

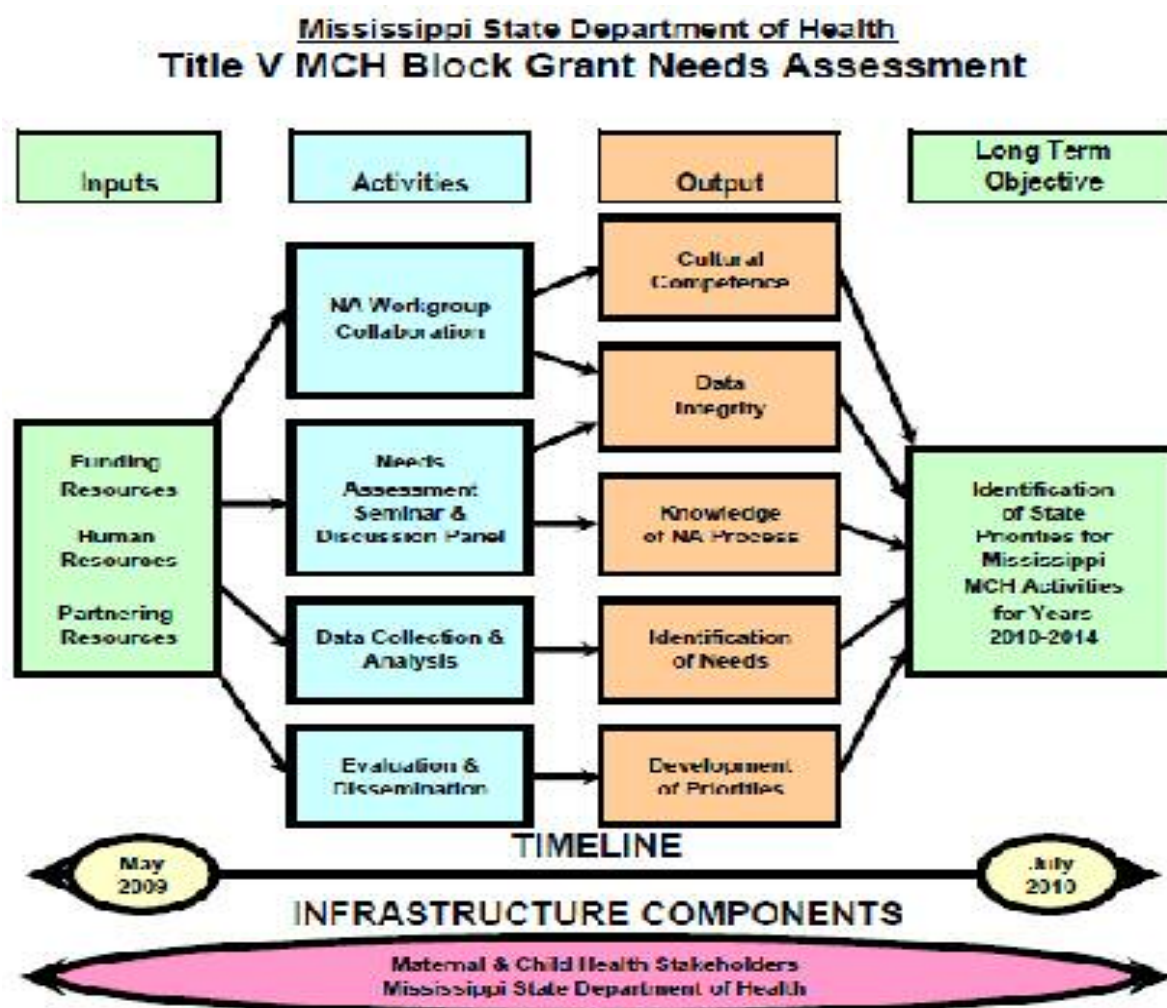
## 2010 Mississippi Needs Assessment

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## II. Needs Assessment of the Maternal and Child Health Population

### II.1 Process and Planning

Mississippi utilized multiple analytical and survey methods to conduct the 2010 Title V Maternal and Child Health (MCH) Needs Assessment and incorporated the Needs Assessment activities with other portions of the grant application and annual report. The ultimate goals of the Needs Assessment were to identify opportunities to improve outcomes for Mississippi families and strengthen MCH partnerships and collaboration within the state. The objectives for the Needs Assessment process were to incorporate the active participation of as many MCH stakeholders as possible to develop a set of priority needs and issues to be addressed during the upcoming 5-year cycle of the Title V MCH Block Grant. Of the methods used, national and state performance measures were examined, overall MCH health status was considered and indicators were used to develop the state's top priorities for our maternal child health population. New state performance measures were developed based on the input of hundreds of MCH stakeholders. A process was defined based on the Needs Assessment cycle. The Needs Assessment process was implemented in June 2009. A summary of the Needs Assessment processes and findings follows, culminating in a list of our new state performance measures for the 2011-2015 block grant cycle.



Early in calendar year 2009, the state Title V MCH Director appointed a full time Health Services staff member to plan and coordinate the process. The staff member was directly involved in the 2005 assessment process and brought that experience to the planning and development of the 2010 assessment. Additionally, a needs assessment committee was established consisting of program leadership and other key staff associated with Mississippi maternal child health programs and the MCH Block Grant. The committee began meeting during late summer 2009 and have met many times throughout the assessment process. The needs assessment committee members included:

Health Services Chief Nurse (Chairperson)	Juanita Graham MSN RN
Health Services Director / Title V Director	Daniel Bender MHS
Title V Block Grant Coordinator	John Justice MHSA
MCH Epidemiologist / SSDI Coordinator	Mary Wesley MPH
State MCH Epidemiologist (CDC Assigned)	Connie Bish PhD, MPH
Director, Office of Child & Adolescent Health	Geneva Cannon RN-C, MHS
Director, Office of Women's Health	Louisa Young Denson LSW, MPPA, CPM
Director, Children's Medical Program	Lawrence Clark
Director, Office of Health Data & Research	Lei Zhang MS, MBA, PhD
State Dental Director	Dr. Nicholas Mosca
Nutrition Services Director	Donna Speed MS, RD, LD
Social Services Director	Danielle Seale LMSW
Social Services Consultant	Terry Beck MSW, LCSW

The first phase of the assessment commenced during the summer of 2009 when a Graduate Student Intern assigned to the agency by the Maternal Child Health Bureau arrived to assist in the early assessment activities. The intern developed and conducted a consumer survey among local health clinics. The second phase included a review of available data sources to support the assessment. In the third phase, a survey instrument utilizing Survey Monkey® was developed and administered to hundreds of MCH stakeholders statewide to solicit input on identifying and selecting state priorities. A small representative group of stakeholders was convened to discuss the Survey Monkey findings and identify priority needs and issues from which a committee selected state performance indicators. A final phase in the assessment process assembled data and narrative to describe and illustrate the findings of the assessment and complete the reporting process.

Following the entire process, the Needs Assessment report was written and submitted for intra-agency approval. During this time, the Needs Assessment was amended and critiqued by office directors and MCH leaders, as well as the state MCH epidemiologist. Upon completion, the Needs Assessment report was attached to the MCH block grant and uploaded to HRSA via the Title V Information System (TVIS) as part of the Block Grant submission process.

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. Her arrival in the state during late 2009 prevented her participation in the early planning process but she was instrumental in guiding decisions during the latter portion of the Needs Assessment activities.

A weakness in the Needs Assessment process was the lack of experienced, dedicated staff to devote full time attention to the process. There was one experienced individual appointed to coordinate the process supported by a team of MCH staff sharing some duties and activities in the process. Unfortunately, the lack of dedicated staff may have caused the Needs Assessment to compete with other simultaneous Agency activities allowing less direct focus on the assessment than should have been devoted to it.

Additionally, in the discussions that followed the final drafting of the report, it was noted that there was insufficient representation of the needs and issues of certain population groups. Of note, children and youth with special health care needs (CYSHCN) were not adequately discussed. None of the clinics for CYSHCN were included in the consumer satisfaction surveys. A plan was set in place to acknowledge these missing pieces in the Needs Assessment narrative along with a discussion of the proposed plan of action to correct them. A plan was set in place to conduct the survey among CYSHCN clinics and collect additional data relevant to the CYSHCN population during late July or early August 2010. The preliminary findings of those additional assessment activities were available in time for the Needs Assessment and Block Grant application reviews scheduled in Atlanta during mid-August 2010. Final remarks and data have been included in section II.3 with the remainder of the survey findings.

There were also some challenges in recruiting direct participation from stakeholders. The economic picture of the state is grim. Although other state agencies and MCH stakeholders expressed a desire for collaboration and support, many simply could not devote time or staff to directly participate in the process such as attending meetings and discussions for setting priorities and developing state indicators.

A discussion during one of the Block Grant and Needs Assessment committee meetings focused on the need to devote additional time and effort towards the process and to begin doing so early in the 5-year cycle. It was decided that this would be the plan of action during the coming 5-year cycle and that utilization of the CDC-assigned MCH epidemiologist would be appropriate to guide this process.

## II.2. Partnering and Collaboration

Many initiatives are currently being implemented to build partnerships within the MSDH. During the 2005-2010 5-year cycle, the MSDH underwent many changes including reorganization at many levels. Stronger collaboration between agency components as well as with external stakeholders has been the focus for Health Services for the past several years. During the cycle, Health Services has grown from a few maternal and child health bureaus to a group of seven offices including Women's Health, Child and Adolescent Health, Preventive Health, Oral Health, Office of Tobacco Control, WIC, and the Office of Health Data and Research. These offices work collaboratively to optimize use of funding, decrease overlaps, fill gaps, and strengthen agency capacity for meeting the needs of the MCH population.

MSDH Health Services has taken great strides to increase collaboration across the state, especially between state and local level components of the agency. During the past few years, the Health Services leadership team traveled to all of the regional public health districts within the state for face-to-face meetings to discuss MCH program performance and identify opportunities for improving outcomes. A similar series of meetings has been planned for 2010-2011 with a slightly different shift in discussion. Rather than focusing so much on program performance and outcomes, more focus will be given to allowing district staff to relate needs and issues at the local level. These discussions will be vital to the initiation of very early planning to improve capacity for conducting the next Title V Needs Assessment.

Initiatives for partnerships with governmental agencies and non-governmental agencies continue to flourish in Mississippi. 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 are vital to the strength of any Needs Assessment process as well improving outcomes for Mississippi families.

The CDC and HRSA provide funding for most services implemented through Health Services. Less than one percent of total funding for Health Services is provided by the State of Mississippi. Therefore, many MCH programs funded through Title V work in cooperation with national resources from CDC and other HRSA Maternal and Child Health Bureau programs. Program staff are constantly in touch with project directors at the national level to ensure that needed services are provided to the MCH population. Additionally, organizational relationships exist between MSDH and other human service agencies that work to enhance the capacity of the Title V program. Examples are given below.

*Alcohol and Drug Prevention Programs:* The Born Free project, which originated with the MSDH, networks available community resources for the provision of services to substance-involved pregnant women and their infants. Other agencies involved in the Born Free network include: (a) the University of Mississippi Medical Center (UMMC); (b) Marian Hill Chemical Dependency Treatment Center; (c) New Life for Women (housing); (d) Catholic Charities (provides direct primary treatment services and transitional program services); (e) community

health centers (CHCs); (f) Jackson Recovery Center; (g) state mental health centers and state hospital; (h) parole officers and the court system; and, (i) sexual assault and domestic violence shelters and other treatment centers. Born Free is now administered by the local chapter of Catholic Charities whose mission is to provide services to people in need, advocate for justice, and to call others to do the same.

The MSDH Adolescent Health Coordinator actively serves on the Mississippi (MS) Department of Mental Health (MDMH) Alcohol and Drug Abuse Advisory Council in order to advise and support prevention and treatment programs aimed at reducing alcohol and drug abuse among adolescents and young adults. The Council promotes and assists the Bureau of Alcohol and Drug Abuse with developing effective youth prevention programs, providing input on the development of the annual State Plan for Alcohol and Drug Abuse Services, participating in the MDMH's peer review process, and promoting the further development of alcohol and drug treatment programs at the community level.

