over that they were unaware of services that they might be eligible for.

Oral Health: In October 2002, the Department of Health hired a full-time dental director to focus on public education about oral health issues and on prevention initiatives. In November 2002, the Governor created an Oral Health Task Force to focus on prevention, health education, and the availability and affordability of quality oral health care for Mississippi's children. The task force is chaired by the State Health Officer and includes health care professionals and public officials from the Medicaid program and the state's Children's Health Insurance Program. The group began meeting quarterly in January 2003 and is charged with providing an annual report to the Governor on the state's oral health status and making recommendations. As of 2004, the task force continues to meet and includes a staff member from the Office of the Governor. The task force is writing a state oral health plan and is working to develop a public information campaign about the oral health plan for use during National Children's Dental Health Month and coinciding with the American Dental Association's (ADA's) 2005 Give Kids a Smile Day.

In 2000, MDH Oral Health conducted a clinical survey on 5,227 third-grade children, using a stratified cluster sample of 74 public elementary schools, statewide. The mean age of participants was 8.6 years, with an age range of 7 to 13 years, and an almost equal distribution by gender (50:50). Forty-three percent (n=2,242) of the sample was identified as white, and 57 percent (n= 2,965) black, with 20 students of unrecorded race. Seventeen percent (n=886) had at least one dental sealant on a permanent first molar tooth. Over 70 percent (n=3,685) of children demonstrated experience with dental decay, measured by the presence of at least one active lesion or one dental restoration. About 15 percent (n=779) of children were in urgent need of dental care, defined by pain and suffering, clinical inflammation, or loss of function.
The Department of Health also began Adopt-A-School—a school-linked sealant initiative with the goal of recruiting community dentists to "adopt" their local elementary second-grade class and place sealants on the children's permanent first molar teeth.

Efforts to integrate oral health assessment into the state's public health disease surveillance system are on-going. The Behavior Risk Factor Surveillance System (BRFSS) includes oral health questions every other year. In 2003, two oral health questions were approved and used with the Pregnancy Risk Assessment Monitoring System (PRAMS) to be implemented in the

next survey. Survey participants are asked about the care of their teeth during their most recent pregnancy and if and when they ever had their teeth cleaned by a dentist or dental hygienist. In addition, a question was added to the 2005 Mississippi YRBS that inquired about students' regular dental check-ups.

In 2004, MDH Oral Health began a second statewide clinical survey of oral health among third-grade children in Mississippi. Technical assistance for the survey methodology was provided by the Association of State and Territorial Dental Directors (ASTDD). The technical consultant attended the kick-off MCH needs assessment conference in August 2004. A weighted analysis design and random sample of 48 elementary schools was obtained. School variables included participation in free and reduced school lunch programs and geographic location. Participation requests were sent to district school superintendents and school principals to obtain their permission. Parental permission forms were used that required the parent or guardian to return a signed form back to the school. Four clinical indicators were used: presence of dental sealants on permanent first molar teeth, caries experience, untreated caries, and treatment urgency.

A software programmer with the MDH Office of Health Informatics developed a secure web-application that allowed data from the clinical survey on oral health to be confidentially linked to pre-existing data sets for individuals registered in the MDH Patient Information Management System (PIMS) as receiving other health services (e.g., immunizations). Data were entered into this secure database. Children screened who had never been to the health department for services were registered in the PIMS database. Web-application data interfaces were also developed for the infant surveillance system (ISS) and the perinatal high-risk management program (PHRM). This software will also be used as a palm-application, which will allow additional portability to conduct school-based clinical screenings in the future.

Results from the dental survey continue to be analyzed. 2,817 children were screened for the oral health needs assessment, with the mean age of participants being nine years old. Of the third graders screened 43% were white, 54% were African American, and 3% were "other" or "unknown". Females and males were virtually equally represented with 51% of children screened female and 49% male. Sadly, data showed that 70% of children had caries experience with 40% having untreated cavities. Overwhelmingly, children did not have sealants (75%) and over one-third of children needed early dental care. Approximately 10% of participants screened were in need of urgent care. All but one (99.96%) of those needing care were referred to dentists in their area so that they could seek proper treatment.

Early results from the oral health clinical survey reveal that dental needs for Mississippi children are great. As stated in this report, Mississippi also has a severe shortage of dentists, especially in the rural areas of the state. Therefore, oral health is identified as a primary MCH need in Mississippi.

Child Safety: According to the Office of Health Informatics, the death rate in Mississippi for children 1-14 years of age was 33.4 per 100,000 compared with the national rate of 22 per 100,000. Mississippi ranked 50th among all the states in child mortality, according to the Kids Count Data Book of 2004. There were 88 deaths in 2003 among children age 1-4 years, a rate of 0.5 per 1000, with injuries accounting for most deaths. The rate grows as children get older,

creating a greater burden to child safety and public health.

Safety is a major concern for public health. Child safety is of particular note due to the burden of care that can be placed on the public systems due to disability from preventable injuries and accidents. According to the Mississippi BUCKLE for Life website, motor vehicle crashes are the number one cause of death and disability of children. Every year approximately 1,000 children are seriously injured in Mississippi motor vehicle crashes, and approximately 30 children up to age 8 die. Studies by the Mississippi Division of Public Safety Planning indicate nearly 95% of child safety seats in Mississippi are used incorrectly, well above the national estimate of 80%.

Mississippi law does direct that all children be restrained properly while in a motor vehicle. Sadly, enforcing the law can prove difficult. The Mississippi Department of Public Safety is addressing this issue and has implemented an 800 number for motorists to report improper child restraint use by other motorists. By reducing the number of child injuries, $3.5 million could be saved in annual health care costs. Table 4 shows statistics for safety device usage. As the table reflects, there is an increase in safety device usage, but there is still a serious lack in appropriate restraint. Eighteen percent of all accidents warranting an EMS call occurs on a highway, city street, or public area. The reasons for most EMS calls were motor vehicle crash, accidents (falls, etc.) or violent crime (assault, gunshot, or stabbing). It is important to note that these figures include all age ranges, not just youth.

Table 4
Use of Select Safety Devices: All Populations

Safety Device	2002	2003	2004
Lap Belt	60%	60%	63%
Shoulder Belt	61%	60%	63%
Automatic Belt	2%	2%	3%
Air Bag	9%	10%	12%
Safety Seat	2%	2%	2%
None	21%	20%	22%
Unknown	13%	14%	15%

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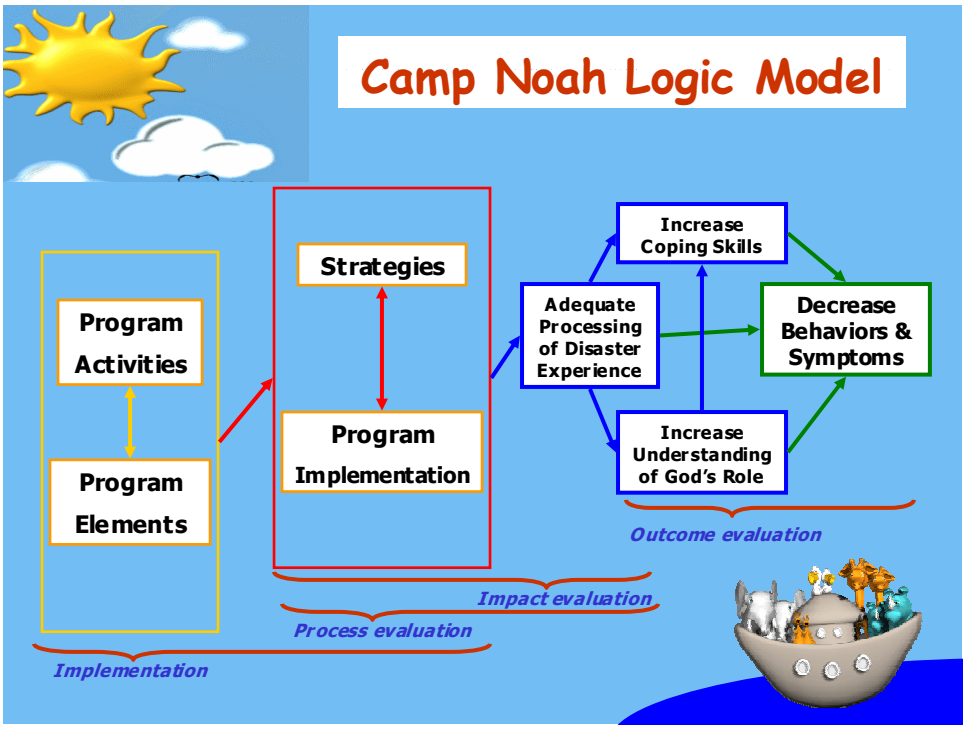
Camp Noah: Camp Noah is a free day camp offered to children affected by natural disaster. It is offered in eight states in the United States, including Mississippi. The purpose of Camp Noah is to focus on children, ages Kindergarten through 6th grade, affected by natural disaster and reduce trauma reactive behaviors by providing therapeutic group care in a faith-based environment. Because Camp Noah is partially funded through the MCH Block Grant, the Health Services Data Unit evaluated the camps held in Mississippi. The intent of the evaluation was as follows: to describe symptoms of children attending the camps; determine camp effects on outcomes; assess fidelity to program design; and describe how the Camp Noah program was implemented. The following logic model developed by the CDC Epidemiologist and Health Services Data Unit staff, which guided the evaluation process.



Evaluation results showed children were able to use the day camp to process the disaster in a faith-based loving environment supervised by a part-time mental health professional. The children overwhelmingly reported that they did so in a fun environment, while their parents reported that trauma reactive symptoms had decreased.

The overall fidelity of the program was determined to be strong with age appropriate curriculum, a mental health professional on site, and a logical system of delivery for the program. Overall weaknesses were that the communities were overwhelmed by experiencing a recent disaster and attempting to start new program in the aftermath and there were gaps in children served because the program limits the number of children that could attend the camp. The conclusion was that with more training and preparation in the communities, the camp can better serve children. In addition, more camps need to be held in order to reach the breadth of children affected by natural disaster, thus being true to serving the public health philosophy of caring for not only physical health, but also mental and emotional health of all.

Asthma: Currently, there are no reliable data available on the prevalence of asthma in children in Mississippi. Extrapolating from the American Lung Association (ALA) national estimates for 2002, approximately 61,000 Mississippi children are estimated to currently have asthma. Of more than 4,000 persons visiting a Mississippi hospital each year (1999-2002; Jackson Metropolitan Area) for asthma, about 40% are children under the age of fifteen. Four out of five of these children are African-American. Young children (0-5) have the highest rate of asthma hospital visits. The University of Mississippi Medical Center opened a Pediatric Allergy and Immunology Clinic in October 2002. Funding from MDH is used to pay the salary of a clinic respiratory therapist. The therapist's duties include teaching patients how to properly use their asthma inhalers, triggers to avoid, and symptoms of asthma exacerbations. Spirometry is conducted on patients over six years old.

The Mississippi Division of Medicaid has two disease management programs for beneficiaries with chronic diseases: pharmacy disease management and comprehensive disease management. Both programs offer disease management to recipients with asthma, diabetes, or hypertension. Nurses and pharmacists work with patients to provide medicinal and case management services to control the diseases and prevent exacerbations. In addition, patients can call a hotline and speak with a nurse at any time if there are questions or concerns. Both programs are designed to promote patient self-management of the condition and management of health care costs by reducing preventable emergency room visits and hospitalizations.

Medicaid/SCHIP: Medicaid is a primary source of health care coverage for many pregnant women and children. Since its inception, SCHIP has also become a provider of health coverage for many more children. Enrollment in Medicaid illustrates the numbers dependent upon public assistance. As of October, 2004, there were 292,789 certified Medicaid eligibles 19 and under. In addition, there were 65,882 enrolled in CHIP. The highest enrollment for both Medicaid and CHIP occurred in Public Health District V, the Jackson Metropolitan Area. Mississippi is also one of only five states requiring an interview for eligibility confirmation and renewal, thus creating a possible barrier to accessing this beneficial state service.