*Breast and Cervical Cancer Program (BCCP):* The BCCP provides outreach activities and educational materials to promote awareness and public education through collaborations with community groups and organizations. Prevention activities are conducted through contracts with community health centers, health departments, private providers, and hospitals to conduct screening services, diagnostic services, referrals and case management. The target populations for the program are uninsured, underinsured, and minority women. Women 50 years of age and older are the target group for mammography screening, and women 40 years and older are the target group for cervical cancer screening. The BCCP also works closely with the Maternity Program to ensure that all women have access to quality care and provides a Cancer Drug Program for women who are at or below 250% of the federal poverty level.

*Children's Medical Program (CMP):* CMP, the state CYSHCN program, maintains an Advisory Council whose members include medical and other service providers and parents of CYSHCN. Medical service providers of the Advisory Council include private physicians, a dentist, orthotics/prosthetics provider, and staff physicians of UMMC, the only state funded medical teaching and neonatal tertiary care facility. A representative from the MSDH also serves on the MS Council on Developmental Disabilities, an appointed group of people designed to support individuals with developmental disabilities, their families and the community in which they live and develop strategies to support systemic change. CMP partners with the MS Disability Determination Service providing for the exchange of respective program eligibility criteria in cross referral of CYSHCN for services. CMP now maintains a Parent Advisory Committee composed of parents of CYSHCN who are covered by the program. Parents provide input regarding the services that their children receive from the CYSHCN program.

*Community Health Centers/MS Primary Health Care Association:* A primary care cooperative agreement with the MSDH Bureau of Primary Health Care has been administered by the MSDH since 1985. The cooperative agreement provides a mechanism for joint perinatal planning and provider education between the state MCH program and the CHCs. Perinatal providers are placed in communities of greatest need through a joint decision-making process of the MS Primary Health Care Association (MPHCA) and the MSDH Primary Care Development Program, making access to care available to many pregnant women and their infants. CHCs also

participate in the MSDH school-based dental sealant program to increase utilization of sealants among eight year old children.

*Family Planning:* The MSDH Family Planning Program maintains contracts with community health centers and with universities and/or colleges for the provision of contraceptive supplies and educational materials. Family planning staff at the central office, district, and local health department levels provide continuous informal collaboration and consultation to persons from the community including other health care providers, teachers, students, patients, potential clients, and organizations. This includes providing and assisting with presentations, health fairs, and training. Family planning staff also participate with different agencies, task forces, and coalitions in providing supportive services to various communities such as letters of support, assistance with grant writing, and service on various coalitions and community councils.

The MSDH Family Planning Program has established contracts with 12 Delegate Agency Providers which include: nine (9) CHCs located in Public Health Districts I, II, III, IV, V, and VIII; two (2) Job Corps Centers in Public Health Districts I and V; and one (1) University Student Health Center in Public Health District V. These entities serve populations that typically do not visit and receive services from MSDH clinics. Several of these entities have access to or are located in school based clinic settings (Aaron E. Henry Community Health Center in District I, Jackson Medical Mall Foundation Convenient Care Clinic). These entities serve populations that typically do not visit and receive services from MSDH clinics. Several of these entities have access to or are located in school based clinic settings (Aaron E. Henry Community Health Center in District I, Jackson Medical Mall Foundation Convenient Care Clinic, MS Job Corp Center, Batesville Job Corp Center) and service a larger population of teens. Job Corp Center, Batesville Job Corp Center) and service a larger population of teens. All provide contraceptive supplies, education, and counseling (supplies are provided by MSDH Family Planning Program funded through Title X).

The Jackson Medical Mall Pregnancy Prevention Project addresses teenage pregnancy prevention in two Jackson area schools, Lanier and Forrest Hill High Schools, through education, counseling and providing clinical services to address their family planning and reproductive health needs. Their efforts should assure timely intervention and ongoing support to students determined to be at risk, thereby reducing sexual behavior and subsequent pregnancies in many.

The G.A. Carmichael Family Health Center (GACFHC) Community Health Center Pregnancy Prevention Program addresses teenage pregnancy prevention through abstinence education in school-based clinics in two of the three counties served by GACFHC as well as teaching abstinence during certain school periods. Teens participate in Teen Summit held annually during the month of May where abstinence, pregnancy and disease prevention are discussed.

*First Steps Early Intervention System (FSEIS):* The FSEIS is structurally located within the Office of Child and Adolescent Health, and has established an Interagency Coordinating Council to bring together the state departments of Mental Health, Education, and Human Services; the Division of Medicaid; universities, providers of services, and others to develop a comprehensive system of family-centered, community based, culturally-competent services. Local interagency

councils and stakeholder groups support the planning, development and implementation of the system at the community level.

*Healthy Linkages:* UMMC, federally qualified community health centers, and MSDH have collaborated to form the MS Healthy Linkages Project, a formal patient referral process for MSDH county clinics, the state's 21 federally qualified community health centers, and the university in order to improve outcomes for the maternal and child health population in MS.

*Department of Human Services (DHS):* DHS provides services that include case management, child care for the developmentally disabled, services for the chronic mentally ill, abstinence education, and treatment for alcohol and chemically dependent adolescents.

DHS Office of Children and Youth uses funds for day care, while the Division of Aging and Adult Services uses Social Services Block Grant (SSBG) funds for home health aides, ombudsmen services, transportation for elderly, case management for adults, adult day care, home-delivered meals for adults, and respite care. The MSDH no longer receives SSBG funds from the DHS to assist in its efforts to provide needed contraceptive services to teens; however, a representative of the MSDH is a member of the DHS Out-of-Wedlock Task Force.

DHS administers the federal Child Care Development Block Grant (CCDBG) which has two basic component areas. The provision of actual child care services comprises 75 percent of the budget. The Quality Child Care Development portion of the budget provides funds for training of child care providers, improvements to day care centers, and media centers. Some CCDBG funds are provided to the MSDH for child care facilities licensure.

*Immunization:* The Bureau of Immunization located in the Office of Communicable Disease, provides vaccine to private physicians and community health centers that are enrolled as Vaccine for Children providers.

The MSDH Statewide Immunization Program is primarily funded by the Centers for Disease Control and Prevention, but MCH funds are used to support some staff in local health department clinics. A statewide coalition has been established, which is composed of health care professionals (organizations and individuals), immunization providers, community-based organizations, social/civic groups, lay people, and others with an interest in improving the immunization status of Mississippi's children. This broad-based group provides the framework for promoting the implementation of the immunization monitoring and tracking system in non-MSDH clinics.

*March of Dimes:* The MSDH partners with the March of Dimes to increase the awareness of folic acid as it relates to birth defects. The March of Dimes launched a campaign to raise awareness of the growing problem of prematurity and to decrease the rate of preterm births. Premature infants are more likely to be born with low birth weight and suffer mild to severe disabilities and/or death. Prematurity is the leading cause of infant death before the first month of life.



*Maternal Death Review:* All maternal death certificates and matching birth certificates (if there was a live birth) or fetal death certificates are sent to the director of the Office of Women's Health. District and county health department staff are requested to gather information regarding prenatal care, labor and delivery, postpartum care and any other information surrounding the death to be used for in-house review. The death certificates were revised in 1998 and a block added to check if the decedent had been pregnant within the last 90 days.

*Division of Medicaid:* The Division of Medicaid is a key partner in MS health care via reimbursement for services to patients seen in MSDH clinics. In addition to a cooperative agreement, which allows billing for special services provided to Perinatal High Risk Management/Infant Services System (PHRM/ISS) and other non-high risk patients, the MSDH assists Medicaid in assessing pregnant women and children for Medicaid and SCHIP eligibility using MSDH staff and out-stationed eligibility workers. Medicaid staff and MSDH staff meet quarterly to discuss PHRM/ISS progress and concerns.

The MSDH Office of Child and Adolescent Health collaborates with MS Division of Medicaid to support the Mississippi Youth Programs Around-the Clock (MYPAC), a home and community-based Medicaid waiver program that provides an array of services for youth with severe emotional disorders. The program provides alternate services to traditional Psychiatric Residential Treatment Facilities (PRTF) services.

*MS Department of Mental Health:* The MSDH collaborates with the MS Department of Mental Health, Division of Children and Youth Services to provide a comprehensive community-based mental health service system for children and adolescents. The Division serves as the lead agency responsible at the state level to improve the availability of and accessibility to appropriate, community-based service for children and youth with serious emotional disorders and their families. Recognizing the wide array of services needed by children and youth with serious emotional disorders, the MSDH, along with MS Department of Mental Health and other key state agency partners, work to provide coordinated, cohesive system of care that is child-centered and family-centered through activities focusing on local and state infrastructure building, technical assistance to providers, and public awareness and education. A wraparound approach to delivery of services has been developed in an effort to make services accessible and appropriate for each child and family. A collaborative team of the MS Department of Mental Health Comprehensive Mental Health Centers, the State Level Case Review Team, several local Multidisciplinary Assessment and Planning (MAP) Teams, and other child-serving agencies and task forces assist children, youth and family access the system of care.

The State Level Case Review Team operates through an interagency authorization agreement to review cases of children and youth up to age 21 with serious emotional and behavioral problems and or serious mental illness for whom adequate treatment and or placement cannot be found at the county or local level, and for whom any single state agency has been unable to secure necessary services through its own resources. Before cases are referred to the State Level Case Review Team, all cases concerning children and youth (age 5 to 21) who have a serious emotional and/or behavioral disorder or serious mental illness and who are at immediate risk for an appropriate 24 hour institutional placement due to lack of access to or availability of needed services and supports in the home and community are reviewed by the Local-Level MAP Team.

After having exhausted all available services and resources in the local community and/or in the state, cases are then referred to the State Level Case Review Team. This team consists of state agencies and private entities including MSDH, Mental Health, Education, Medicaid, Human Services, and the Attorney General's Office, and meets monthly to identify services used prior to referral, recommends modifications to these services, and develops alternate strategies to meet client need. Follow up monitoring of recommendations and clients are also activities of the State Level Case Review Team.

*Nutrition Services:* The Nutrition Services program serves in an advisory capacity to internal and external programs. The primary focus is to encourage a healthier lifestyle by means of improved nutrition and increased physical activity throughout the agency and state by means of collaboration with relevant stakeholders.

The Department of Human Services (MDHS) partnered with MSDH to offer the Color Me Healthy program in the state. This program is for teachers in the preschool setting and targets incorporating food variety and physical activity using all five senses. Color Me Healthy also offers a component for parent education on nutrition and physical activity. The program was implemented on a limited basis in 2008. With the help of MDHS, Color Me Healthy toolkits have been purchased for every licensed child care center in MS to receive after completing training which is available throughout the state.

Nutrition Services also works with the Child Nutrition Program in the Department of Education, the Department of Agriculture, and WIC to promote Fruits and Veggies-More Matters at school events, worksite wellness programs and education/health fairs. Our Fruits and Veggies-More Matters program reached over 15,000 individuals in 2009 and stresses the importance of including a variety of fruits and vegetables in the diet.

Nutrition Services works with universities and colleges in precepting and training dietetic students. Each fall, the major universities invite Nutrition to participate in the orientation for new students. This is an opportunity to highlight the services provided by MSDH. Dietetic students are assigned preceptors for community nutrition in the clinics. Students are assigned to educate clients through individual counseling, WIC certification, and group classes. MSDH also hosts a "Genetics 101" conference for all students and professors annually. During the conference, students are introduced to the genetic and metabolic concerns that affect many of our children. Topics include processes to assist our children and their parents with dietary, emotional, and financial needs.

Nutrition Services works closely with the MS State Department of Education's Office of Healthy Schools to increase fruits and vegetables consumption and promote healthier lifestyles in an effort to decrease obesity. Funding allows for distribution of education materials, workshops, and assistance for schools and school wellness councils.

*Oral Health:* MSDH Mobile Dental Clinic (Direct Health Care) -- In January 2007, the Sullivan-Schein Corporation donated a 51-foot mobile-dental-clinic equipped with two dental operatories, digital radiography, and electronic records for use to provide direct health care services. In February 2008, MSDH collaborated with the University of Mississippi School of Dentistry to

provide free dental care to about 50 people in the City of Clarksdale in the MS Delta. MSDH continue to seek additional funding to use this state-of-the-art mobile clinic to provide dental services in rural underserved communities.

*Preventive and Primary Care:* MSDH provides funding and contracts with MS Federally Qualified Health Centers to increase access to preventive and primary care services for uninsured or medically indigent patients, and to create new services or augment existing services provided to uninsured or medically indigent patients. Services include, but are not limited to, primary care medical and preventive services, dental services, optometric services, in-house laboratory services, diagnostic services, pharmacy services, nutritional services, and social services.

*Office of Rural Health (ORH):* The MSDH ORH administers the Medicare Rural Hospital Flexibility (FLEX) Grant, which funds the Critical Access Hospital program. This program is designed to foster the growth of collaborative rural health delivery systems across the continuum of care at the community level with appropriate external relationships for referral and support. This should result in improved access to care, economic performance and viability of rural hospitals, and ultimately, health status of the community. The Office of Rural Health contracts with the MS Hospital Association to provide staff support and programmatic assistance for the FLEX program.

*Statewide Smoke-Free Air Campaign:* MSDH is leading a statewide campaign to educate Mississippians about the dangers of secondhand smoke. The goal is to complete a two-year campaign that will inform Mississippians about the benefits of smoke-free air, educate residents about the harmful effects of breathing secondhand smoke, and support a comprehensive statewide smoke-free air law.

In order to reduce the estimated 5,250 premature deaths, including 550 deaths among nonsmokers as a result of secondhand smoke, MS health advocate organizations are partnering with MSDH to help with the Smoke Free Air MS campaign. The campaign will include extensive grassroots efforts, a statewide media campaign, and collaboration with key partners to support the passage of a comprehensive smoke-free air law.

A recent study by MS State University researchers in two MS towns, Starkville and Hattiesburg, showed respective decreases of 27.7 and 13.4 percent in heart attack hospital admissions after implementation of smoke-free air ordinances. The study focused on residents in the three-year span after the laws went into effect compared to three years prior (53 admissions before and 38 after in Starkville; 345 admissions before and 299 after in Hattiesburg). It is hoped that similar decreases would be realized with the passage of a statewide smoke-free air law.

*MSDH STD/HIV:* The STD/HIV Office maintains sub-grants with ten community-based organizations, including federally qualified health centers, and UMMC to provide STD/HIV prevention, awareness, care and services. These activities are targeted to populations at highest demonstrated risk. People living with HIV and African-American men and women are the three top priority populations in MS. The STD/HIV sub-grants address not becoming infected with STDs or HIV and the importance of routine HIV screening in general and during pregnancy. Using federal Ryan White funds, the STD/HIV office provides funding for statewide medical

case management, including direct care, for HIV-infected pregnant women and labor and delivery guidance and follow-up. Women with HIV infection eligible for the AIDS drug assistance program may receive dental care at an MSDH dental clinic at no cost to the woman (an example of MSDH provided direct care for those living with HIV infection). The pediatric infectious disease sub-grant also pays for statewide medical case management of perinatally-exposed infants until they are deemed HIV negative and for perinatally-infected infants until they are at least 18 years old. At this time they are transferred to UMMC Adolescent and Adult Infectious services -- also funded to provide additional services through Ryan White pass-through money.

*WIC:* The Office of WIC has a contractual relationship with 19 community health centers for the purpose of certification of women, infants, and children for provision of WIC food and/or formula through distribution centers located throughout the state.



Participant support will be further acknowledged through the dissemination of survey results and findings. Upon completion of final revisions to the Needs Assessment document, an executive summary of the assessment including survey findings will be distributed to the list of participating stakeholders. The full Needs Assessment document and the executive summary will be made available to the general public for download from the Mississippi State Department of Health website.

Participants were demographically diverse. Racial groups included white (68.7%) and black/African American (29.9%). Other racial and ethnic groups comprised the remaining 1.4% of participants. All participants were at least 19 years of age. Participant age groups included 19-24 years (2.9%), 25-44 years (34.2%), 45-64 years (60.2%), and 65+ years (2.7%).

Individuals representing a variety of organizational associations participated in the survey. The vast majority of participants were employed in the field of public health (69.5%). Other stakeholder groups represented included advocacy organizations (1.4%), clinicians/providers (5.2%), community members (0.9%), community-based organizations (1.1%), faith-based organizations (0.2%), health plans/HMOs (0.2%), hospitals/inpatient care centers (0.2%), nursing (3.9%), schools/academia (2.7%), social services (1.1%), other state agencies (8.6%), and other miscellaneous groups not otherwise identified (4.8%). Participants were asked to describe their geographic areas of practice. Practice areas included community (9.8%), city (4.8%), county (4.8%), region/district (23.2%), state (36.8%), and other (1.1%).

Participants were asked three open-ended questions: 1) List up to 4 strengths in health services related to the community or population you work with, 2) List up to 4 weaknesses in health services related to the community or population you work with, and 3) List up to 4 solutions to the weaknesses identified above. Each of these questions generated more than 600 responses. Participants also were provided a list of issues for each of the primary populations including women and infants, children and adolescents, and children/youth with special health care needs. Participants were asked to rate those issues on a Likert scale system according to the level of importance or priority they felt each issue should hold for the given population. The results of the priority setting questions are summarized in section 11.6.A which discusses the new list of state priorities.

Responses to the open ended questions were downloaded from the survey software into three Excel files: community strengths, community weaknesses, and recommended solutions. All responses were listed in one column and sorted into ascending order to facilitate “clumping” of similar responses. Categories were developed based on the four tiers of the maternal child health pyramid model: 1. direct health care services, 2. enabling services, 3. population-based services, and 4. infrastructure building services. More specific sub-categories were developed within these four categories based on examples of activities for each of the four pyramid domains. Sub-category codes were established and the responses to the open ended questions were categorized utilizing the codes. The coded responses were sorted in ascending order by codes.

Calculations were made to quantify the percentage of responses in each category and sub-category. Sometimes, an identified strength in one part of the state was identified as a weakness

## Community Strengths, Needs Assessment Survey 2010

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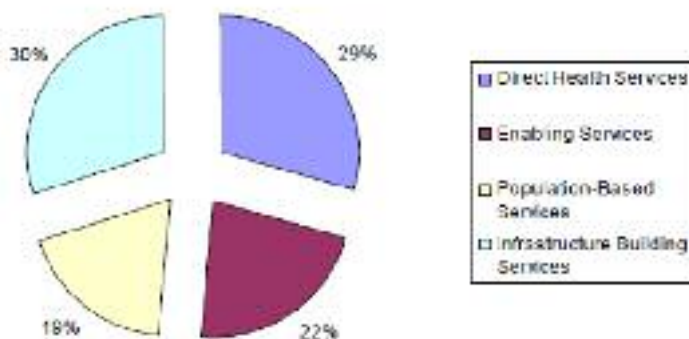


Figure 1.

confidence. For example, many respondents simply replied “oral health” without further distinguishing between types of oral health services. Some oral health services such as dental cleaning or restorative care should be categorized as direct services while other oral health services such as promotion of water fluoridation would be classified as population-based services. The pyramid specifically lists oral health as an example of population-based services. Thus, all oral health responses were categorized as population-based since no information was available to confirm the response indicated direct services rather than population-based services.

*Community strengths:* Survey data for community strengths were categorized as direct health services (29%), enabling services (22%), population-based services (19%), and infrastructure building services (30%) (Figure 1).

Within direct health services, stated strengths included access to affordable health services (38%), services for CYSHCN including specialty care (9%), access to expanded services including after hours, rural, and specialty care (21%), and access to comprehensive/affordable women’s health services (32%) (Figure 2).

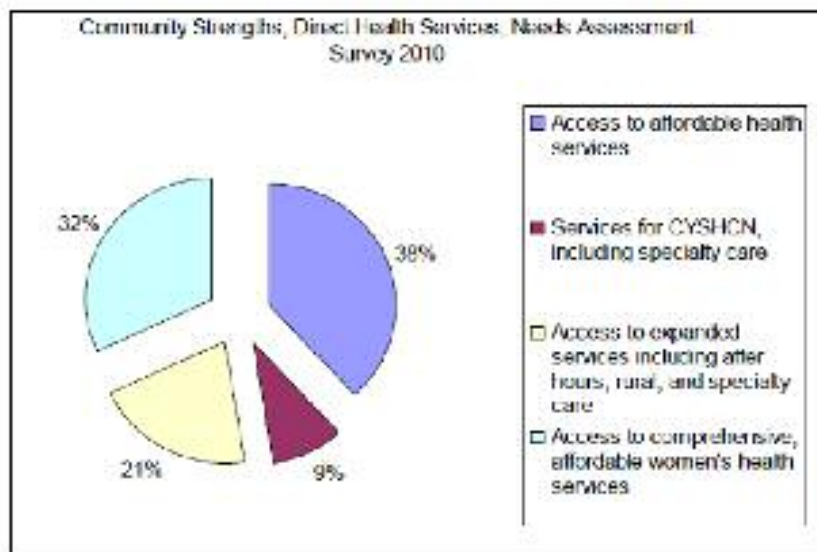


Figure 2.

in another. Or, services available in one area of the state may be less available in another area. Thus, geographic diversity affected the responses.

There were some limitations to this process of categorizing public health activities. Some responses to the open ended questions were very short and due to possible overlapping across pyramid tiers, it proved difficult to accurately divide responses with

Community Strengths, Enabling Services, Needs Assessment Survey 2010

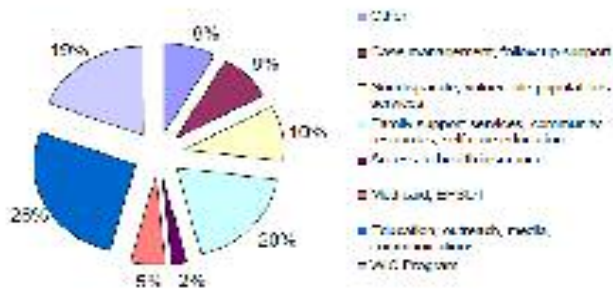


Figure 3

The most popular responses for enabling services included case management and follow up services (8%), Medicaid/EPSTDT (5%), family support, community based and self care services (20%), WIC (19%), and education, outreach, and communication (28%) (Figure 3).

Community Strengths, Population-Based Services, Needs Assessment Survey 2010

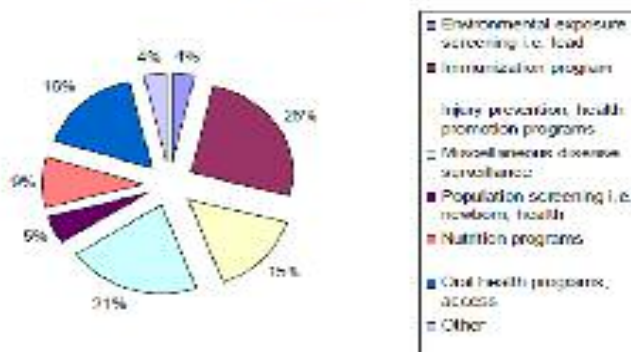


Figure 4

Population-based services for community strengths included environmental exposure screening, i.e., lead (4%), immunization program (26%), injury prevention/health promotion programs (15%), miscellaneous disease surveillance (21%), population screening, i.e., newborn and health (5%), nutrition programs (9%), oral health programs (16%), and other (4%) (Figure 4).

responses include coordination, partnering, coalitions, teamwork, and collaboration (26%); compassionate/experienced staff (23%); supplies, equipment, and facilities (15%); quality assurance and outcomes focus (8%); and provider availability and competence (9%) (Figure 5).