The CHIP Steering Committee suggested that a CHIP Advisory Committee be established in 2004 to make recommendations to the program and discuss the effectiveness of CHIP. This venue provided for stakeholders to come together and assess state CHIP needs and focus on eligibility issues. Upon meeting in October, 2004, the advisory committee made recommendations to focus on the concepts of simplification, outreach, and coordination. The following are some recommendations:

- Reduce stigma of CHIP being considered public assistance
- Have one agency to determine all eligibility for Medicaid and CHIP
- Have more eligibility workers to focus soley on Medicaid
- Simplify applications so that they are not confused with TANF and Food Stamp applications and regulations
- Focus on all children getting physical exams (EPSDT)

Many of the features of the current system, however, were recommended to be retained. Of these, the shortened joint application, continuous eligibility, removal of child support barriers and only requiring the social security number of the applicant were selected as positive features of the enrollment system for CHIP.

EPSDT Screenings: Early Periodic Screening Diagnosis and Treatment (EPSDT) visits are imperative to the early detection and prevention of health problems in children. These screenings, provided through Medicaid and CHIP, are a way of addressing health issues in children before they become severe problems. The screenings are a valuable resource for assessing public health efforts throughout the state. As stated in the needs assessment priority selection portion of this report, EPSDT screenings are not being used to their full potential in the state. This must be addressed in order to ensure the health of Mississippi's children.

Special Populations: As mentioned earlier, many districts are seeing growing numbers of Hispanic infants born to undocumented mothers. These infants present a growing concern to the MDH staff at the local level. Even though these infant are Medicaid eligible, the parents do not seek Medicaid enrollment due to the fear of deportation.

The Choctaw Tribe has its heaviest population in two counties in the East Central Public Health District . The tribe has its own health care facility. However, sick infants (most on Medicaid) are often taken to local emergency rooms for care.

Gaps in Service: Some gaps in infant services cited by the districts are the same as cited for women (e.g. transportation, and lack of high risk providers). Children with special health care needs sometimes have to travel long distances to access pediatric sub-specialists. Access to dental services for children on Medicaid is a serious problem in the state. Many dentists in the state do not accept Medicaid. One district reports only two pediatric dentists in the eleven county district. One accepts no Medicaid and the other accepts only limited Medicaid.

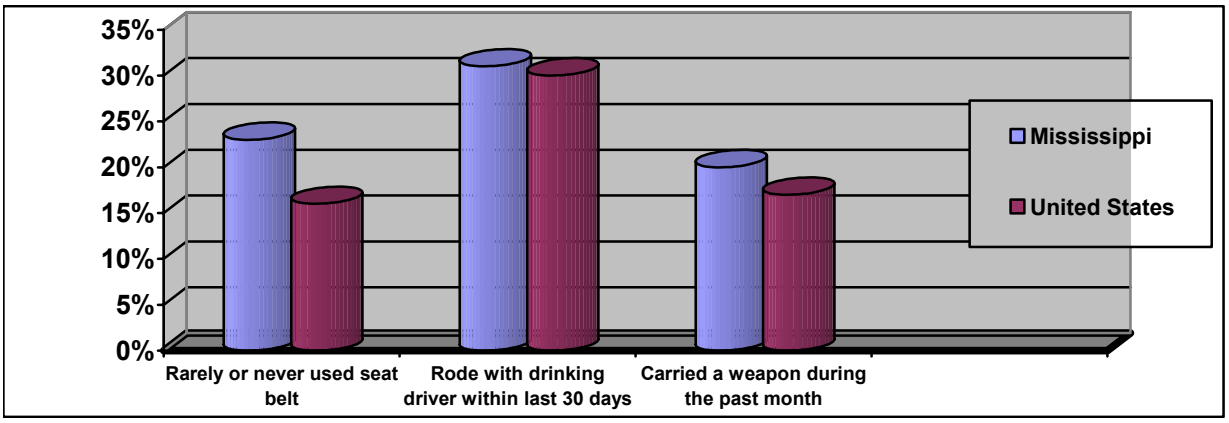
Often there is poor availability of appropriate pediatric providers, especially providers that accept Medicaid. In the community survey, appropriate services for children was cited as one of the challenges throughout the state. There could be many reasons for this including low Medicaid reimbursements and provider shortages.

Adolescent Health

As in other states, the major cause of adolescent health problems in Mississippi is risk-related behavior. The problems associated with teenage pregnancy have been noted in a previous section. Unintentional and intentional injuries were responsible for most deaths among youth aged 15-24.

Injury is one of the most serious social, economic and medical problems of our time. It is the leading cause of death among children in the United States, with more children and adolescents dying as a result of injury than for all other causes combined. Injuries also result in lifelong disabilities. According to the Office of Health Informatics in 2003, 72% of all deaths among persons aged 10-24 years result from only four causes: motor vehicle crashes; other unintentional injuries; homicide; and suicide. Many students in Mississippi engage in risky behaviors that pose a danger to themselves and others. See Figure 1 below for a comparison of selected adolescent risky behaviors that contribute to injury and possible death.

Figure 1
Mississippi vs. United States: Select Adolescent Risky Behaviors



Among Mississippi youth aged 10-24 years, motor vehicle accidents (MVA) account for 40% of all deaths. As with child safety, significant improvement has occurred in some adolescent measures relevant to MVAs, but much work is yet to be done. One example of progress is the percentage of students who rarely or never use safety belts. This percentage has decreased from 33% in 1993 to 23% in 2003.

In 2003, the suicide death rate in Mississippi among youths 15-19 was 6.0 per 100,000, which represents a significant decrease from the last needs assessment cycle. However, risky behavior has contributed to the downward trend of adolescent health indicators. Recently, the MDH created a State Adolescent Health Coordinator position. Since adolescents rarely use preventive health services, special efforts are made to reach them in schools by placing school nurses in selected school systems around the state. School systems are chosen by utilizing a need-based ranking system. Infant mortality rate, teen pregnancy rate, repeat pregnancy rate among teens, teen suicide rate, school dropout rate, reported substance abuse cases, teen sexually transmitted disease (STD) rate, and the rate of reported child abuse are used to form a composite variable on which school systems are ranked. Public health and school nurses are available to provide counseling and referral services to youth identified as at risk. They also act as school and community resources for health education and are expected to assist in bridging communication gaps between adolescents and families.

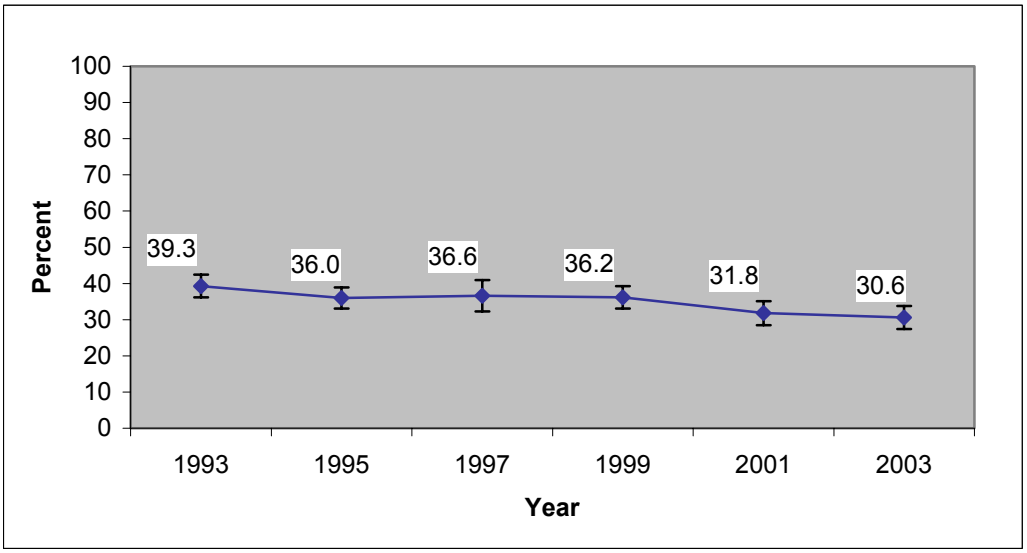
Sexual Assault: MDH's Rape Prevention and Crisis Intervention Program retains statistical information on sexual assault cases and crisis line calls. Over 40% of the incidents were reported to be acquaintance assaults. Over the past five years, it has been reported by sexual assault victims that they know their assailants and that teenagers and young adults are afflicted most often in these cases. The following has been extracted from MDH caseload data to illustrate the issue of sexual assault in FY 2004:

Table 5
Mississippi Sexual Assault Cases
Number of Victims Assisted by MDH Supported Programs by Age

Age of Victim	# Male Victims	# Female Victims
0-6	27	115
7-12	27	111
13-17	13	229
18-24	6	261

Youth violence: According to the CDC, youth violence is "the threatened or actual physical force or power initiated by an individual that results in psychological injury or death" and in which "the perpetrator, the victim or both are under 25 years of age". Based on the 2003 findings of the Mississippi YRBSS, there have been significant improvements and overall downward trends in several measures related to violent behavior. The percentage of students carrying a weapon during the past 30 days (before the survey was implemented) has decreased from 28% in 1993 to 20% in 2003. The percentage of students carrying a weapon on school property decreased from 14% in 1993 to 5% in 2003. This suggests that school policies and violence prevention programs are achieving their goals but must be maintained in order to have continued success. Another positive note is illustrated in Figure 2. The percentage of students involved in a physical fight has significantly decreased over the past 10 years.

Figure 2
Percentage of Students Involved in a Physical Fight
1993—2003



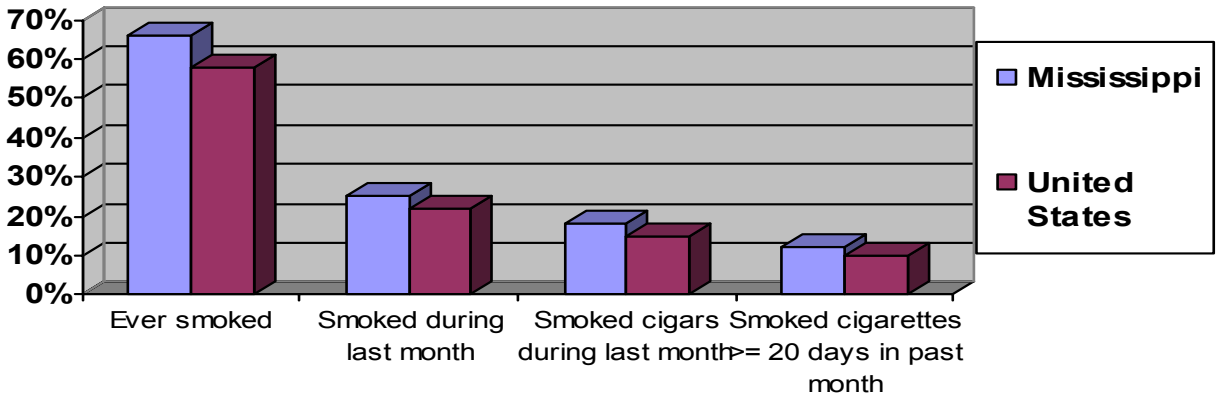
The following measures of injury and violence among Mississippi students have shown no significant change:

- The percentage of students who have been threatened or injured with a weapon on school property during the past 12 months was 8% in 1993 and 7% in 2003.
- The percentage of students who were injured in a physical fight during the past 12 months was unchanged over the past 10 years, remaining at 3%.
- The percentage of students who were ever hit, slapped, or physically hurt on purpose by a boyfriend or girlfriend during the past 12 months was 13% in 1999 and 2003.

The Mississippi Department of Education (MDE) has created an Office of Healthy Schools that addresses not only the health of students but also the safety of children in school. According to the MDE, comprehensive school safety is fundamental to a student's well being and is now a fundamental component of all schools. MDE enacts school safety planning in order to provide a safe environment and to combat school violence.