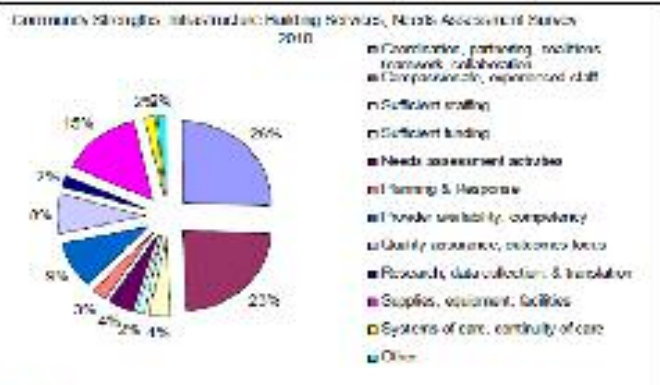


Figure 5

*Community weaknesses:* Survey data for community weaknesses were categorized as direct health services (17%), enabling services (34%), population-based services (9%), and infrastructure building services (40%) (Figure 6).

Community weaknesses, Needs Assessment Survey 2010

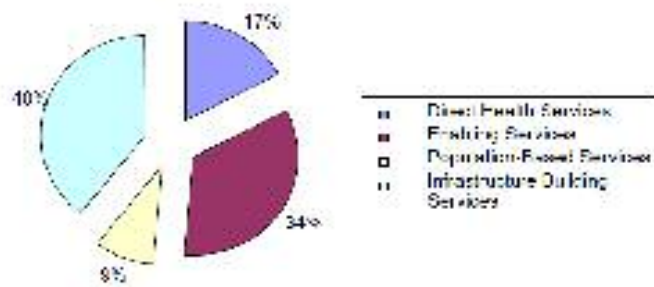


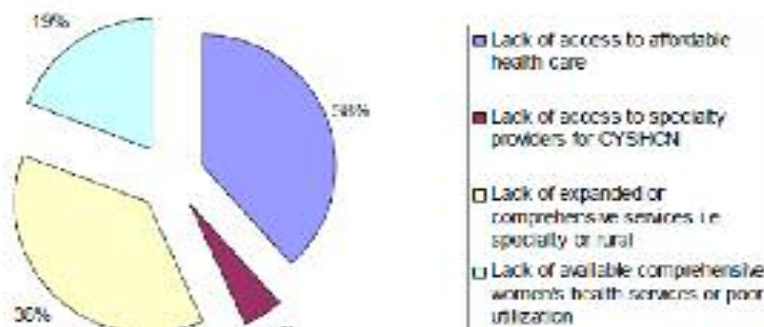
Figure 6

The most popular responses for community weaknesses relating to direct health services were lack of access to affordable health care (38%), lack of access to specialty providers for

Infrastructure building services for community strengths were varied. Examples of the most popular



Community weaknesses, Direct health services, Needs Assessment Survey 2010



CYSHCN (5%), lack of expanded or comprehensive services, i.e., specialty or rural (38%), and lack of available or poor utilization of comprehensive women's health services (19%) (Figure 7).

Community weaknesses relating to enabling services were varied. The most popular responses

included lack of case management and follow up services (4%), poor community or individual support systems (26%), poor access to health insurance (4%), Medicaid issues (6%), ineffective communications, outreach, and education (20%), lack of transportation services (17%), and lack of translators (10%) (Figure 8).

Community weaknesses, Enabling services, Needs Assessment Survey 2010

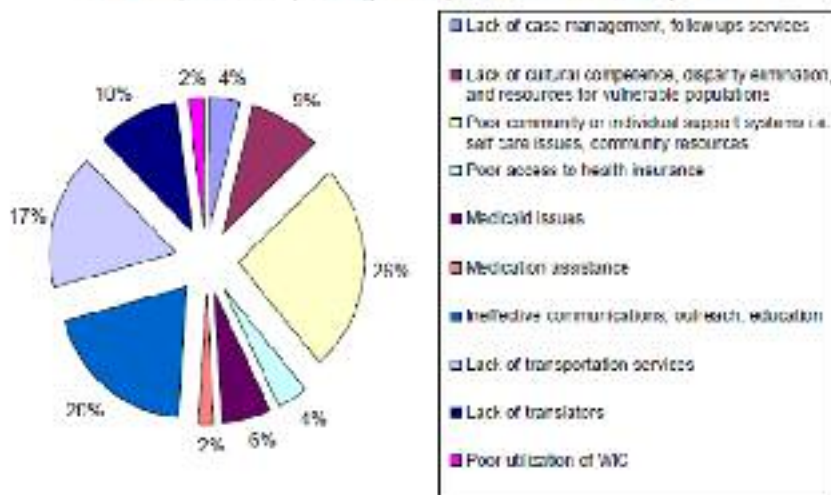


Figure 8

Community weaknesses, Population-based services, Needs Assessment Survey 2010

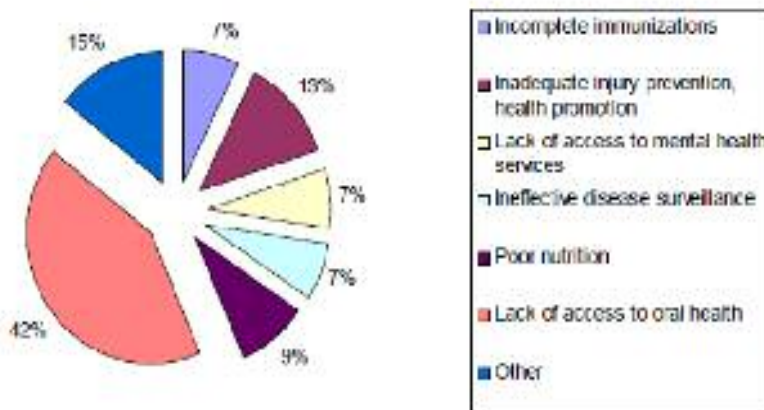


Figure 9

Responses for community weaknesses in the population-based services group included incomplete immunizations (7%), inadequate injury prevention and health promotion (13%), lack of access to mental health services (7%), ineffective disease surveillance (7%), poor nutrition (9%), lack of access to oral health (15%), and other miscellaneous reasons (42%), (Figure 9).

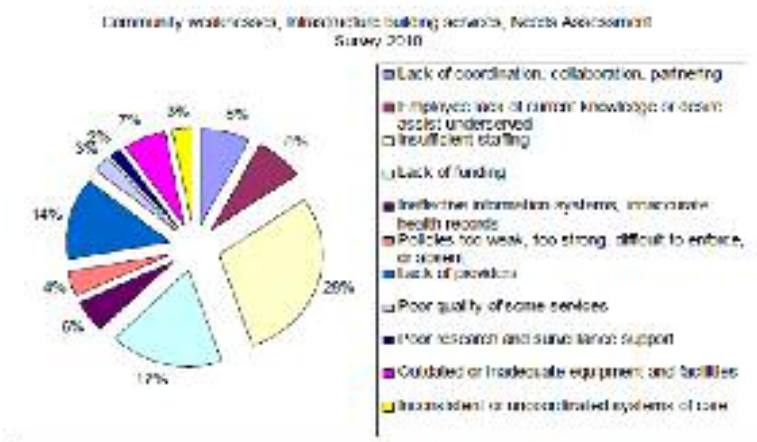


Figure 10

(4%), lack of providers (14%), poor quality of some services (3%), inconsistent or uncoordinated systems of care (3%), and outdated or inadequate equipment and facilities (7%) (Figure 10).

*Recommended solutions:* Survey data for recommended solutions were categorized as direct health services (9%), enabling services (36%), population-based services (6%), and infrastructure building services (49%) (Figure 11).

Within solutions, there were only three categories for responses to direct health services including access to affordable health services (22%), access to expanded services including after hours, rural, and specialty care (62%), and access to comprehensive affordable women’s health services (16%) (no figure).

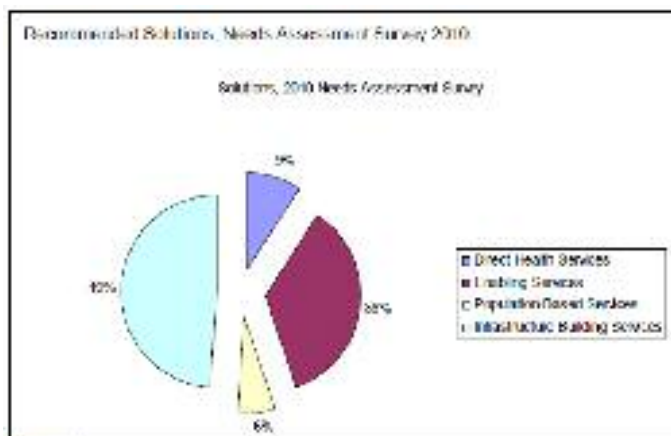


Figure 11

Within solutions, there were multiple categories for responses to enabling services including case management and follow up support (3%), nondisparate and vulnerable populations services (3%), family support services, community resources, and self care education (20%), access to health insurance (6%), Medicaid / EPSDT (14%), education, outreach, media, and communications (26%), translation services (10%), and transportation services (13%) (Figure 12).

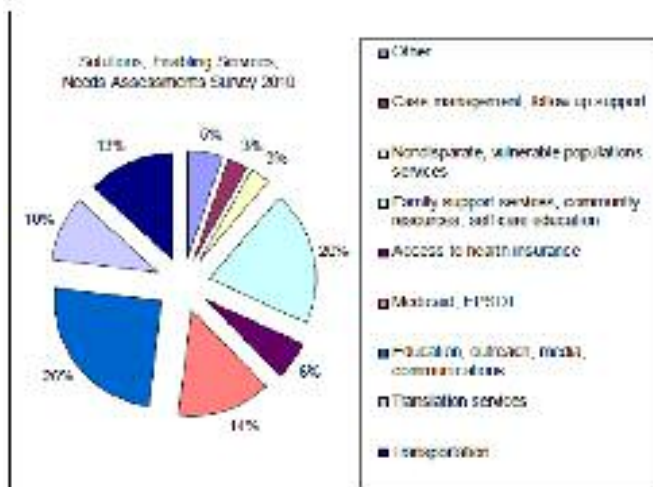


Figure 12

Communities’ weaknesses in infrastructure building services were varied. The most popular responses included lack of coordination, collaboration, and partnering (8%), employee lack of current knowledge or desire to assist underserved (8%), insufficient staffing (28%), lack of funding (17%), ineffective information systems and inaccurate health records (6%), policies too weak, too strong, difficult to enforce, or absent

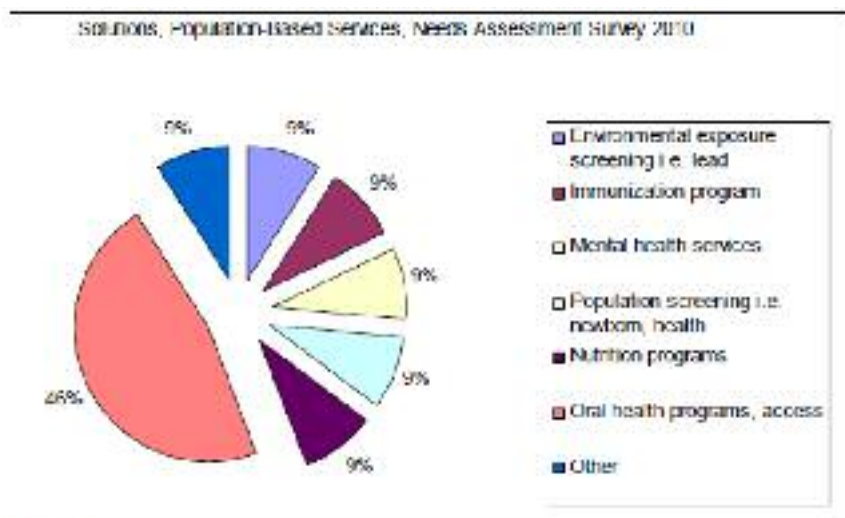


Figure 13

Solutions recommended for population-based services included environmental exposure screening (9%), immunization program (9%), mental health services (9%), population screening (9%), nutrition programs (9%), oral health programs and access (46%), and other miscellaneous responses (9%) (Figure 13).

Recommended solutions for infrastructure building services were quite variable. The largest responses included a need for compassionate and experienced staff (13%), sufficient staffing (20%), and sufficient funding (26%) (Figure 14).

Two additional activities were undertaken to assess the needs of two groups. A small pilot study was conducted in the Mississippi Delta to assess and describe the health care needs of non-English speaking Hispanic community members. Customers and patrons of local health clinics were surveyed to assess consumer satisfaction with services provided by the local health clinics.

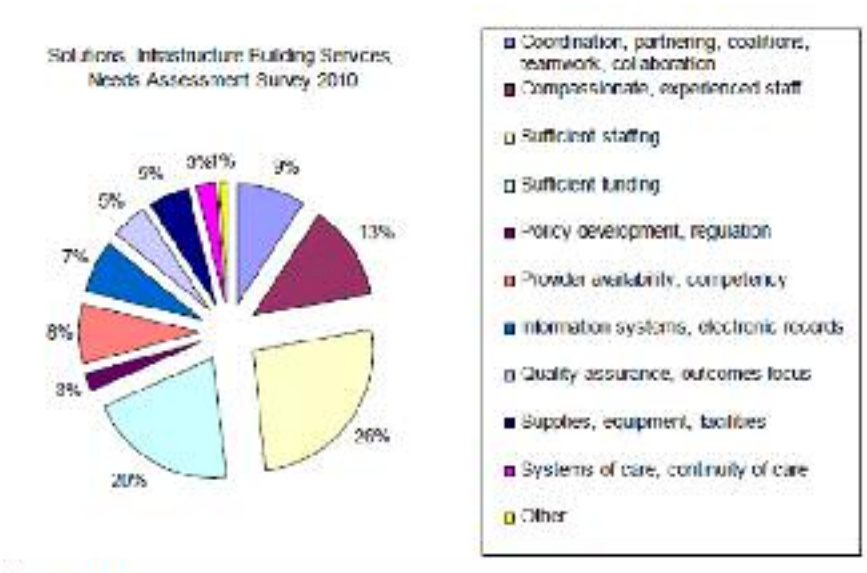


Figure 14

*¡Hola, Delta:* The Hispanic population in Mississippi has grown considerably in recent years. The true number of Hispanic residents is not available due to migration of groups, lack of representation in census numbers, and the desire of illegal residents to remain anonymous. The healthcare needs of this growing number of residents are not well understood. Language and other barriers to care must be resolved to facilitate access to care and assure healthy outcomes for Hispanic women and infants. The purpose of the Hispanic Outreach and Learning Activities (HOLA) project was to assess healthcare needs and knowledge of available health services among Hispanic residents in the Mississippi Delta. Though extremely limited in scope, the study

was conducted as an initial effort in qualitative phenomenology to assess needs of this growing population.

The HOLA pilot project enlisted a Spanish-speaking intern to provide outreach and learning activities to Hispanic residents living in the Mississippi Delta. The intern's qualifications included fluency with multiple Hispanic dialects and doula training in the care of prenatal and postpartum Hispanic women. The project was a qualitative study employing an ethnographic approach to data collection. Content analytical approach was utilized as the qualitative analysis method. Outreach was limited to community-based settings in the lower Mississippi Delta or the MSDH Public Health District III, a 9-county area of the lower Mississippi Delta.

The HOLA project occurred during May 2010 and produced a journal of qualitative data describing experiences, barriers, and lessons learned in providing HOLA services to Hispanic women in the Mississippi Delta. Data analysis is ongoing but saturation and identifiable themes were revealed.

Eight Hispanic subjects (6 female, 2 male) were approached in community settings such as restaurants or local businesses and interviewed about their experiences in accessing health services within their community. The main barriers preventing receipt of services at local health departments were related as fear of discrimination based on the alleged experiences of others and having actually experienced discrimination first hand. The perceived discrimination was described as being based upon language barriers, although racial discrimination could also play a role in some communities. Embedded in this was the influence of the English-speaking ability of the client and availability of human resources to deal with the translation barriers.

Among those interviewed two who visited their local health departments and brought people with them to translate reported satisfactory experiences. Two who did not bring translators experienced problems and reported that staff demonstrated behaviors such as "rolling their eyes." The two young men were confident in their English-speaking skills and experienced no problems when they visited health department clinics.

Of the eight interviews done, two reported directly experienced discrimination, defined subjectively as experiencing a perceived negative attitude from the clinic personnel. One spoke of general historical discrimination within the community which seemed to influence her decision to use a private clinic rather than the health department clinic despite having to pay full service expenses in cash at the time of service.

The limitations of this study were numerous. It was a very small group of participants in a small area of the state. Therefore, the data are not representative of any larger population groups. It is unclear whether the described experiences of discrimination were due to racial or language barrier issues. The described behaviors of clinic staff could be discriminatory or merely outwardly expressed frustration with the language barrier problems. These findings seem to be consistent with the reported needs within the community. In both the weaknesses and solutions categories, there were a high number of responses related to translation services.

*Family to Family Health Information and Education Center Focus Groups:* Two focus groups were held for the Family to Family Health Information and Education Center. The focus group participants were parents and family members of children and youth with special health care needs (CYSHCN). Participants were recruited from families who have children served by the Children's Medical Program. Recruitment was conducted by Family to Family staff, Children's Medical Program staff, and the director of a local advocacy group. Parent and family member participants were asked a series of questions about family (parent) support groups and family (parent) support services. The ultimate answer to be derived from respondents' responses to the questions was how parents and family members defined family support groups and family support services and if they felt support groups or services were more effective at meeting the needs of families than the other. Thematic analysis approach was utilized to identify themes of major concepts and participant perspectives.

The focus group participants defined family support groups as a group of family members with similar experiences and a common focus who come together to share resources, problem solve, receive training and education and vent. Focus group participants agreed that family support services included the allocation of actual services that address specific needs, such as physical therapy and occupational therapy, as well as the dispersal of information.

The major themes that developed during the first focus group session were: family members desire resources that equip them to be better advocates for their children and youth; all family members should be involved in the support groups, including parents, siblings and grandparents; the health care providers delivering the services, the availability of services and the actual services are equally important; the main barriers to establishing support groups are the varying levels of family member commitment to the group and accessibility of the meeting location; and the communication between family members and health care providers needs to be strengthened.

The major themes that developed during the second focus group session were: support groups assist family members with navigating through services and resources; family members should be responsible for organizing support groups; online technology, such as Skype and a central website, can be used to encourage regional and national resource sharing amongst family members; lack of group resources was a main barrier to maintaining support groups; follow-up, via newsletters and other forms of communication, should be used to continue the line of support for family members in addition to support group participation; and parents often need just as much support as the children and youth with special health care needs that they are parenting.

Focus group participants indicated that both family support groups and family support services were beneficial to families of CYSHCN in different ways, despite the acknowledged barriers. They were willing to be involved in family support groups and family support services if they were advantageous to their families.

*Consumer satisfaction survey:* As part of the Title V Needs Assessment process, a consumer satisfaction survey was conducted in order to obtain demographic information of clinic consumers, assess service utilization, and document consumer opinions regarding facilities, staff, and services. The study was a cross-sectional design. Data were gathered using a survey

instrument modified from a previous assessment. The survey questions are listed in the following table:

<b>Patient demographics</b>
1. Gender
2. Year of birth
3. Race/Ethnicity
<b>Accessibility questions</b>
4. Did you have an appointment at this clinic today?
5. If you had an appointment, how long ago was the appointment made?
6. Did you have problems getting to the clinic today?
7. If you had problems getting to the clinic, what sort of problems did you have?
8. How far do you live from the clinic?
<b>Health services questions</b>
9. What brings you into the clinic today?
10a. Did you or will you see a clerk today?
10b. I received all the help I need from the clerk. (Likert scale)
11a. Did you or will you see a lab staff or medical aide today?
11b. I received all the help I needed from the lab staff or medical aide. (Likert scale)
12a. Did you or will you see a nurse today?
12b. I received all the help I needed from the nurse. (Likert scale)
13a. Did you or will you see a social worker today?
13b. I received all the help I needed from the social worker. (Likert scale)
14a. Did you or will you see a nutritionist today?
14b. I received all the help I needed from the nutritionist. (Likert scale)
15a. Did you or will you see a doctor or nurse practitioner today?
15b. I received all the help I needed from the doctor or nurse practitioner. (Likert scale)
16. Did you feel comfortable asking the staff questions?
17. How long did you wait to see the staff?
18. What type of information did you receive today?
19. Did the clinic meet your needs?
<b>Facility questions</b>
20. Did you find the Health Department clean?
21. Did you have enough privacy?
22. What did you like the best?
23. What did you like the least?
24. What would you change?
25. How would you rate the Health Department overall?
26. Would you tell your friends/family to come to the Health Department?

The convenience sample included 15-30 patients at the two busiest clinics in each of the state's nine public health districts. Questionnaires were collected from 346 clinic consumers. The sample interviewed was demographically diverse. The questionnaire included 26 questions about consumer demographics, attitudes and opinions.

The surveyed population was predominantly female (70%) and African American or black (60%). The largest group of respondents represented patients under the age of 18 years (47%). The top three reasons people identified for coming to the Health Department were immunizations or records (40%), Women, Infant and Children (WIC) services (28%), and women's health (13%). Survey respondents reported that 41% of patients had a scheduled appointment. Inconsistent responses were noted. The majority (93%) of patients marked "no problems getting to the clinic" but then went on to describe problems such as lack of transportation, no extended hours, and work or school conflicts. Of concern, one fourth of patients reported living 15 or more miles from the clinic, underscoring the need for transportation services in rural communities.

Survey questions inquired about consumer interactions with clinic staff and if consumer needs were met by those staff members. Of those who interacted with clerks, lab workers, medical aides, nurses, social workers, nutritionists, and practitioners, minimal respondents (1-3%) reported dissatisfaction or unmet needs. Additional questions revealed diverse responses on important aspects of clinic visits. The majority (87%) of respondents reported feeling comfortable asking staff questions. Clinic wait times varied across the state: 32% waited less than 30 minutes, 32% waited 30 minutes to an hour, 16% waited 1 to 2 hours, and 8% waited more than 2 hours. Participants received a variety of educational information during visits. The most frequent information covered immunizations, shots, or records (35%), WIC services (28%), and family planning (10%).

Overall, 85% reported that needs were met, 86% reported clean facilities, and 82% reported sufficient privacy. The final questions asked about overall opinions and attitudes. Most respondents (67%) said they would recommend the clinic to other consumers. Overall clinic ratings were varied: 66% reported excellent, very good, or good and 21% reported fair or poor. Finally, open ended questions inquired as to what consumers least and most liked about their clinic visit. The poorest experiences reported included waiting times, insufficient privacy, and lack of child waiting room activities. Perspectives on clinic staff varied among clinics. Nurses and clerks were generally described as very friendly and helpful but sometimes described as very rude. Consumers at the older clinics were not happy with facilities (e.g., dirty bathrooms, dirty waiting room, and uncomfortable chairs).

This study serves as an important source of data to inform Agency decisions about services, programs, and funding needs to maximize the benefit seen by consumers of state health services. With immunizations, WIC, and women's health accounting for the majority of clinic visits, these data highlight the importance and significance of the role of health department clinics in protecting the health of the MCH population. Generally, participants were happy with the nursing staff and pleased with facility improvements resulting in cleaner clinics and waiting room activities for their children.

Negative responses about staff attitudes, wait time, privacy, and facility cleanliness confirm areas of weakness and draw concern. Local clinics should explore new processes that improve service efficiency and decrease wait time. Time studies could be implemented periodically to track wait times and identify opportunities for improvement. Any visit that results in greater than a two-hour wait should be individually investigated to identify opportunities for improvement

and efficiency. Privacy issues are of critical concern since many of the services provided are highly personal in nature, such as pregnancy testing and treatment of sexually transmitted disease. Failure of local clinics to make these consumers feel respected could result in failure of consumers to access early prenatal care or delay treatment of infectious disease. Wait times and follow up for test studies should also be addressed as delays in diagnosis generally result in delays in treatment and access to care.