Tobacco Use: Although Mississippi has put forth great effort and designed excellent programs to address adolescent smoking, the state still ranks higher in most measures related to youth smoking. Refer to Figure 3 below for comparisons.

Figure 3
Mississippi Adolescent Tobacco Use Compared to United States Adolescent Use

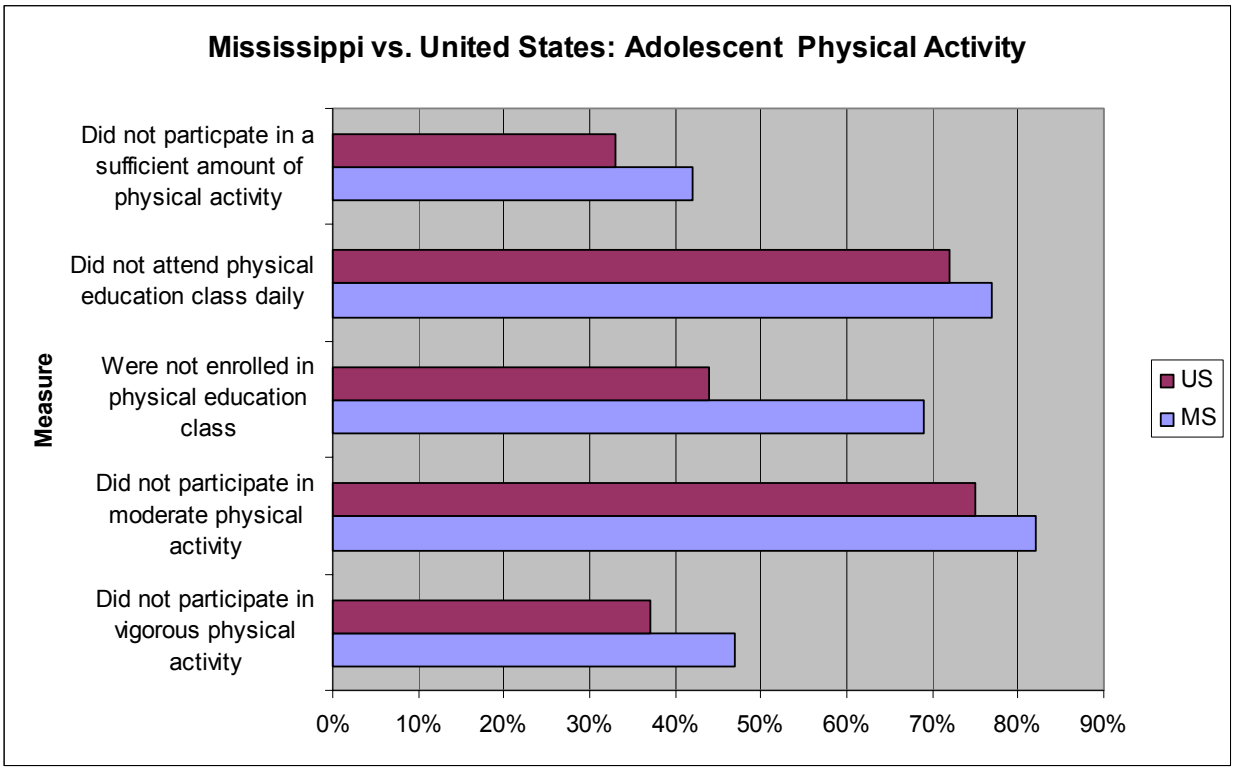


The MDH has a Tobacco Prevention program housed within the Office of Preventive Health. Through this program, MDH collaborates with the Partnership for a Healthy Mississippi, the agency created from the master settlement agreement to combat tobacco use. In addition to state collaborations, MDH administers the Youth Tobacco Survey and funds tobacco nurses in schools across the state. The Youth Tobacco Survey, conducted every other year, is given to middle and high school students throughout the state to gather self reported data on specific tobacco use. This provides valuable information that corroborates the YRBS information regarding youth tobacco use. The tobacco nurse program has not only assisted Mississippi youth in remaining

smoke free, it has also addressed other youth health issues facing Mississippi's teenagers through innovative use of comprehensive health programs.

Obesity: In recent years, obesity issues have become of increasing interest across the United States and are no different in Mississippi. Mississippi students have less than optimum diets, but figures are comparable to national figures. The frequency of overweight students in Mississippi was higher than the national average in 2003. Over 16% of Mississippi students are overweight, compared to 12% nationally. Another 16% of students are at risk for becoming overweight, compared to 15% nationally. Eighty percent of Mississippi students have consumed less than 5 servings of fruits and vegetables per day during the past 7 days, compared to 78% nationally, whereas 89% of students drank less than 3 glasses of milk a day during the past week, 6% over the national average. The tragedy is that most measures of diet and weight have not shown significant change over the past four years. Furthermore, YRBSS data suggest that students also engage in unhealthy eating habits to keep from gaining weight or to lose it. Mississippi students are also more sedentary in nature than national averages. The following figure illustrates measures of physical activity.

Figure 4



2.3.C. Children with Special Health Care Needs

Children's Medical Program: Mississippi families of children with congenital anomalies face a number of problems. Among these problems is inadequate access to care due to fragmentation and poor coordination of resources. Deficits abound in Mississippi's pediatric health care system. Provider shortages exist for pediatric specialty physicians, nurses, nutritionists, social workers, and other disciplines. Other weaknesses relate to Mississippi's rural status, such as the scarcity of

specialty provider resources in rural areas. Inadequate family support systems and a limited number of case managers also prevent children from accessing the few resources available to them. The Children's Medical Program (CMP) of the MDH exists to address some of these problems by providing comprehensive care for children and adolescents with special health care needs. CMP works with individual and group pediatric sub-specialty providers to establish acceptable arrangements for field clinic staffing. However, CMP resources are used as the payor of last resort. This type of care and service is similar to services provided throughout HRSA Region IV states.

SLAITS National Survey of CSHCN: A national telephone survey of families of children with special health care needs (CSHCN) was conducted in 2001 to evaluate access to care and services, barriers to care, and CSHCN effect on family. Telephone interviews were conducted in Mississippi from October 2000 through April 2002. After a screening process, 945 households and 743 individual CSHCN participated in the survey. The proportion of participants was sufficient for weighting data. Survey purposes included:

- Determining the state-specific CSHCN prevalence
- Determining if health care needs of CSHCN were being met
- Discovering how families are affected by having a special needs child
    - Economical / employment
    - Emotional
    - Provision of care and care coordination
- Determining if insurance coverage was adequate

Of the survey participants, 21% were birth to 5 years, 40% were aged 6-11, and 38% were 12-17 years old. The group was 41% female and 59% male. Forty-six percent of survey participants were non-Hispanic black and 54% were non-Hispanic white. Over 61% lived in a rural area. Nearly 52% of mothers had at least some college education. Approximately 49% reported an income level less than 199% of the federal poverty level. Insurance coverage was a factor in care for CSHCN. Health care coverage sources were 31% public, 47% private and 8% combined public and private. 14% reported being uninsured at some point during the last 12 months. Those uninsured in the past 12 months were nearly eight times more likely to miss routine care and 8.5 times more likely to miss specialty care than those with consecutive coverage.

Predisposing and demographic factors, such as race, were less important in determining health factors than enabling factors, like insurance coverage. Illness severity, as ranked by the parent, proved more indicative of how families are affected by having a special needs child. Mental health needs were least often met. Genetic counseling was listed as a family need least met. Mental health care, dental services, specialty care, and physical/occupational/speech therapy ranked highest among those services needed but not obtained. Enabling services included direct services, insurance related issues, and family needs, specifically respite care.

Oral Health: In 2004, the MDH conducted a Dental Health Survey of Children with Special Health Care Needs in the Jackson Metropolitan Area (JMA), where the largest concentration of CSHCN exists and receives services. Of 96 CMP consumers surveyed:

- 58% were ages 3-5
- 67% non Hispanic black
- 91% had Medicaid
- Just over 40% reside in the JMA, indicating the majority of participants travel to see specialists and seek treatment
- 46% see a dentist that accepts Medicaid
- Over 52% need a dental home
- About one-fourth of parents have dental insurance
- Almost one-half of parents have Medicaid and need a dental home
- 40% without Medicaid have problems accessing dental services
- Approximately 13% with Medicaid had untreated caries
- Medicaid was positively associated with the absence of dental caries but also positively associated the absence of sealants

In this survey, it was hypothesized that some parents related dental insurance to having Medicaid. Many of the children, between 30 and 40%, were in need of early dental care but were not receiving proper dental services. The survey reinforces the perception that accessing dental services, even with Medicaid coverage, is a challenge in Mississippi. Dental providers are not readily available for those who have coverage. For those who do not have coverage, providers are most often unaffordable and inaccessible.

Special Sub-Populations: The Hispanic population is increasing in Mississippi. Outreach efforts are underway to provide maternal and child health services to this population. Increased accessibility to interpreter services may be needed in some areas of the state. Little data exist regarding services for Hispanic CSHCN.

Gaps in Services: Information from the CMP suggests a need for systematic patient tracking, data collection, and comprehensive care plans for CSHCN. The current database system for CMP is relatively new, less than 3 years old. The system is used primarily for billing and payment information.

2.3.D. Needs that Cross MCH Population

Economic Factors: Economic factors continue to influence the Title V delivery system. The MDH feels the impact of Medicaid program reductions as a decrease of patients seen in the health department system. However, the patients are able to gain access to private providers leaving the health department clinics to serve as a last resort health resource.

The State Legislature created a Child Health Insurance Task Force in 1998 to develop a State Plan for the implementation of a State Child Health Insurance Program (SCHIP). SCHIP began providing coverage in late 1998 to 15 - 18 year olds living between 33% and 100% of the federal poverty level (Phase I). In February 1999, HCFA approved a state plan to further extend coverage to all children between 100% and 200% of the federal poverty level. Phase II implementation began in January 2000. SCHIP has proved to be an asset to public health. A new report regarding the second phase of SCHIP was not available at the time the needs assessment report was written. Eligible children up to 200% of the poverty level have had more health care

choices and have received more health care. Despite the strides in access to care issues, most recent Kids Count data indicates approximately 10% of Mississippi children remain uninsured.

All public health districts cited gaps in services for children of the "working poor." According to 2002 Kaiser Family Foundation data, 31% of children less than 18 in Mississippi live at less than 100% of the Federal Poverty Level. The Kaiser Family Foundation reports the median family income for a family of four as $31,887 (2001-2003) compared to $43,527 for the nation. Uninsured children are estimated at 94,630, roughly 12% of the under age 18 population. Child Health Insurance Outreach, a major initiative of the health department, primary care providers, and child advocates, is aimed at enrolling as many uninsured children as possible. In some areas, with severe pediatrician shortage and decreased participation of pediatricians and pediatric dentists in Medicaid, it remains questionable whether increased enrollment will have the expected benefit of increased access. In other areas of the state, clinicians are anticipating an improvement in the health status of children who can now afford preventive care services, an increase in the number of children who establish a medical home and reimbursement for acute services previously provided without fees.

Reproductive Health: Sexual behavior and reproductive health cross all MCH population lines. Males, females, old and young face challenges in reproductive health. When persons engage in risky sexual behavior, they place both themselves and unborn infants at risk. Many pregnancies in the state are classified as unplanned, either mistimed or unwanted.

Adolescents comprise the greatest risk-taking population. Sixty-one percent of Mississippi adolescents report ever having sexual intercourse, nearly 20% over the national average. Of those who have had sexual intercourse, 25% have had four or more sex partners, compared to 14% nationally. To complicate these staggering numbers, much of the sexual activity is unsafe. Thirty-five percent of adolescents did not use a condom during last sexual encounter and 85% did not use birth control pills. It is known that adolescent mothers are at greater risk for low birth-weight, preterm births, and other negative health effects. These statistics indicate there is much to be done to improve maternal and child health in Mississippi.

Sexually transmitted diseases (STDs) continue to be of great concern. The problem is far from under control in Mississippi, despite initiatives to lower these numbers. According to the Office of STD/HIV, the numbers of STDs fluctuate from year to year. Table 6 illustrates the number of reportable STDs in Mississippi by age. As the table indicates, the highest risk groups for STDs are teenagers and young adults. More efforts to target these two groups must be made in order to reduce the number of those afflicted.

Table 6
Mississippi STD/HIV Report by Age Group (2004)

Age	Chlamydia	Gonorrhea	Early Syphilis	HIV Disease
0-9	3	7	0	0
10-14	394	130	0	4
15-19	6837	2242	11	31
20-29	10134	3684	55	176
30-39	1082	710	56	171

Mississippi continues to experience too many unwanted or mistimed pregnancies. Sexual activity is beginning too young and with a high prevalence of STDs. These factors may be contributing to LBW and the IMR. Mississippi will seek additional ways to integrate STD services into the MCH program although the STD program is physically separated from MCH programs. Coordination of screening and treatment services must be regularly negotiated and discussed.

Health Disparities: Mississippi public health officials have long recognized health care needs of minorities resulting from poverty, lower educational levels, and limited manpower, particularly in more rural areas. The Office of Health Disparities has developed a report addressing this issue. Mississippi has recently had an influx of minority immigrants, particularly Asians and Hispanics, although these populations make up less than two percent of the total population. It is important to remember that Mississippi holds the highest proportion of African-Americans in the United States. Many programs are being implemented to address health disparities and will be addressed under the MCH Pyramid discussion.

Health Care Access: Many, but not all, of Mississippi's maternal and child health problems might be decreased by improving health care access. Improving access is costly and Mississippi is a poor state. Given available funds, priority-setting becomes a major task. Access to health care is not the only way to improve health status in the state. Health promotion and education efforts in schools and communities, and enactment and enforcement of health-related laws and regulations would improve health status. Several types of access barriers will be considered. Financial barriers are important. Availability of services, cultural competency, and accessibility are also of concern. The lack of health insurance makes it difficult for many Mississippi women and children to access health care.

All 82 counties in Mississippi are designated whole or in part as medically underserved areas, according to HRSA, 2004. In 2005, 79 counties are designated whole or in part health professional shortage areas. Children in many counties lack access to general pediatric care. As critical, however, is the need for access to pediatric subspecialty care, especially for children with special health care needs. Insurance coverage is more likely for CSHCN, but other barriers exist such as paucity of medical resources and lack of a medical home. Increased local assessments are needed as well as transportation to regional centers. Transportation was listed as a major barrier by communities and providers of care. It was specifically cited as a barrier to genetic, sickle cell, and CMP clinics. The addition of local clinics and provision of transportation are seen as remedies to increase the numbers of clients served.

Another gap in service is the provision of care to Hispanic children. Often those born in the state have not enrolled in Medicaid secondary to parental fears of deportation. Older Hispanic children and teens who are illegal immigrants have no options for health care insurance coverage. Health departments, community health centers, emergency departments, Catholic Charities and Methodist outreach ministries, and some teaching hospitals provide gap-filling services for these young clients. Resources for other than routine care are limited in the majority of health department clinics.

Health Care Coverage and Insurance: The lack of health insurance makes it difficult for many Mississippi women and children to access health care. Medicaid is the primary insurance

resource for many Mississippians. Over half of Mississippi births are paid for by Medicaid and there are approximately 36% of all children in Mississippi receiving Medicaid.

In 2002, the Department of Medicaid (DOM) applied for and was awarded a State Planning Grant through HRSA to investigate the uninsured population. The purpose of the project was to collect, analyze and synthesize quantitative information from a variety of sources on the uninsured; to develop options and priorities for expanding health insurance coverage and access to care; and to develop, analyze and recommend coverage options to the Governor. The DOM awarded contracts in order to complete the scope of work. One such contract was awarded to the Fairman Group, Inc. (FGI), a health care research, development and management consulting firm. According to the FGI report, about 12% of children 0-18 are uninsured and about 15% of the non-elderly population was uninsured. Most uninsured persons (69%) had incomes equal or less than 200% of the federal poverty level and African Americans were overrepresented in the uninsured population. Low income and part time workers and their families accounted for 4 out of 5 uninsured non-elderly Mississippi residents, with 19% of the uninsured being women.

FGI conducted focus groups throughout the state in order to collect more qualitative data in the non-elderly uninsured population. Of the findings, some of the most noteworthy are the following:

- Health insurance is needed to access comprehensive, high quality care
- Health insurance is needed for financial reasons; in one instance, a young woman who could not afford her employer sponsored insurance premium accrued $70,000 in medical bills from emergency surgery and a miscarriage.
- Health insurance is needed to stay healthy
- Health insurance is needed for diagnostic and chronic care services
- Health insurance is needed to fill prescriptions
- Low income workers cannot afford insurance premiums
- Low income, uninsured workers exhaust all available remedies before seeking care, thus making the care they do seek more emergent

Although many of the focus group participants seek care from CHCs, one individual reported having an outstanding bill of $2000 for care received at a CHC. Without health insurance, additional stress is put on individuals and families. Unfortunately, for many, the emergency room is still a routine source of care when insurance is unavailable.

According to another survey conducted by the University of Southern Mississippi (USM) the profile of uninsured children is grave. Of those uninsured children, 52% are Caucasian and 44% are African American with almost half living in a single parent home. Over a third of these children's parents have health insurance for themselves and close to 40% of the parents were unaware of SCHIP but would apply if eligible. The most common cited reason for not having insurance was that the parent did not feel they would qualify for coverage and if they did, they could not afford it. In congruence with the FGI report, USM reported that utilization of care for uninsured children was most often the emergency room or urgent care center.

According to these reports, health insurance is of tremendous need in Mississippi. This need

seems to stretch across all MCH populations. Access to care and availability of care appear to be rooted in insurance coverage also.

Health Care Provider and Facility Availability: In 2000, 9.6 percent of Mississippi's total workforce was employed in the health sector. Mississippi is traditionally a medically underserved state with health care professional shortages. Although the number of health care professionals practicing in Mississippi has increased over the past five years, many areas of the state remain underserved.

Numerically, dentistry represents the fourth largest health profession, following nursing, medicine, and pharmacy. The Mississippi State Board of Dental Examiners reported 1,403 licensed dentists in the state for 2004, with 1,188 actively practicing. Based on Mississippi's 2005 projected population of 2,991,488, the state has one active dentist for every 2,518 persons. The more populated areas of Mississippi are sufficiently supplied with dentists; however, many rural areas still face tremendous shortages, particularly in dentists who specialize in treating periodontal disease. The U.S. Department of Health and Human Services has designated 38 Mississippi counties or portions of counties as health professional shortage areas for dental care. The Jackson Metropolitan Area and the Gulf Coast Region contained a total of 39% of the state's active dentists. Six counties in Mississippi had no dentists at all and six others only had one dentist to serve the county.

Health care infrastructure must be analyzed in order to properly address some of the access and barrier issues facing Mississippi's MCH population. The following tables are a synopsis of the type of hospitals and care provided throughout the state. Illustrated through tables, one can see that Mississippi is deprived of both an adequate number of facilities and providers, especially to the MCH population. All of Mississippi's counties are designated health professional shortage areas, though some are better served than others. Just as in other service deficient areas, the rural areas are hardest hit by this shortage.

Table 7
Number of Hospitals in Mississippi (2000-2003)

Year	Number of Hospitals	Number of State/Local*	Number of Non-profit*	Number of for-profit*
2000	95	45 (47.4%)	26 (27.4%)	24 (25.3%)
2001	96	45 (46.9%)	27 (28.1%)	24 (25.0%)
2002	91	42 (46.2%)	25 (27.5%)	24 (26.4%)
2003	92	42 (45.7%)	26 (28.3%)	24 (26.1%)

*(%) = percentage of total number of community hospitals for that year

Table 8
Number of Hospital Admissions in Mississippi (1999-2003)

Year	Number of Admissions (per 1,000 population)	Number of Emergency Room Visits (per 1,000 population)
1999	150	516
2000	-	519
2001	153	525
2002	145	543
2003	144	554

Table 9
Number of Hospital Obstetrical Deliveries in Mississippi (2003)

Number of Hospitals	Number of Deliveries	Percentage of State's Hospital Deliveries
4	More than 2,000	27.6%
15	800-2,000	41.4%
36	Less than 800	31.1%

Health Care Facilities (2003)

Community Health Centers (CHCs) are an important part of health delivery systems in Mississippi. There are 22 centers (19 rural and 3 urban operations) that serve as a vital health link to the rural areas in the state. In addition to serving the rural areas in state, some CHCs operate in the most remote areas of the state with 5 centers that operate mobile health units. There are also over 100 satellite clinics. According to MDH state health plan, there were 952,631 patient encounters/visits with service to 285,796 patients at CHCs.

Local Health Departments

Table 10
Summary of County Health Departments in Mississippi (2004)

District	Region	County Health Departments /Clinics	WIC Distribution Centers	Services*
1	North West	10	10	HIV Screening, Hypertension, Pregnancy Testing, STD
2	North East	11	12	Environmental Health, Health Education, Maternity, Social Work, STDS
3	Delta	9	12	Breast and Cervical Cancer, Children's Health Insurance, Diabetes Control, Hypertension, Maternity, Social Work, STDS
4	Tombigbee Area	12	12	Breast and Cervical Cancer, Children's Health Insurance, Diabetes Control, Hypertension, Maternity, Social Work, STDS
5	West Central	13	12	Breast feeding program, Pre-marital blood testing, Maternity, STDs
6	East Central	13	9	Child Care Licensure, Environmental Health, Hypertension, HIV Screening, Newborn Genetic Screening, Pregnancy testing, STDs
7	South West	10	9	Diabetes, Genetic Services, Home visits, Hypertension, Maternity, STDs
8	South East	9	10	Breast and Cervical Cancer, Children's Health Insurance, Diabetes Control, Hypertension, Maternity, Social Work, STDS
9	Gulf	9	10	Breast and Cervical Cancer, Children's Health Insurance, Diabetes Control, Hypertension, Maternity, Social Work, STDS
Total	Mississippi	96	96	

*Core Services: Child Health (EPSDT), Early Intervention (First Steps), Children's Medical Program, Family Planning, Immunization, Perinatal High Risk Management (PHRM), TB, WIC

Over the past few years, Mississippi has improved its population-to-physician ratio. From 2003 to 2004, the number of physicians increased by 1.4 percent. The state as a whole had a ratio of 1 primary care physician per 1,318 persons in 2003. However, physicians are not available to the general population. Nearly half of the 2,269 primary care physicians lived and practiced in seven of Mississippi's 82 counties. Hinds County, home to the capitol city, has 22 percent of the state's primary care physicians.

The majority of health care providers in the state are members of the nursing profession. Nurses in Mississippi outnumber all other health professionals combined. There remains a very small number of physician assistants practicing in the state. Only 46 physician assistants were employed in the state in 2004, and 37 of those were federal employees. In the state, there are:

- 5,457 active medical doctors
- 246 osteopaths
- 62 podiatrists
- 1:548 (active medical doctor to person in population)
- 2,269 (41.6%) are primary care physicians
- 421 (18.6%) primary care physicians are 60 years of age or older, and may not see patients on a full-time basis

When broken down by specialty, the following serve these populations:

Table 11
Number of Primary Care Physicians in Mississippi (2004)

Type of Physician	Number
Internal Medicine	749
Family Practice	717
Pediatrics	366
OB/GYN	314
General medicine	123
All types	Total = 2,269

Registered Nurses are often the backbone to the medical community. In 2004, according to the state nursing board website, there were 27,133 actively employed (full-time and part-time) registered nurses 64.2% in hospitals, 5.2% in nursing homes, 2.2% in schools and 11.3% in other nursing careers. This translates into a ratio of 1:129 employed full-time in nursing career to person in population. In addition to registered nurses, licensed practical nurses play a big part in service delivery. In 2004, there were 10,103 actively employed (full-time and part-time) in nursing with 33.9% in hospitals, 31.2% in nursing homes, 5.1% in community, public or home health, 17.2% in offices, 3.7% in private duty and 9.0% in other nursing careers. Nurse Practitioners are especially instrumental in serving the MCH population. As illustrated in the table below, it is shown that over 60% of certified nurse practitioners serve the MCH population.