During initial review of the Needs Assessment document, it was noted that the consumer satisfaction survey did not include specialty clinics for CYSHCN. A plan of action was developed to correct the problem and proceed with conducting the survey in a CYSHCN specialty clinic by mid-August 2010. The goal was to replicate the previous method of conducting the survey by again utilizing the federally assigned student intern as the survey administrator. The same survey instrument was utilized. Participant recruitment was also the same. The student randomly approached patients and their families seated in the waiting room of the specialty clinic while they were waiting for their appointment and asked if the patient or patient's surrogate would complete the questionnaire while they waited. Because the clinic had a very unique clientele that did not represent the general public as in other clinics, the findings of that survey are presented separately in the following paragraphs.

Demographics were recorded describing the patients who were scheduled for an appointment at the specialty clinic rather than for the patient's caregiver completing the surveys. The patient participants (n=17) included nine male and eight female clients. Ten of the patients were African American and seven were white. Patient ages ranged from zero to 20 years. All of the patients had a previously scheduled appointment at the clinic on that afternoon. Five of the appointments had been scheduled less than seven days in advance, one was scheduled between eight and 14 days in advance, two were scheduled 15-21 days in advance and nine appointments had been scheduled more than 22 days in advance.

Only one respondent reported problems getting to the appointment that afternoon and noted "no transportation" as the reason for the problem. Fifteen respondents reported living greater than 15 miles from the clinic site. One reported having traveled 89 miles and another reported having traveled more than 200 miles to the clinic. Various reasons were provided for the purpose of the clinic visit: child health and safety, check-up, follow-up, urology, myosis [treatment], or unspecified. Respondents reported having received various types of educational information including WIC services, nutrition and physical activity, and child safety.

Nine respondents confirmed that they did or would see a clerk on that day and all agreed or strongly agreed that they received all the help needed from the clerk. Four reported seeing lab staff or medical aides and all either agreed or strongly agreed that they had received the help they needed. Eleven respondents saw a nurse. Eight strongly agreed, three agreed, and one strongly disagreed that they had received the assistance needed from the nurse. Of the seven who reported seeing a social worker, all agreed or strongly agreed that needed help was received. Five who reported seeing a nutritionist eight agreed or strongly agreed that they had received the help they needed. All thirteen who saw a doctor or nurse practitioner agreed or strongly agreed they had received all the help they need.



Overall, respondents rated the clinic as excellent (n=8), very good (n=2), good (n=3), and fair (n=1). Fourteen stated they would tell friends /family to come to the Health Department. Fifteen respondents reported feeling comfortable asking the staff questions. When asked how long they waited to see the staff, three said less than 30 minutes, two said 30 minutes to an hour, six said one to two hours, and two said more than two hours. Fifteen respondents reported that the clinic was clean. Thirteen said they had enough privacy and two said they did not. One of those respondents commented, “No, the clinic is wide open for everyone to look in at these children and I don’t like people to look at my child; this is not a freak show.” Additional comments were noted and are listed in the following table.

<b>What did you like the best?</b>	
	The information we received
	They didn’t make me feel stupid when I asked silly questions.
	Respect.
	Whenever we come here they get the job done and my child is “done good”. So we are ok.
	Friendly staff always explains things clearly.
	Kindness of the staff
	Clinics starting on time / early to keep the process flowing easy.
<b>What did you like the least?</b>	
	The waiting period
	Waiting in the room longer than waiting on the outside
	I do not like that they may tell 10 people to be here the same time you are to come in and I do not like the big windows in front.
	Long waiting period
	Not enough space for wheelchairs
	Waiting
<b>What would you change?</b>	
	The waiting period
	Don’t know
	I would have a bigger waiting room
	There should be staggered appointment times
	I would make more room for wheelchairs
	Their time
	Nothing.

The findings of each survey were distributed to nursing leaders at the district and local levels. Given that immunizations, WIC, and women’s health account for the majority (>80%) of clinic visits, these data highlight the importance of rural and urban county health clinics in filling gaps in needed services for maternal and child consumers. Understanding the reasons consumers visit county clinics and how to better meet MCH needs presents a critical opportunity to improve outcomes for Mississippi families.

### II.3.A. General Population Descriptives

This portrait, developed by the Association of Maternal and Child Health Programs (AMCHP) with funding from the W.K. Kellogg Foundation, provides a comprehensive overview of Mississippi's MCH system and health status. Data were collected from a number of sources on leading MCH indicators and MCH infrastructure measures.

#### 1. Population

MS	2,889,110	US	298,215,360
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Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2007 and 2008 Current Population Survey (CPS: Annual Social and Economic Supplements).

#### 2. Population distribution by gender

	MS %	US %
Female	52	51
Male	48	49

Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2007 and 2008 Current Population Survey (CPS: Annual Social and Economic Supplements).

#### 3. Population distribution by age

	MS %	US %
Children ≤18	28	26
Adults 19-64	60	61
65+	12	12
65-74	7	7
75+	5	6
Total	100	100

Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2007 and 2008 Current Population Survey (CPS: Annual Social and Economic Supplements).

#### 4. Population distribution by race/ethnicity

	MS #	MS %	US #	US %
White	1,664,150	58	196,128,710	66
Black	1,071,540	37	36,259,720	12
Hispanic	69,710	2	45,949,210	15
Other	83,710	3	19,877,720	7
Total	2,889,110	100	298,215,360	100

Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2007 and 2008 Current Population Survey (CPS: Annual Social and Economic Supplements).

## 5. Population distribution of children &lt;18 by race/ethnicity

	MS #	MS %	US #	US %
White	398,140	48	44,729,520	57
Black	366,340	45	11,573,680	15
Hispanic	NSD	NSD	16,463,720	21
Other	36,030	4	5,878,310	8

Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2007 and 2008 Current Population Survey (CPS: Annual Social and Economic Supplements). \*NSD- No significant data

## 6. Poverty: Distribution of total population by age and poverty level

	MS #	MS %	US#	US%
Children ≤18, < 100% FPL	303,590	37	18,215,550	23
Adults 19-64, < 100% FPL	410,260	24	28,193,940	15
Elderly 65+, < 100% FPL	78,050	23	4,799,760	13
Total < 100% FPL	791,900	27	51,209,260	17
100-199% FPL	597,520	20.7	55,321,800	18.6
200% + FPL	1,499,700	51.9	191,684,300	64.3

Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2007 and 2008 Current Population Survey (CPS: Annual Social and Economic Supplements). \*FPL – Federal poverty level

## 7. Household Income: Median annual household income

	Median	Mean
MS	\$35,971	\$47,065
US	\$49,901	\$67,626

Source: U.S. Census Bureau, Current Population Survey, 2005 to 2007 Annual Social and Economic Supplements. Three-Year-Average Median Household Income by State: 2005-2007, available online at <http://www.census.gov/hhes/www/income/income07/statemhi3.xls>. Median Household Income, 2007, available at <http://www.census.gov/hhes/www/income/acscpsinccomp.html>

## 8. Population distribution by household employment status

	MS %	US %
At least 1 full time worker	69	73
Part Time workers	7	8
Non worker	24	19
Total	100	100

Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2007 & 2008 Current Population Survey.

## 9. Percent of adults who are overweight or obese

MS %	US %
70.2	63.2

Source: 2009 Behavioral Risk Factor Surveillance System

## 12. Overweight and obesity rates for adults by sex

	MS %	US %
Male	74.5	71.1
Female	66.1	55.7

Source: 2009 Behavioral Risk Factor Surveillance System

## 13. Risk factors for chronic disease

Smoking:	Smoking is the single most important modifiable risk factor for CVD/CHD. In 2009, approximately 23% of adult Mississippians reported being current smokers. Also, an estimated 19.6% of Mississippi high school students were current cigarette smokers in 2009 (Mississippi YRBS, 2009).
High Blood Pressure /Hypertension:	In 2009, an estimated 37.4% of Mississippi's population reported a history of high blood pressure. Approximately 816,910 Mississippi adults were estimated to have a history of high blood pressure (MS BRFSS, 2009).
High Blood Cholesterol:	In 2009, the percent of adult Mississippians reporting a history of high blood cholesterol level was 41.3.

Source: Behavioral Risk Factor Surveillance System

## 14. Lack of regular physical activity

In 2009, an estimated 62.5% of adult Mississippians were not physically active on a regular basis (at least 5 days a week, at least 30 minutes per session).
In 2009, an estimated 32% of Mississippi adults reported no leisure time physical activity.
In 2009, an estimated 45% of Mississippi high school students watched 3 or more hours of TV per day on an average school day.
Diet. In 2009, only an estimated 16.8% of adult Mississippians reported consuming fruits and vegetables 5 or more times a day.

Source: Behavioral Risk Factor Surveillance System

## 15. Overweight or obese

Mississippi has the highest rate of obesity in the nation. In 2009, an estimated 34.9% of adult Mississippians were overweight (BMI 25-29.9 kg/m <sup>2</sup> ); and 35.3% were obese BMI $\geq$ 30kg/m <sup>2</sup> .
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Source: Behavioral Risk Factor Surveillance System

## 16. Cardiovascular disease

Cardiovascular Disease (CVD) is the leading cause of death in Mississippi. 10,180 Mississippians died from CVD in 2008, accounting for 36% of all deaths.
1,559 Mississippians died from stroke in 2008. It was the fourth leading cause of death in Mississippi, accounting for 5% of all deaths.
In 2009, approximately 9.7% of Mississippi adults (211,873 persons) reported having some form of CVD.
4% of adults (87,370 persons) had been diagnosed with coronary heart disease in the past
4.9% of adults (107,028 persons) had been diagnosed with a heart attack in the past
3.7% of adults (80,817 persons) had been diagnosed with a stroke in the past

Source: Behavioral Risk Factor Surveillance System; MS Vital Statistics

### 17. Diabetes and related complications

Diabetes is a major cause of morbidity, disability, and mortality for Mississippians and a major source of health care costs in the state. In 2009, 253,000 Mississippi adults were diagnosed with diabetes. Many more cases went undiagnosed.

Mississippi's diabetes prevalence has risen from 9.5% in 2005 to 11.6% in 2009. This represents a 22.1% increase. In addition, 28,400 individuals were diagnosed with pre diabetes in 2009.

In 2008, diabetes mellitus was the 7<sup>th</sup> leading cause of death in Mississippi, account for 3% of the leading top ten deaths.