Table 12
Selected Nurse Practitioners by Specialty, Mississippi (2004)

Type of MCH Population Specialty	Number
Family Practice	754
Neonatal Care	29
Pediatric	26
Women's Health Care	26
Certified Midwife	25
OB/GYN	15
Family Mental Health	7
Family Planning	6
Total Serving MCH Populations	888 (62.8%)

In September of 2004, it was reported by the Human Resources Services Administration that all Mississippi counties are considered partial or entire medically underserved areas. Of the 82 counties 76 whole counties and 6 partial counties were deemed medically underserved. Designated in May of 2005, HRSA determined that 48 counties and 5 geographic areas were health professional shortage areas (HPSA) for primary medical care. In order to remove all HPSA designations, there would need to be 113 additional full time primary medical care providers.

As illustrated through the above tables and discussion, Mississippi is in desperate need of more accessible health care. In addition, health care providers are needed throughout the state, specifically ones that can address maternal and child health issues.

Cultural Competency: In an effort to address the issue of cultural competency in service delivery, MDH formed a cultural competency committee (CCC). In February 2005, this committee convened to discuss the findings of a preliminary survey to ascertain a description of health care policies and practices that extend medical support or services to clients of diverse racial, ethnic, religious, socioeconomic, gender, class, and social backgrounds within the MDH. Participants were professionals attending the needs assessment conference and the survey was taken from the final report *Developing a Self-Assessment Tool For Culturally and Linguistically Appropriate Services in Local Public Health Agencies.* Findings from this survey, despite the scientific limitations of it and small number of participants (51), indicated that participants demonstrated a poor level of awareness of cultural competence activities among participants. It was decided that the next step would be to gather data regarding knowledge and awareness of cultural competence policies and activities within the MDH on a larger scale. Several other surveys will be conducted and analyzed before the CCC makes official recommendations for creating a culturally and linguistically competent environment throughout MDH and health care delivery systems in Mississippi.

Accessibility Issues: Inadequate public transportation poses a barrier to care access. Urban transit systems serve only the Jackson, Hattiesburg, and the Biloxi/Gulfport areas, where taxi service is also available. Rural transit systems consist of elderly/handicapped buses operated by a variety of community agencies such as the Choctaw Transit Authority; Lift, Inc. in the Tupelo area; and Five County Child Development (Head Start). The MDH arranges transportation for some patients. Ambulance transport of high risk mothers is paid by Medicaid. The MCH Block Grant supplements payment for infant transport. Medicaid provides for non-emergency transportation to medical appointments for recipients.

Title 504 of the Civil Rights Bill requires that hospitals have interpreters available. Local health departments and community health centers offer MCH services to the Vietnamese population concentrated in the coastal area of the state, including CSHCN related services. In addition to English, health education materials for family planning, prenatal, and immunizations are available in Vietnamese and Spanish. Translation services are available through an ATT service. The ATT service assists with women and children whose first language is Spanish or almost any other language. The Catholic Charities coastal office has a Vietnamese Resettlement Program with two interpreters and contracted services in the community. In addition, Mississippi's Band of Choctaw Indians has identified an interpreter who is available upon request.

2.4. MCH Capacity by Pyramid Levels

2.4.A. Direct and Enabling Services

Delivery Systems: As noted in other places in this report and the block grant application, Health Services, within the MDH, is one of the major providers of primary care services and specialized care to the poor and near-poor residents of Mississippi even though MDH should be the provider of last resort. Its services encompass prenatal care including WIC, services for children and adolescents including immunization, preventive, and restorative services for CSHCN, and reproductive health services including family planning. Organizations such as community health

centers, rural health clinics, and hospitals have assumed more responsibility for the poor and near-poor. Services are delivered through a network of district and local health departments providing a range of primary and preventive services and through the Children's Medical Program for CSHCN at sites statewide.

Maternity Services: The MDH provides maternity services in seven of the nine public health districts. Approximately 30% of women who give birth in Mississippi receive prenatal care from a county health department. Pregnant women whose incomes are at or below 185 percent of the federal poverty level are eligible for services. The MDH uses the Hollister Maternity Record, with risk status updated at each visit and referral to obstetricians and appropriate hospitals as indicated. A multidisciplinary team at the county health department, including physicians, nurse practitioners, nurses, nutritionists, and social workers, provides ambulatory care throughout pregnancy and the postpartum period. Following birth, the team emphasizes family planning services for the mother and well-child care for the infant and places a high priority on close follow-up for 12 months after delivery. The Supplemental Food Program for Women, Infants, and Children (WIC) provides essential nutritional counseling and supplemental foods to pregnant and breastfeeding women, as well as infants and children.

Family Planning: Each county health department offers family planning services targeted toward sexually active teens and women 20-44 years of age with incomes at or below 150 percent of the poverty level. Approximately 88,000 Mississippians, some 25,000 of them 19 years of age or younger, took advantage of comprehensive family planning services during FY 2004, a decrease of approximately 10,000 women served from FY2003. The family planning program promotes awareness of and ensures access to reproductive health benefits by encouraging individuals to make informed choices that provide opportunities for healthier lives. Confidential services offered by MDH include: physical exams, counseling and contraceptive methods education, testing (pregnancy, HIV, STD), birth control supplies, sterilization (counseling, education and referral), pre-contraception counseling (planning pregnancy), and care coordination (for some high-risk clients).

In recent years, MDH has applied for and received a Medicaid Family Planning Waiver. *Care for Yourself* provides family planning services to women ages 13-44. Included in these services are medical exams, follow-up visits, birth control methods, limited lab services, and education through case management. Services are free to those who meet these qualifications: (1) meet Medicaid income requirements, (2) have not had a tubal ligation or other surgery to prevent pregnancy, and (3) are legal residents or citizens of the United States.

Women, Infants, and Children: WIC certification is provided by county health departments and independent agencies with which the Office of WIC has contracted. Mississippi is the only state with distribution centers instead of vouchers. Distribution centers operate similarly to grocery stores. WIC participants can bring their vouchers to a distribution center once a month and shop for WIC approved foods. The distribution centers are mindful of name brand foods that offer nutritional value to the clients. WIC services are available in all counties. Breastfeeding is encouraged through the Loving Support Breastfeeding Campaign. Staff is available for consultation regarding breastfeeding and boasts a state breastfeeding initiation rate of over 50%.

First Steps Early Intervention Program (FSEIP): FSEIP for Infants and Toddlers is available in all public health districts. First Steps is an interagency system designed to coordinate services necessary to prevent and/or minimize the effects of disability on young children (birth to third birthday) with special health/developmental needs and their families. As the lead agency for First Steps, MDH serves as the single point of intake for the early intervention system. FSEIP is available at all local health departments and matches the special needs of infants and toddlers with developmental delays with professional community resources. In FY 2004, FSEIP served 6,134 children and families with approximately 2,400 children referred during the year. Designed according to federal regulations under Part C of the Individuals with Disabilities Education Act, FSEIP is unique in Mississippi because the MDH is the lead agency rather than the Department of Education (MDE). The MDH and MDE work closely with each other at the state and local level along with other resource agencies to provide the best services possible to FSEIP participants. Individual child assessments and family service plans drive the service coordination and provide for service unique to the child's needs.

Children's Medical Program (CMP): The CMP is Mississippi's Children with Special Health Care Needs direct services program. Participants must be at or below 185 percent of the federal poverty level and must be under 21 years old. The goal of CMP is to assure the availability of comprehensive care for CSHCN through a network of care coordinators, hospitals, physicians', sub-specialty physicians, physical and occupational therapists, and other health professionals. The program currently operates 21 sites across the state with a central multidisciplinary clinic located in Jackson at the Blake Clinic for Children.

Early Periodic Screening, Diagnosis and Treatment Program (EPSDT): EPSDT visits are available through MDH. This preventive health screening tool is available to children up to the age of 21 and who are eligible for Medicaid. This is a well child assessment available at any county health department as well as through Medicaid providers, community health centers and rural health clinics.

Oral Health: The systematic addition of oral health education, including oral hygiene and the use of dental sealants during anticipatory guidance is essential. To address having the state's lowest dental sealant utilization rate (10 percent), Public Health District III developed a school-linked dental sealant program through a partnership with the University of Mississippi Medical Center. This program uses an Adopt-a-School model to encourage community dental providers to partner with a local elementary school to deliver dental sealants. Sealants are placed on-site at participating schools using the University of Mississippi School of Nursing Mercy Delta Express Project mobile clinic. From October 1 to September 30, 2003, over 3,760 dental sealants were placed in 728 second grade school children in District III. In 2004, the program expanded into Sharkey/Issaquena counties, which have no local dental providers.

The Children's Oral Health Protection Program (COHPP) is a voluntary elementary school program that was developed for areas without fluoridated water. This program provides alternative methods of fluoride treatment, such as a weekly school fluoride mouth rinse, a daily school chewable fluoride tablet, and a daily tooth brushing activity with a fluoride toothpaste, all proven methods to reduce dental decay among children. In FY 2004, 41 elementary schools participated in the weekly fluoride mouthrinse program, serving more than 11,000 children, with

active recruitment for additional school participation in progress. A daily supplemental chewable fluoride tablet program is under development with area Head Start programs, to begin in FY 2006.

Non-Emergency Transportation: NET is a Medicaid supported program that provides transportation for Medicaid eligible recipients who demonstrate a need for transportation to a Medicaid provider appointment. Eligible participants must request transportation at leas 72 hours in advance of the appointment and must be attending an appointment that is a Medicaid covered service.

March of Dimes (MOD): The MOD provides valuable direct and enabling services throughout the state. Major programs available to the MCH population in Mississippi are as follows: Chapter Community Grants Program, Stork's Nest, Project Alpha, and Comenzando Bien. The community grants program is designed to invest in priority projects that further the MOD mission and support MOD goals. Funds are allocated through grants and activities are carried out by various non-profit agencies throughout the state. The Stork's Nest is a collaborative project with Zeta Phi Beta Sorority, Inc. that provides prenatal education and motivation for low-income pregnant women. Similarly, Project Alpha teams up with the men of Alpha Phi Alpha Fraternity, Inc. and provides education, incentive, and skill-building to young males. This program focuses on responsibility, relationships, teen pregnancy, and sexually transmitted diseases. Finally, Comenzando Bien is the prenatal education program offered to the growing number of Hispanic women in Mississippi. It was developed nationally in partnership with the National Alliance for Hispanic Health and focuses on culturally and linguistically appropriate messages.

Car Seat Safety: The car seat distribution program is managed by the Office of Health Promotion and implemented by local health department staff. Parents are taught correct installation of car seats and proper restraint of seated infants. Mississippi law requires that passengers under the age of four be properly restrained in a child restraint device and that all front passengers in a motor vehicle wear a seat belt. Although Mississippi law requires the use of child restraints, half of the children traveling by automobile are not restrained according to the Mississippi Department of Public Safety. On average, 27 children die each year in Mississippi in motor vehicle crashes. Most of them were not properly restrained. It is estimated that increasing the use of child restraints by 50% would save the lives of 10 children each year and would save $3.5 million in emergency department and hospitalization costs. Mississippi has an estimated 95% misuse rate for child passenger safety seats, according to the Department of Public Safety.

School Violence: The Mississippi Department of Education supports programs aimed and reducing and eliminating school violence. The programmatic approach to this includes: character education, crime prevention, aggression management, peer counseling, Crime Stoppers, ROTC and similar programs. Specifically, MDE supports Conflict Resolution/Anger Management programs, Social Skills Training, Peer Mediation Training, Drug Abuse Resistance Education, Communication Skills programs, and Teen Court. The MDE requires that schools only use evidenced-base programs in reducing student violence. In addition to addressing youth violence through these programs, many school districts have school safety staff that include school resource officers, enforcement officers, and/or safety officers.

Boys and Girls Clubs: Boys and Girls Clubs throughout the state offer a safe haven for children in need of after school care. This service is important to public health because it allows children to remain in a safe, positive environment; thus, preventing possible injury and risky behaviors. All children, ages 6 to 18, are welcome at Boys and Girls Clubs across the state.

Children's Community Mental Health Services: Through the Mississippi Department of Mental Health, the Division of Children and Youth Services provides mental health care to children across the state. In addition to that, they identify needs in a community and plan and develop programs to suit those needs. Currently provided through 15 regional community mental health centers and many non-profit agencies throughout the state, this program assists in addressing the needs of children who are emotionally and behaviorally challenged.

Children and Youth Mental Health Facilities: There are two state psychiatric hospital facilities that serve as inpatient facilities for mentally, emotionally, and behaviorally challenged children and youth in the state of Mississippi. The East Mississippi State Hospital at Meridian serves males, ages 12 to just before their eighteenth birthday, while the Mississippi State Hospital at Whitfield serves all children ages 4 to just before their eighteenth birthday. There are also two specialized facilities located in Brookhaven and Gulfport. The Juvenile Rehabilitation Facility at Brookhaven serves adolescents with mental retardation and the Specialized Treatment Facility for Youth with Emotional Disturbances serves as an inpatient facility for adolescents with severe emotional issues.

Emergency Medical Services for Children (EMSC) Program: The EMSC is a federally funded initiative designed to reduce child and youth disability and death due to severe illness or injury and is housed in the Office of Emergency Planning and Response. Beginning in 1998, the Office of Emergency Planning and Response received a program planning grant to conduct a needs assessment aimed at identifying the top areas of need in pediatric care. These two priorities were identified as professionals needing advanced pediatric education and a need for injury prevention programs. With the start of an implementation grant in 1999, the Office of Emergency Planning and Response began programs developed during the planning phase that focused on the identified needs. Included in these programs were "Risk Watch" and "Watch Out", a comprehensive school based injury prevention program and a safety education program, respectively. These programs were implemented throughout the state in schools and through a Mobile Pediatric Education Unit. "Risk Watch" is a school based program focusing on fire safety but incorporating other elements of safety issues for youth grades kindergarten through eight. "Watch Out" focuses on water, bicycle, fire, car, pedestrian, and home safety as well as fall and poison prevention and how to access 911 programs and utilizes a recreational vehicle to promote its safety message in as many communities as possible.

2.4.B. Population-Based Services

Newborn Screening: The state leads the nation in newborn screening and identification of genetic disorders and birth defects. Mississippi screens for over 40 genetic disorders and MDH follows identified cases through case management services. In 2000, this system was still in development. During the past five years, the MDH worked diligently to capture all families who

have a newborn with a genetic disorder and offer case management, education, and support. Case management efforts are reaching close to 100% of families having a newborn identified through the newborn screening program. Initial newborn screening takes place in the delivering hospital. The Genetics Program office notifies the resident county health department, the hospital of birth, the clinician listed on the lab slip, and in most cases, the Genetics Field staff by telephone of any positive screening results. The health department is requested to locate infant/family immediately so that confirmation can be initiated. The report of the confirmatory test results along with specific instructions for management is sent to the county health department.

Early Hearing Detection and Intervention: Newborn hearing screening is available at all major (greater than 100 deliveries per year) hospitals throughout the state.

Immunization: Immunizations are provided in all county health departments. Adequate and timely immunizations for all infants and children are a MDH priority. Guidelines for vaccine administration are maintained according to current ACIP recommendations. *No child will be denied routine childhood vaccine at a MDH clinic, regardless of Vaccines for Children (VFC) eligibility category or ability to pay an administration fee.* It is stressed that each clinic visit should be looked upon as an opportunity to review and update a child's immunization status. If immunizations are needed, they are administered without appointment, physical exam, or referral.

The MDH participates in the Vaccine for Children's Program. The MDH supplies vaccine to physicians and other providers who agree to participate. The vaccines, singularly or in conjunction, offered through the VFC program are those providing protection against 12 diseases: diphtheria, Haemophilus Influenza type b, hepatitis B, poliomyelitis, measles, mumps, rubella, pertussis, varicella, tetanus, pneumococcal disease and influenza.

Oral Health: The Public Water Fluoridation Program encourages the adjustment of fluoride content that occurs naturally in a community's water to the best level for preventing tooth decay. Optimal levels of fluoride in drinking water can prevent 20-40 percent of tooth decay. Waterworks operators are required to continuously monitor the fluoride content of drinking water in communities that fluoridate to maintain certification. The program strives to reach the federal Healthy People 2010 goal to increase the U.S. population served by optimally fluoridated water by 75 percent. In 2003, the MDH Division of Oral Health received a grant from the Bower Foundation to create a Fluoridation Administrator position to assist communities to develop water fluoridation programs and train water operators about fluoride content testing, monitoring, and reporting. The Bower Foundation also provides funds to pay the cost of purchasing and installing new fluoridation systems. By December 31, 2004, 1,172 public water systems served an estimated 3,090,011 Mississippians; 132 of these water systems adjusted their fluoride content, while 77 water systems had optimal natural fluoride content which did not need adjustment. Together, these water systems provided optimal water fluoridation to 1,467,056 Mississippians (47.5 percent).

2.4.C. Infrastructure Building Services

Maternal and Infant Mortality Surveillance System: The Office of Women's Health receives all

matched birth and death certificates of infants. These are sent to the district SIDS Coordinators and then distributed to the county staff for follow-up. Parents are contacted regarding a home visit. Additionally, within the eight targeted counties (Bolivar, Coahoma, Hinds, Leflore, Madison, Rankin, Sunflower and Washington), the matched birth and death certificates are submitted to the Closing the Gap program for inclusion in the Maternal Infant Mortality Surveillance System, which began in July 2004. A Social Worker contracted by the Closing the Gap program facilitates completion of the in home visit following all infant deaths in targeted counties. With assistance from the Mississippi State Systems Development Initiative, it is planned that the Maternal Infant Mortality Surveillance System will be expanded statewide within the next year.

Pregnancy Risk Assessment Monitoring System: PRAMS is part of the CDC initiative to reduce infant mortality and low birth weight. PRAMS is an on-going, state specific, population-based surveillance system designed to identify and monitor selected maternal behaviors and experiences before, during and after pregnancy. The Mississippi PRAMS project has been underway for approximately three years. The first year of data collection in Mississippi for PRAMS was 2002, but failed to obtain the weighted data. The challenges with obtaining the required 70% response rate were addressed and a new strategy for administering the survey was employed. In 2003, the MDH PRAMS program obtained the weighted data and soon will be reporting on it. Generalized reports are not yet available in Mississippi, but will be in the near future.

State Systems Development: The State Systems Development Initiative (SSDI) program has proven a vital resource for infrastructure and capacity building with the MDH. Creation and expansion of a Health Services Data Unit has considerably improved capacity for data collection and analysis to support MCH programs in Mississippi. Goals of the SSDI program include improving data linkage, performing ongoing needs assessment activities, maintenance of the Health Services Data Unit and unit skills, and addressing health disparities among racial and other groups. Each year, the non-competitive HRSA/MCHB grant focuses on several projects to improve and enhance data capacity and infrastructure.

Data collection has occurred at state, district, and community levels. Secondary resources for state level data included vital statistics, national performance measures and outcomes, and the previous state performance measures. Other special topics investigated at the state level included: Perinatal Periods of Risk, Asthma Surveillance and Prevention, Prematurity and Infant Mortality, and the Mississippi National Evaluation of Camp Noah**.** Both consumer and community survey tools provided descriptive and qualitative data.

MDH Statewide Surveillance: Mississippi has several mechanisms for collecting population based information that can be used in a meaningful way and assist in developing systems of care that will address public health issues. The following are registries that support data infrastructure in Mississippi:

- System for the identification of SIDS deaths
- Immunization Registry (records of Mississippi resident's immunizations received from public clinics and participating private doctors)

- Spinal Cord Injury/Traumatic Brain Injury
- Indoor Air Quality Surveillance
- Birth Defects Registry (developed for epidemiologic and genetic studies)

Emergency Preparedness & Response: Bioterrorism and Emergency Preparedness division strives to improve the state's planning, equipment and facilities in order to meet unexpected and unusual health threats and activate detection and response to emergencies. According to the MDH website, the agency has recently put into place the following:

- Bio-safety labs with advanced pathogen detection,
- 17 Weapons of Mass Destruction Centers of Excellence in hospitals across the state,
- Satellite-based Health Alert Network (HAN) connecting 13,000 Mississippi physicians and facilities to coordinate information and activities,
- Distribution system for emergency medication from the Strategic National Stockpile,
- State and regional bioterrorism response plans and nurses in every health district; and
- Information hotline and new website have been launched.

Comprehensive School Health Program: This cooperative program through the MDH, MDE, and Mississippi Alliance for School Health (MASH) works with other organizations and programs to raise awareness of important health issues at the school and community level. The mission of the MDH-lead program is to increase the proportion of schools that implement the eight components of a Coordinated School Health Program (CSHP). Those components, according to the CDC model, include: (1) health education, (2) physical education, (3) health services, (4) nutrition services, (5) counseling, psychological, and social services, (6) a healthy school environment, (7) health promotion for staff; and (8) family/community involvement. The CSHP works through a MDH school health coordinator that is a liaison to the Department of Education and the Mississippi Alliance for School Health.

Mississippi Alliance for School Health (MASH): MASH is a statewide coalition whose mission is to promote and encourage coordinated school health programs in the Mississippi public schools. This coalition is constantly advocating for changes in schools through partnerships and programs. Currently a partnership with Action for Healthy Kids, a non-profit organization formed to address changes in the schools, focuses on the epidemic of overweight, undernourished and sedentary youth. Through this a state team is working to improve the quality of snacks and foods in school vending machines and advocating for quality physical education and nutrition education in school curriculum, thus combating the problem of obesity and overweight children.

2.5. Selection of Priority Needs

2000 Top MCH Priorities: Top priorities from the last needs assessment cycle should be discussed before proceeding with future plans and priorities. During the 2000 Title V MCH Needs Assessment, ten priorities were determined to be the focus for the five year cycle. The priorities were the starting point for assessing the progress of the past five years.

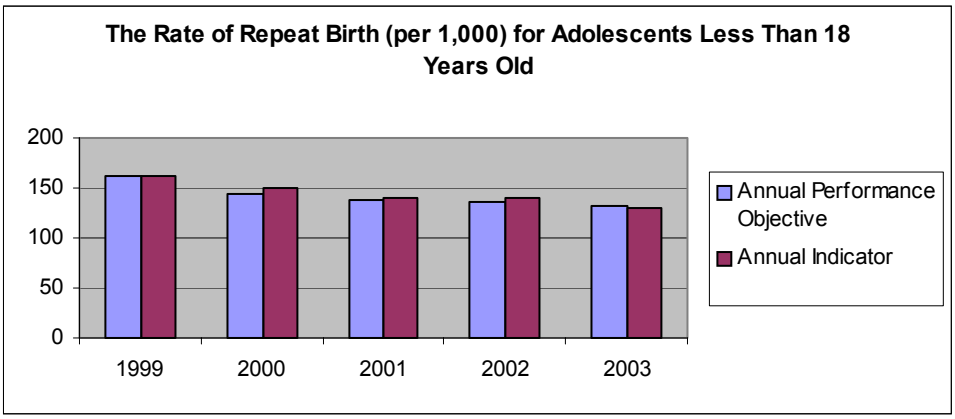
1. Reduce repeat teen births

2. Improve data collection for MCH Title V populations
3. Explore asthma coverage and services for children
4. Increase EPSDT screenings
5. Decrease low birth weight and infant mortality rate
6. Plan to identify, gather data, and address maternal death
7. Decrease smoking among teenagers
8. Decrease unhealthy teen behaviors
9. Assure access to pediatric care
10. Decrease smoking in pregnant teenagers

Effective description of the MCH population begins with addressing priorities to gain closure, begin anew, or enhancements to further focus on Mississippi's most serious MCH challenges.