Source: Behavioral Risk Factor Surveillance System; MS Vital Statistics

### 18. Self-reported health status, general health fair or poor

Group	White #	White %	Black #	Black %	Total #	Total %
Male	670	18.2	326	21.5	1011	19.2
Female	1273	19.3	873	30.4	2187	23.4
18-24	9	4.0	17	7.6	27	5.7
25-34	41	7.9	60	15.8	104	11.3
35-44	121	15.2	86	17.4	217	16.2
45-54	286	19.2	277	35.4	572	24.6
55-64	453	25.5	360	44.9	832	31.1
65+	1033	32.8	399	46.3	1446	36.6

Source: 2009 Behavioral Risk Factor Surveillance System

### 19. Mental Health

#### a. Percentage of adults reporting poor mental health by race/ethnicity, 2007

	MS %	US%
White	32.3	33.2
Black	38.5	35.2

Source: <http://www.statehealthfacts.org/profileind.jsp?rgn=26&cat=2&ind=95>

#### b. Number of deaths due to suicide per 100,000 people, 2007

MS %	US%
13.8	11.3

Source: <http://statehealthfacts.kff.org/profileind.jsp?ind=667&cat=2&rgn=26>

#### c. Homicide, 2005

Age	MS: % of homicide victims by age	US: % of homicide victims by age
Under 14	3.7	4.8
14-17	1.9	5.0
18-24	22.4	23.9
25-34	22.4	28.8
35-49	31.1	22.8
50-64	10.6	9.3
65+	7.5	5.3

Source: <http://www.ojp.usdoj.gov/bjs/homicide/hmrt.htm>,  
<http://bjsdata.ojp.usdoj.gov/dataonline/Search/Homicide/State/RunHomStatebyState.cfm>

#### d. Major depression

	MS	US
Percentages of Past Year Major Depressive Episode among youths aged 12-17	8.26%	4.3%
Persons aged 18 and older	7.76%	5.3%

Sources: Substance Abuse & Mental Health Services Administration, Office of Applied Studies (06/11/07). The NSDUH Report: State Estimates of Depression: 2004 & 2005. Rockville, MD., Pratt, L., Brody D., Depression in the United States Household Population, 2005–2006 NCHS Data Brief, September 2008. Available online <http://www.cdc.gov/nchs/data/databriefs/db07.htm>

#### 20. Oral health / MS State Oral Health Program

##### a. Dental Visits Among Adults (Ages 18 +)

MS 2008 %	MS 2006 %
57.5%	57.9%

##### b. Percentage of total population with fluoridation

MS 2009 %	MS 2007 %
54.9%	53.0%

<http://apps.nccd.cdc.gov/nohss/ListV.asp?qkey=5&DataSet=2>, CDC BRFSS  
 MS State Oral Health Program: CDC Water Fluoridation Reporting System Query

#### 21. Estimate asthma hospitalization discharge rate per 10,000 by year and race

	2003	2004	2005	2006	2007
White	12	11	14	11	11
Black	28	26	32	25	24

Source: State of Mississippi. The Burden of Asthma in Mississippi: Asthma Surveillance Summary Report, 2009

#### 22. Top three causes of injury related death, 2003-2007

Type of Event	Total Count	Average Number per Year
Motor Vehicle Crashes	4607	921
Poisonings	1105	221
Falls	917	184

Source: [http://msdh.ms.gov/msdhsite/\\_static/resources/3280.pdf](http://msdh.ms.gov/msdhsite/_static/resources/3280.pdf)

#### Healthy Women and Infants

##### 1. Cigarette smoking during the last two years

Race- Ethnicity	%
White	39.9
Black	14.4

Source: Mississippi PRAMS Surveillance Report: 2006. MSDH.

## Resources for Healthy Communities

## 1. Financing Title V MCH programs

## a) State expenditures: Expenditures by class of individuals served

	Pregnant Women	Infants < 1 Year	Children 1 to 22 Years	CYSHCN	All Others	Administration	Total Expenditures
2007	\$9,558,273	\$0	\$4,216,377	\$4,214,895	\$0	\$743,388	\$18,732,933
% of Total	51.0%	0.0%	22.5%	22.5%	0.0%	4.0%	--

Source: <https://perfdata.hrsa.gov/mchb/mchreports/TVISReports/UI/Snapshot/snapshot.aspx?~statecode=MS>

## b) Sources of state revenue

	Federal Allocation	Unobligated Balance	Total State Funds (Match and Overmatch)	Local MCH Funds	Other Funds	Program Income	Total
2007	\$9.1 million	\$0	\$9.6 million	\$0	\$0	\$0	\$18.7 million
% of Total	48.5%	0.0%	51.5%	0.0%	0.0%	0.0%	100%

Source: [https://perfdata.hrsa.gov/mchb/mchreports/Search/special/finsch06\\_history\\_result.asp](https://perfdata.hrsa.gov/mchb/mchreports/Search/special/finsch06_history_result.asp)

## c) Number of individuals served and population group

	Pregnant Women	Infants < 1 Year	Children 1 to 22 Years	CYSHCN	All Others	Administration	Total Expenditures
2007	22,154	46,046	34,249	3,069	101,377	N/A	206,895
Expenditures for FY 2007	\$9.5 million	0	\$4.2 million	\$4.2 million	0	\$743,388	\$18.7 million
% of Total	51%	0%	22.5%	22.5%	0%	4%	100%

Source: <https://perfdata.hrsa.gov/mchb/mchreports/TVISReports/UI/Snapshot/snapshot.aspx?~statecode=MS>

## d) Per capita state health expenditure

	MS \$	US\$
Health Care Expenditure Per capita by State	\$5,059	\$5,283
Average Annual % growth in health care expenditure	7.6%	6.7%

Source: <http://www.statehealthfacts.org/profileind.jsp?cat=5&sub=143&rgn=26>

## 2. Performance Measures

## a) Comparison of MS to US performance measures and indicators

Topic:	Health Care Status (Indicator)	Child's Family
Variable:	Current health insurance coverage	Someone smoking in the household

Measure:	% of children aged 0 -17 years currently insured in MS compared to children aged 0 -17 years nationwide reporting at the same time period.	% of children aged 0 -17 years who live in household where someone smokes in MS compared to children aged 0 -17 years nationwide reporting at the same time period.
MS:	90.7%;	35.1%;
US	90.9%,	26.2%,

Source: <http://www.nschdata.org/StateProfiles/CustomProfile07.aspx?rid=5&geo2=Nationwide-&geo=Mississippi>

b) CYSHCN performance outcome measures compared to MCHB core outcomes US, 2006

	MS%	US%
CYSHCN whose families are partners in decision making at all levels, and who are satisfied with the services they receive.	60.3	57.4
Youth with special health care needs who receive the services necessary to make appropriate transitions to adult health care, work, and independence?	30.9	41.2
CYSHCN who are screened early and continuously for special health care needs	51.4	63.8
CYSHCN whose services are organized in ways that families can use them easily	90.9	89.1

Source: <http://mchb.hrsa.gov/cshcn05/MI/sd.pdf>

3. State health workforce

a) State health employee workforce, total health care employment, 2008

MS #	US#
105,490	11,178,720

Source: Bureau of Labor Statistics, State Occupational Employment and Wage Estimates; available at [http://www.bls.gov/oes/oes\\_dl.htm#2006\\_m](http://www.bls.gov/oes/oes_dl.htm#2006_m), accessed October 2009

b) Occupations: Physicians, nurses and dentists

Physicians	MS#	US#
Female	1,250 (21%)	288,391 (29%)
Total	6,071 (2.1 per 1,000 population)	9,991,066 (3.2 per 1,000 population)
Primary Care Physicians (internist, family practice, pediatrics, OB/GYNs, general practice)	2,506 (0.9 per 1,000 population)	385,508 (1.2 per 1,000 population)

Sources: American Medical Association, Physicians Data, Year of Data 2008; <http://www.statehealthfacts.org/profileind.jsp?cat=8&sub=100&rgn=26>

Nurses	MS #	US #
Registered Nurses	27,350	2,542,760
Registered Nurses per 100,000	931	836
Physician Assistants	86	73,893
Physicians per 100,000	3	24
Nurse Practitioners	2,167	147,295



Sources: American Dental Association, Dental Data, year of Data 2008;  
<http://www.statehealthfacts.org/profileind.jsp?cat=8&sub=100&rgn=26>

Dentist	MS #	US #	Per 1,000 population
Female	248	44,114	
Total	1,442	233,104	MS:0.5 US: 0.8

Sources: American Dental Association, Dental Data, year of Data 2008;  
<http://www.statehealthfacts.org/profileind.jsp?cat=8&sub=100&rgn=26>

#### 4. Compensations: Household income, Year 2008

	MS	Rank	US
Median Household Income	\$36,400	44	\$50,300
Per Capita Income	\$30,400	44	\$40,200

Source: <http://www.acinet.org/acinet/state1.asp?stfips=28>

#### 5. Federally qualified health centers (FQHCs), Year 2008

FQHCs	MS #	US #
Federally Funded HCs	21	1,080
Federally Service Delivery Sites	178	8,176
Patient Encounters	896,412	66,924,192

Source: <http://www.statehealthfacts.org/profileind.jsp?cat=8&sub=99&rgn=26>

#### 6. State WIC Program

WIC Program FY 2008	MS #	US #
Average Monthly Participation	109,015	8,704,510
Women	25,164	2,153,192
Infants	34,428	2,222,462
Children	49,423	4,328,857

Total State WIC Participation & Cost	MS	US
Total State	109,015	8.7 million
State Food Cost	\$62.8 million	\$4.5 billion
Average Annual Benefits Per Person	\$47.99	\$43.41

Source: <http://www.fns.usda.gov/pd/wisummary.htm> ,  
[http://www.fns.usda.gov/pd/24wicfood\\$.htm](http://www.fns.usda.gov/pd/24wicfood$.htm), <http://frac.org/StateOfStates/2008/states/MS.pdf>

#### 7. Medicaid

##### a) Medicaid enrollment, FY 2007

	MS #	MS %	US #	US %
Children	376,100	50.1	28,754,500	49.5

## b) Medicaid eligibility levels by annual income and federal poverty level (FPL), 2009

	MS \$	MS %	US \$	US % (FPL)
Working parents	\$8,064	46%	\$11,928	68%
Pregnant Women	\$33,874	185%	\$24,352	133%
Infants	\$33,874	185%	\$24,352	133%
Children 1-5	\$24,352	133%	\$24,352	133%
Children 6-19	\$18,310	100%	\$18,310	100%

Source: <http://www.statehealthfacts.org/profileind.jsp?cat=4&sub=52&rgn=26>  
[http://www.kff.org/medicaid/upload/7855\\_TABLES.pdf](http://www.kff.org/medicaid/upload/7855_TABLES.pdf)

## 8. Uninsured populations

## a) Non-elderly uninsured by age

	MS #	MS %	US #	US %
Children $\leq$ 18	112,000	21.4%	8,076,400	17.7%
Adults 19-64	411,200	78.6%	37,616,900	82.3%
Total	523,200	100%	45,693,300	100%

MS: 2007-2008 data; US: 2008 data

Source: <http://www.statehealthfacts.org/comparetable.jsp?ind=134&cat=3&sub=40-&yr=134&typ=2>

## b) Non-elderly uninsured by federal poverty level

	MS #	MS %	US #	US %
Under 100%	262,700	50.2%	17,476,400	38.2%
100-133%	59,000	11.3%	4,702,800	10.3%
134-300%	138,900	26.5%	15,950,700	34.9%
301-400%	NSD	NSD	3,172,100	6.9%
Over 400%	NSD	NSD	4,391,400	9.6%
Total	523,200	100%	45,693,300	100%

MS: 2007-2008 data; US: 2008 data; NSD=Not Sufficient Data

Source: <http://www.statehealthfacts.org/profileind.jsp?ind=136&cat=3&rgn=26>

## 9. Adults' immunizations against flu and pneumonia (2008)

	MS %	US %
Flu Shots aged 65+	67.4%	71.0%
Pneumonia Vaccine 65+	66.4%	66.9%

Source: <http://www.statehealthfacts.org/profileind.jsp?cat=2&sub=16&rgn=26>

## 10. Environmental: Toxic chemicals and air quality

## a) Toxic chemicals, 2004

	MS (national rank)
Released with potential lead hazards as described by the number of housing units with a high risk of lead hazards:	32 (with housing units contaminated by lead)

Source: [http://scorecard.org/env-releases/lead/rank-states.tcl?fips\\_state\\_code=28](http://scorecard.org/env-releases/lead/rank-states.tcl?fips_state_code=28)

## b) Air quality, 2002

	MS (national rank)
Hazardous Air Pollutants (HAPs, all sources); (national rank 41, with housing units contaminated by lead)	32 persons per 100,000
Average individual's hazardous Air Pollutants	74 persons per 100,000
Hazardous Air Pollutant with the highest contribution to cancer risk is diesel emissions	88%
Cumulative Hazard Index	75%

Source: <http://scorecard.org/env-releases/hap/us.tcl>, <http://www.scorecard.org/env-releases/hap/rank-states.tcl>

## 11. Health infrastructure distribution/utilization

## a) Hospital Distribution (private /public)

	MS #	US #
Community Hospitals	95	4,897
Beds per 1,000 People	4.4	2.7

Source: Distribution of Hospitals, 2007, US, 2007

By Ownership Type	MS %	US %
State/local Gov	44.2%	22.7%
Non-Profit	30.5%	59.5%
For-Profit	25.3%	17.8%
Total	100%	100%