Repeat Teen Births: The 2000 priority to reduce repeat births to adolescents originated from information collected over the previous five years. Approximately 30% of all teenage births were second or higher order births. This priority was chosen to be a state performance measure. Progress towards this measure is illustrated in Figure 5 below:

Figure 5Error!



Although somewhat decreased, the 2003 rate of repeat births to mothers less than 18 years old was approximately 140 per 1,000 live births. Initiatives to address this state performance measure have been moderately successful. Adolescent pregnancy has plagued Mississippi as a top MCH issue for quite some time and remains a priority to address for years to come.

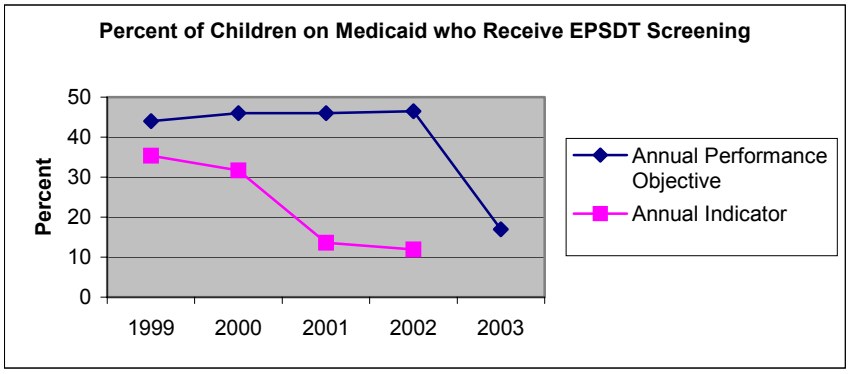
Data Collection for MCH Title V Populations: The priority to improve data collection for MCH populations was established due to weak data infrastructure in existence during the 2000 Needs Assessment. Through this priority another state performance measure was developed to focus on improved data collection. Five years later, although much is yet to be done, great strides have been made to address this priority. Of the ten priorities established by the workgroup five years ago, this priority has realized the greatest success. In 2000, the MDH had a CDC assigned MCH Epidemiologist who supervised only one employee. Staff expansion, special analyses, data collection and reporting has been enhanced. During the past two years, the Data Unit has grown from two full time employees to more than ten full time employees, several contract workers, and some part time employees. This growth occurred through the creation of positions with

federal funding, MDH reorganization, and the foresight of upper administrators who envisioned that reliable MCH data management improves services and funding opportunities for Mississippi's MCH population.

Asthma Coverage: Five years ago, state budgetary issues and cuts in Medicaid placed children at risk of inadequate coverage for diagnosis and treatment of asthma. Child asthma coverage was to be explored through the CSHCN program (CMP). Children on Medicaid and SCHIP do receive coverage for asthma. Through surveillance it was discovered that asthmatic children do tend to have adequate coverage. As discussed earlier in the assessment of needs of infants, children and adolescents, more could be done to expand and improve asthma services for children. However, at this time it is appropriate to close out this priority so that others may be addressed. The MDH Asthma program is expanding and collaborating with other agencies and programs and will continue to assess the needs of children with asthma so that the needs may be addressed comprehensively and appropriately.

EPSDT Screenings: Medicaid is the health care coverage source for many children in Mississippi providing them with coverage needed to access sick-child services. Preventive services offered by Medicaid, through EPSDT screenings, are not used as often despite availability. Figure 6 illustrates the trend over the past five years for EPSDT screenings. The dip in screenings indicates a dramatic decrease but this may not necessarily be the case. The population being monitored changed during 2001. Formerly, the MDH measured the number of EPSDT screenings performed on the population with Medicaid coverage served in the health department clinics. In 2001, the numerator became all EPSDT screenings throughout the state divided by all Medicaid enrollees. The shift suggests that private Medicaid providers may not be performing EPSDT screenings at the same rate as the MDH. Efforts to improve those numbers are ongoing.

Figure 6



Infant Mortality and Low Birth Weight Rates: The infant mortality rate in Mississippi has declined since 1980, although inconsistently. The mortality rate for nonwhite infants is greater than twice that for white infants. Mississippi consistently ranks worst in the United States for infant mortality rates keeping infant mortality very near the top MCH priority.

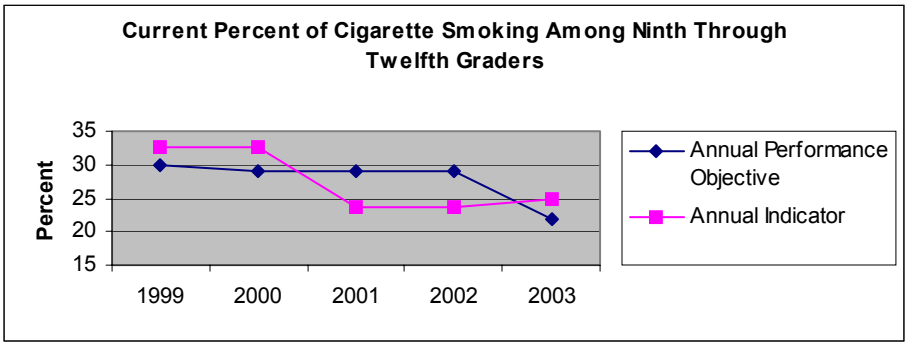
Low birth-weight (LBW) is a leading cause of infant mortality and mental retardation. Risk factors, markers, and causes of LBW include poor prenatal care, nutrition, maternal education levels, socioeconomic status, substance abuse, and maternal age. Approximately 11% of 2003

births were LBW. As with infant mortality, the indicator differs markedly by maternal race. National studies have shown teenagers to be more likely to deliver LBW babies, which also holds true in Mississippi. In 2003, about 12 percent of births to teenagers were LBW and 18% were premature. During the past five years, Mississippi has ranked in the highest percentages of LBW babies and infant mortality rates among all 50 states, according to the Kids Count Data Book. Mississippi ranked last in a composite rating of 10 selected child well-being measures.

Maternal Deaths: In 2000, maternal death held political and social interest. Thus, the MCH Needs Assessment Workgroup decided to explore this issue as a top priority for the 2000-2005 needs assessment cycle. When examining the number of maternal deaths as a public health issue, the numbers simply did not indicate a widespread, severe problem. At last study according to the MDH OB/GYN Consultant, there were nine maternal deaths for approximately 42,000 live births. Thus, this issue will not be renewed for the 2006-2010 needs assessment cycle.

Smoking Among Teenagers: Figure 7 shows great success in addressing teenage smoking as evidenced by the decline in percent of smokers in grades nine through twelve. Mississippi has succeeded in meeting and exceeding yearly objectives set by the Title V Block Grant. Although teenage smoking continues to decrease, the Youth Risk Behavior Surveillance System data show that the percentage of teenagers who have ever smoked cigarettes hovers above national averages. Therefore, tobacco prevention activities must continue so that the number of teenage smokers continues to decline. Over the past five years, the Partnership for a Healthy Mississippi has enacted youth targeted activities. Many of these activities center around the "Reject All Tobacco" campaign. The MDH funds School Tobacco Nurses that provide tobacco prevention and control in the school settings and clinics. It is evident that comprehensive programs and strong partnerships can influence youth tobacco use. However, the issue must remain in the forefront for continued success.

Figure 7



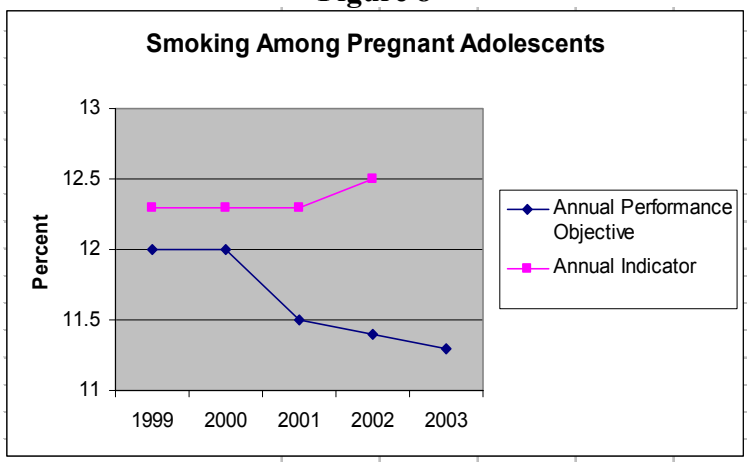
Unhealthy Teen Behaviors: In 2000, a priority to address unhealthy adolescent behaviors was set. The MDH defines unhealthy teen behaviors as alcohol and drug use, unhealthy nutritional habits, unsafe behavior resulting in injury, and sexual behavior. These issues have been addressed through various public health programs and MCH partner agencies. In the past five years, no central effort has addressed all unhealthy adolescent behaviors although many different programs and efforts surround these behaviors. According to Kids Count, Mississippi rates lowest among the fifty states in child injury and death rates and among the highest of the states in teen pregnancy and births. This priority will be addressed in the next needs assessment cycle in

a more defined manner.

Access to Pediatric Care: Issues surrounding access to care have been at the forefront of MCH priorities for quite some time. During the last needs assessment, it was determined that access to pediatric care might be a top priority due to changing Medicaid eligibility, rules, and regulations. There were also many counties with insufficient pediatric providers. This was deemed an important issue to MCH. When discussing this during the current cycle, it was decided that access to all care, not just pediatric services, continues to be prominent in MCH, thus making it a priority to address and incorporate into every priority and performance measure.

Smoking in Pregnant Adolescents: Mississippi has one of the highest rates of adolescent pregnancy. About 13% of all pregnant adolescents smoke. Smoking and adolescent age are risk factors for LBW and preterm birth. Births to girls under the age of eighteen are at greater risk for a host of health problems that are only compounded by smoking. The five-year trend in smoking among pregnant adolescents is illustrated in Figure 8. As the chart reflects, the number of smoking pregnant adolescents has not declined as hoped or predicted. Great strides have been made in the reduction of teen tobacco use. However, pregnant women, especially pregnant teenagers, have not stopped cigarette smoking. More needs to be done to address this issue in the next needs assessment cycle. The consensus of the workgroup was that this issue not be abandoned, but enhanced for the next cycle.

Figure 8



2005 Needs Assessment Priorities: The 2005 Needs Assessment priority selection process began by first reviewing the last cycle's priorities. Some priorities remained and were carried over for various reasons. Some of the previous priorities were simply enhanced to better focus on current needs. Others still are new. The 2005 priorities were chosen utilizing the Hanlon Method of prioritization. The following priorities address issues of each population in each pyramid level. The priorities are not listed in any specific order. In the next section, each priority will be summarized and discussed as to how it was chosen by the MCH workgroup. This section will discuss each priorities' relationship to the MCH Pyramid and population group.

1. Increase EPSDT/preventive health services for children on Medicaid and SCHIP.
2. Decrease smoking among pregnant women.

3. Decrease cigarette smoking among sixth through twelfth graders.
4. Reduce repeat teen pregnancies for adolescents less than 18 years old.
5. Address child/adolescent obesity/overweight issues.
6. Increase oral health care and preventive services for children.
7. Reduce child/adolescent unintentional injuries.
8. Decrease unhealthy behaviors, specifically alcohol and drug use and risky sexual behavior, for teenagers sixth through twelfth grades.
9. Maintain case management follow-up services for children with genetic disorders identified through MDH newborn screening.
10. Continue to improve and maintain developed data collection capacity for Title V population.

2.6. Needs Assessment Summary

EPSDT/Preventive Health Services: This priority was carried over from the previous cycle and enhanced. Little more than one-half of Medicaid eligibles receive preventive health screenings. One may reasonably assume a comparable percentage for SCHIP eligibles. Therefore, SCHIP was added to this priority and to the state performance measure that corresponds with this priority.

Smoking Among Pregnant Women: During the previous cycle, smoking among pregnant teenagers was selected as a priority to focus efforts on a specific age group of pregnant women. When revisited, it was agreed that this priority should be expanded to include all pregnant women. As data reflect, women who smoke during pregnancy are more likely to be low socioeconomic status, minorities, and deemed high risk. Smoking in itself makes pregnant women high risk due to the effects of smoking on unborn babies. In Mississippi, approximately 25% of pregnant women smoke. This statistic makes the size, seriousness, and scope of the issue appropriate for selection as a top priority.

Cigarette Smoking Among Sixth through Twelfth Graders: Cigarette smoking among youth continues to be a public health problem in Mississippi. Progress has been made to address youth smoking in Mississippi. However, according to 2003 YRBSS, the percent of children who report having smoked in the last 30 days or having ever smoked is well above the national average. Therefore, this priority was selected to remain in the top ten priorities. In the past, due to only having weighted data for ninth through twelfth graders, sixth through eighth graders were not included. Due to improved data resources, the priority will be enhanced to include sixth through twelfth graders, increasing the global scope of the priority.

Repeat Teen Pregnancy: Teen pregnancy remains a problem in Mississippi. Currently, over 40 per 1,000 births are to adolescent mothers. The rate of repeat teen pregnancies continues to be of special concern. Since a national performance measure to addresses teen pregnancy for 15-17 year olds exists, the workgroup desired to address the issue of repeat teen pregnancy. Repeat teen pregnancies remain around 140 or more per 1,000 live births to teens. This statistic accounts for approximately 25% of all teen births, above the national average according to the Kids Count Data Book 2004. Although it has declined in recent years, the rate is still a major concern due to implications for repeat teenage births. Adolescent mothers are at risk for LBW and preterm births, and a host of other health problems. This priority will remain in the top priorities for

2006-2010 so that more can be done to address this issue.

Childhood Obesity: Overweight or obese children, poor nutrition and physical inactivity have drawn public attention in recent years. Mississippi's children are becoming increasingly overweight, as is the adult population. Mississippi ranks among the most obese states in the U.S. According to 2003 YRBSS data, over 16% of youth self report as being overweight and another 17% as at risk for becoming overweight. With physical education at an all time low and education funding woes, little seems to be in progress to influence this growing problem. Childhood obesity must be made priority so that multi-agency combined efforts may collaborate to eliminate child obesity.

Dental Care: A 2000 MDH Oral Health clinical survey of 5,227 third-grade children showed that only 17% had at least one dental sealant on a permanent first molar tooth, over 70% demonstrated experience with dental decay, and about 15 percent of children were in urgent need of dental care, defined by pain and suffering, clinical inflammation, or loss of function. Several programs have been put into place to improve access to oral health programs. However, much remains to be done. Therefore, increasing oral health care and preventive services for children will be a 2005 Needs Assessment priority.

Unintentional Injuries in Children: Mississippi holds one of the highest rates of childhood unintentional injuries and deaths. Most childhood deaths and injuries occur before age 14 with the highest risk ages being 0-5 years. Adolescent injuries comprise the second highest risk group. Provisional data from 2003 show that 35.5 per 100,000 deaths will occur in children between ages one and 14 years. According to the 2004 Kids Count Data Book, 69 per 100,000 teenagers aged 15-19 die as a result of homicide, suicide, and accidents. This statistic is well above the national average of 50 per 100,000 deaths. These statistics support selection of this issue to be addressed during the next cycle.

Case Management Follow-up for Children with Genetic Disorders: The state leads in newborn screening and identification of genetic disorders and birth defects. Mississippi screens for over 40 genetic disorders and MDH follows identified cases through case management services. In 2000, this system was still in development. During the past five years, the MDH worked diligently to capture all families who have a newborn with a genetic disorder and offer case management, education, and support. Case management efforts are reaching close to 100% of families having a newborn identified through the newborn screening program. This priority will remain a top priority to support continued success within the program.

Data Collection Capacity: During the 2000 needs assessment cycle, a separate entity for data collection and capacity was a fairly new concept. A CDC assignee had been struggling to develop MCH data capacity. The workgroup determined the best way to address such an issue was to make it a top priority. Over the next five years a great amount of growth and strengthening occurred. Much has been done to address the issue of data capacity and infrastructure. However, data collection capacity should remain a top priority for this needs assessment cycle, but not as a state performance measure.

Summary: The Title V MCH Needs Assessment process consisted of several methodological

principals to ensure the ongoing nature of the process and incorporate results and activities with other portions of the grant application and annual report. National and state performance measures were examined. Overall MCH health status was considered. Capacity indicators were used to develop the state's top ten priorities and develop new state performance measures based on needs assessment evidence. Steps involved the collaboration of a workgroup, conducting special analyses, analyzing health status and existing data, identifying current activities to address needs, and finally, assigning top priorities along with developing a plan to address the priorities and monitor progress over the next five years.

A different scientific method was used to determine the top priorities of the state during this needs assessment. To assess communities and MCH needs statewide, similar qualitative and quantitative methods were used. Surveys developed by ad hoc committees were based on surveys used during the 2000 needs assessment. The committees essentially built upon strengths of existing surveys and enhanced questions to meet the changing Mississippi climate. Other similarities consisted of the convening of the needs assessment workgroup and conferences to present data findings. The state's capacity to meet the needs identified by the 2005 needs assessment is adequate and provides room for growth and further capacity development.

2.7. Health Status Indicators

Refer to forms in the MCH Block Grant Application

2.8. State Outcome Measures

The following list of State Performance Measures was derived from the 2005 needs assessment priorities as approved by the workgroup. These are also listed in the block grant application.

1. Percent of children on Medicaid and SCHIP who receive EPSDT and preventive health services well child visits.

Goal:	Increase access to preventive health care and health care for children on Medicaid and SCHIP.
Numerator:	Number of children ages 0-20 enrolled in Medicaid and SCHIP who received a preventive screening during the past year
Denominator:	Number of children ages 0-20 enrolled in Medicaid and SCHIP
Data Source:	Statewide data from Medicaid and SCHIP

2. Percent of pregnant women who smoke

Goal:	To decrease cigarette smoking among pregnant women
Numerator:	Number of women who report smoking during pregnancy during calendar year
Denominator:	Number of women who gave birth during calendar year
Data Source:	BRFSS and Vital Statistics

3. Percent of children with genetic disorders identified through MDH newborn screening who receive case management services

Goal:	To provide case management services to children testing positive for genetic disorders through newborn screening to ensure their enrollment in a follow up treatment program
Numerator:	Number of children with genetic disorders identified through newborn screening provided with case management services
Denominator:	Number of children identified with genetic disorders through newborn screening
Data Source:	Vital Statistics / Office of Genetics

4. The rate of repeat birth (per 1000) for adolescents less than 18 years old.

Goal:	To reduce the rate of repeat births among teenagers
Numerator:	Number of repeat live births to adolescents aged less than 18 years of age during reporting period
Denominator:	Number of live births to adolescents less than 18 years old during the reporting period
Data Source:	Vital Statistics

5. Current percent of cigarette smoking among sixth through twelfth graders

Goal:	To decrease cigarette smoking among 6-12 graders
Numerator:	Number of 6-12 grade public school students who report smoking cigarettes during the past 30 days
Denominator:	Total number of 6-12 grade public school students who reported smoking cigarettes during reporting period
Data Source:	YRBSS, YTS

6. Percent of adolescents in grades 6-12 who are overweight or at risk for becoming overweight.

Goal:	To reduce the rate of teens who are overweight or at risk for becoming overweight.
Numerator:	Number of 6-12 grade public school students who report being overweight or at risk for becoming overweight
Denominator:	Total number of 6-12 grade public school students surveyed during reporting period
Data Source:	YRBSS

7. Percent of children ages 0-5 on WIC classified as overweight.

Goal:	To reduce the rate of children on WIC who are identified as overweight
Numerator:	Number of children ages 0-5 on WIC classified as overweight
Denominator:	Number of children ages 0-5 on WIC
Data Source:	WIC patient management system

8. Percent of children entering kindergarten reported to have had a comprehensive dental exam within the past 12 months.

Goal:	Increase the percent of children entering kindergarten who receive oral health care and preventive services.
Numerator:	Number of children entering kindergarten reported to have had a dental exam within the past 12 months
Denominator:	Number of children entering kindergarten
Data Source:	Immunization records required for children to enter kindergarten

Attachment A

Conference Agenda

Uniting to Build Healthier Mississippi Families

August 30, 2004

9:30-9:45 Welcome—Dr. Brian Amy, MD, MHA, MPH
9:45-10:45 Overview of Title V and SECCS Needs Assessments
Marianne Zotti, RN, DrPH, Roy Hart, MPH
10:45-11:00 Break
11:00-11:45 Autism in Mississippi
Roy Hart, MPH
11:45-1:15 Lunch

1:15-2:00 Children with Special Health Care Needs (CSHCN) SLAITS Survey—Preliminary Findings
Debra Kane, PhD
2:00-2:30 Concurrent Sessions
Adolescent Issues—Childhood Obesity—YRBS
Lei Zhang
Birth Defects and Newborn Screening
Daniel Bender, MHS
Infant Mortality and Preterm Birth/Perinatal and Maternity Issues
Marianne Zotti, DrPH
2:30-2:45 Break
2:45-3:15 Concurrent Sessions (repeat of above)
3:15-4:00 Child Oral Health
Nicholas Mosca, DDS, MPH

August 31, 2004

8:15-9:00 Breakfast
9:00-9:45 The Needs Assessment Process
Anna Lyn Whitt, MPH, MSW
9:45-10:15 Round Robin Concurrent Sessions
Focus Groups
Anna Lyn Whitt, MPH, MSW
CSHCN: What the Children Mean to Public Health
Debra Kane, PhD
Partnerships in Your Community
Member of Workgroup
Assessing Your Community
Member of Workgroup

10:15-10:30 Concurrent Sessions
10:30-11:00 Concurrent Sessions
11:00-11:30 Concurrent Sessions
11:30-1:00 Lunch
1:15-2:00 Summary and Overview of Needs Assessment Process
Marianne Zotti, DrPH, Anna Lyn Whitt, MPH, MSW
2:00-2:15 Closing and Evaluation

Attachment B

Needs Assessment Priority Setting Conference

March 29-30, 2005

Tuesday, March 29, 2005

9:00—9:10	Welcome Danny Bender
9:10—9:25	MCH Block Grant Ulysses Conley, MPPA
9:25—9:40	MCH Pyramid and Needs Assessment Review Anna Lyn Whitt, LMSW, MPH
9:40—9:55	5 year trends Anna Lyn Whitt and Ulysses Conley
9:55—10:45	Special Analyses Cultural Competence, Jackie German, MPH
10:45—11:00	Break
11:00—11:50	Special analyses Infant mortality, Sarah Oppenhiemer, BS Camp Noah, Anna Lyn Whitt, LMSW, MPH
11:50	Lunch
12:30—1:20	SLAITS CSHCN Debbie Kane, PhD
1:20—2:10	Consumer survey/Community Survey Anna Lyn Whitt, LMSW, MPH
2:10—2:25	Break
2:25—3:15	Youth Risk Behavior Surveillance System Lei Zhang, MBA, MS
3:15—4:05	Oral Health Nicholas Mosca, DDS
4:05—4:30	Review of the day Anna Lyn Whitt

Wednesday, March 30, 2005

8:30—8:45	Introductions/ Review of Workgroup Responsibility
8:45—9:15	Review Hanlon Method
9:15—10:00	Review Data—what the numbers say we need to address
10:00—10:15	Break
10:15—11:45	Workgroup Breakout Session Prioritize individually
11:45—12:45	Lunch
12:45—2:45	Group Priority Setting
2:45—3:30	Wrap up/ Questions