Source: <http://www.statehealthfacts.org/profileind.jsp?cat=8&sub=94&rgn=26>

## b) Health Insurances (private HMOs and Public)

## I. State managed care and insurance coverage, July 2008

	MS #	US #
Total Number of HMOs	4	577
Total HMOs Enrollment	44,199	64,490,974

Source: <http://www.statehealthfacts.org/profileind.jsp?cat=7&sub=85&rgn=26>

## II. Health insurance coverage of the total population

	MS %	US %
Employer	44.8%	53.4%
Individual	4.5%	4.9%
Medicaid	19.1%	13.2%
Medicare	10.4%	12.1%
Other Public	1.4%	1.1%
Uninsured	19.8%	15.3%
Total	100%	100%

Source: <http://www.statehealthfacts.org/profileind.jsp?cat=7&sub=85&rgn=26>  
MS: 2006-2007 data; US: 2007 data

### III. Health insurance coverage of children (ages 0 -18)

	MS %	US %
Employer	41.2%	55.3%
Individual	4.5%	4.4%
Medicaid	36.7%	27.6%
Other Public	NSD	1.4%
Uninsured	16.2%	11.3%
Total	100%	100%

Source: <http://www.statehealthfacts.org/profileind.jsp?ind=127&cat=3&rgn=26>  
MS: 2006-2007 data; US: 2007 data

### IV. Health insurance coverage of women (ages 19-64)

	MS %	US %
Employer	55.4%	63.7%
Individual	5.1%	6.0%
Medicaid	12.2%	9.6%
Other Public	3.8%	3.1%
Uninsured	23.6%	17.7%
Total	100%	100%

Source: <http://www.statehealthfacts.org/profileind.jsp?ind=127&cat=3&rgn=26>  
MS: 2006-2007 data; US: 2007 data

### 12. Health professional shortage areas (HPSAs)

#### Estimated underserved population living in primary care (HPSAs)

a)	MS %	US %
Estimated Underserved Population	31.9%	11.8%
Mental Health (HPSAs)	40.2%	18.7%
Dental Health (HPSAs)	31.8%	10.4%

Source: <http://www.statehealthfacts.org/profileind.jsp?cat=8&sub=156&rgn=26>

### II.3.B. Women and Infants

#### 1. Maternity/perinatal services

Maternity services are provided statewide to women through county health departments, targeting pregnant women with incomes at or below 185 percent of the Federal Poverty Level. The goal is to reduce low birth weight, infant and maternity mortality and morbidity. Services include physical exams, nutrition, social services, health screening, education, counseling, interventions and referral service as appropriate. Approximately 17% of the women who gave birth in Mississippi received their prenatal care in county health departments during CY 2009. Source: [http://www.msdh.state.ms.us/msdhsite/\\_static/41,0,225,168.html](http://www.msdh.state.ms.us/msdhsite/_static/41,0,225,168.html)

#### 2. Family planning (FP)

- a) MS has secured a waiver from CMS to cover services as of September 1, 2009. Basis for eligibility for family planning for women with incomes below FPL 185% waiver expiration date, September, 30, 2011, services limited to individuals 19+ years.

Source: <http://www.statehealthfacts.org/profileind.jsp?cat=10&sub=109&rgn=26>

- b) Abortion (legal abortion rate per 1,000 of women aged 15-44)

MS	US
4.9	19.4

Source: [http://www.guttmacher.org/pubs/state\\_data/states/mississippi.html](http://www.guttmacher.org/pubs/state_data/states/mississippi.html)

#### 3. Percentage of women (Ages 18-64) who have no access to health care coverage

MS %
23.1%

Source: Region IV Network for Data Management and Utilization. The University of North Carolina at Chapel Hill, the Cecil G. Sheps Center for Health Services Research. Available online at <http://www.shepscenter.unc.edu/data/Rndmu/Databook2009.pdf>

#### 4. Percentage of women who smoke cigarettes

Race-Ethnicity	%
White	29.8
Black	12.6

Source: Mississippi PRAMS Surveillance Report: 2006. MSDH.

#### 5. Percentage of women who smoked cigarettes during the last three months of pregnancy

Race/Ethnicity	%
White	20.1
Black	8.9

Source: Mississippi PRAMS Surveillance Report: 2006. MSDH.

6. Secondhand Smoke Exposure: Among all mothers currently living with their infant, and whose infant is exposed to secondhand smoke

Characteristic	%
All Women	11.7

Source: Mississippi PRAMS Surveillance Report: 2006. MSDH.

7. Use of alcohol during the last two years

Race- Ethnicity	%
White	65.2
Black	41.4

Source: Mississippi PRAMS Surveillance Report: 2006. MSDH.

8. Binge drinking during pregnancy: % of women who binged during last three months of pregnancy

All Women	1.2%
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Source: Mississippi PRAMS Surveillance Report: 2006. MSDH.

9. Percentage of women who experienced 1-5 stressful life events

Among all women with a live birth	70.8%
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Source: Mississippi PRAMS Surveillance Report: 2006. MSDH.

10. Percentage of women who were on WIC during pregnancy

Characteristic	%
All Women	64.4

Source: Region IV Network for Data Management and Utilization. UNC the Cecil Sheps Center for Health Services Research. Available online at <http://www.shepscenter.unc.edu/data/Rndmu/Databook2009.pdf>

11. Breastfeeding initiation; % of women who ever breastfed or pumped milk

Characteristic	%
All Women	52.7
White	61.1
Black	42.1

Source: Mississippi PRAMS Surveillance Report: 2006. MSDH.

12. Sleep position: among all mothers currently living with their infant, percentage that place their infant to sleep on the back only

All women	White	Black	
50.0%	58.2%	40.0%	
Medicaid for prenatal care &/or delivery			
No	60.9	Yes	45.3

Source: Mississippi PRAMS Surveillance Report: 2006. MSDH.

## 13. Rate of STD/reproductive tract infections in females (ages 15+) per 100,000 by race/ethnicity

MS	2005	2006	2007
White	338	296	323
Black	3,384	3,056	3,317
Latina	1,253	1,175	1,419

Source: Region IV Network for Data Management and Utilization. UNC the Cecil Sheps Center for Health Services Research. Available online at <http://www.shepscenter.unc.edu/data/Rndmu/Databook2009.pdf>

## 14. Total women (ages 20-29) newly diagnosed as HIV positive

2008	2009
54	46

Source: MSDH STD/HIV Program

## 15. Percent of Title X Family Planning users (male &amp; female) by race and ethnicity

Race/Ethnicity	2005	2006	2007
White	34.0	34.1	33.0
Black	62.8	62.1	62.6
Latino	1.6	2.0	2.3

Source: Region IV Network for Data Management and Utilization. UNC the Cecil Sheps Center for Health Services Research. Available online at [www.shepscenter.unc.edu/data/Rndmu/Databook2009.pdf](http://www.shepscenter.unc.edu/data/Rndmu/Databook2009.pdf)

## 16. Multivitamin use before pregnancy: % of women who did not take a multivitamin during the months before pregnancy

Characteristics	%
All women	62.0

Mississippi PRAMS Surveillance Report: 2006. MSDH.

17. Pre-pregnancy weight above normal: % of women with above normal pre-pregnancy weight (BMI 18.5 – 24.9kg/m<sup>2</sup>)

Characteristic	%
All women	49.6

Mississippi PRAMS Surveillance Report: 2006. MSDH.

## 18. Number and percentage of births to unmarried women by race

	All Races	White	Black	Hispanic
MS (#)	24,330	6,438	16,670	873
US (#)	1,641,946	614,522	436,227	518,152
MS (%)	52.8	28.4	79.1	56.1
US (%)	38.5	26.6	70.7	49.9

Source: Martin JA, Hamilton BE, Sutton PD, Ventura SJ, et al. Births: Final data for 2006. National Vital Statistics Reports; vol. 57, no 7. Hyattsville, MD: National Center for Health Statistics, 2009.

## 19. Infant mortality rate per 1,000 live births

	2004	2005	2006	2007
Total	9.7	11.4	10.5	10.1
White	6.1	6.6	6.9	6.6
Non white	14.2	17.0	14.4	14.1

Source: 2008 Infant Mortality Report, Office of Health Data and Research, MSDH, December 2008. Available online at [http://www.msdh.ms.gov/msdhsite/\\_static/resources/3109.pdf](http://www.msdh.ms.gov/msdhsite/_static/resources/3109.pdf)

## 20. Percentage of infant deaths by period of death

Neonatal	42%
Post Neonatal	58%

Source: 2008 Infant Mortality Report, Office of Health Data and Research, MSDH, December 2008. Available online at: [http://www.msdh.ms.gov/msdhsite/\\_static/resources/3109.pdf](http://www.msdh.ms.gov/msdhsite/_static/resources/3109.pdf)

## 21. Percentage of infant deaths by birth weight

	%
VLBW( <1500 grams)	51.2
LBW (< 2500 grams)	14.9
Normal	29.6
Unknown	4.3

Source: 2008 Infant Mortality Report, Office of Health Data and Research, MSDH, December 2008. Available online at: [http://www.msdh.ms.gov/msdhsite/\\_static/resources/3109.pdf](http://www.msdh.ms.gov/msdhsite/_static/resources/3109.pdf)

## 22. Infant mortality rate by race and mother's age per 1,000 live births

Age in Years	White	Non White
<18	9.7	15.8
18-24	6.2	14.3
24-34	5.8	11.9
35+	7.2	22.8

Source: 2008 Infant Mortality Report, Office of Health Data and Research, Mississippi State Department of Health, December 2008. Available online at: [http://www.msdh.ms.gov/msdhsite/\\_static/resources/3109.pdf](http://www.msdh.ms.gov/msdhsite/_static/resources/3109.pdf)

## 23. Maternal co-morbidities

Chronic hypertension and diabetes are co-morbidities that can result in adverse perinatal outcomes, such as premature birth, fetal growth retardation, and perinatal mortality. Zhang & Cox (2005) examined the 1999-2003 Mississippi birth cohort linked with infant death files. They found that 2.5% of Mississippi mothers delivering a live birth during the period reported having diabetes. Chronic hypertension was reported by 1.5% of Mississippi mothers giving birth between 1999 and 2003. Black mothers reported chronic hypertension more frequently compared to white mothers. A similar study of the Mississippi 1999-2003 birth cohort linked with infant death files (Graham & Zhang, 2006) found that maternal chronic conditions were significant factors associated with negative birth outcomes in Mississippi. The study determined that infant



mortality, LBW and PTB were more prevalent among nonwhite women, very young women ( $\leq 15$  years), and women with certain chronic medical conditions.

Source: Infant Mortality in Mississippi, 1996-2005: Trend and Risk Analysis, MSDH Bureau of Health Data and Research, February 01, 2007.

#### 24. Prenatal care by race

		All Races	White	Black	Hispanic
% beginning prenatal care in first trimester	MS	83.2	89.6	77.3	73.1
	US*	83.2	88.1	76.1	77.3
% receiving late or no prenatal care	MS	3.2	1.7	4.3	9.0
	US*	3.6	2.3	5.7	5.0

\* Excludes data from territories

Source: Martin JA, Hamilton BE, Sutton PD, Ventura SJ, et al. Births: Final data for 2006. National Vital Statistics Reports, vol. 57, no 7, Hyattsville, MD: National Center for Health Statistics, 2009.

#### 25. Total Cesarean delivery rate by race

	All Races	White	Black	Hispanic
MS	35.4	36.2	35.1	28
US	31.1	31.3	33.1	29.7

Source: Martin JA, Hamilton BE, Sutton PD, Ventura SJ, et al. Births: Final data for 2006. National Vital Statistics Reports; vol. 57 no 7. Hyattsville, MD: National Center for Health Statistics. 2009.

#### 26. Percentage of women who were physically abused by a partner during the 12 months before pregnancy

Characteristic	%
All Women	7.3

Office of Health Data and Research, MSDH. Mississippi PRAMS. Surveillance Report, Year 2006 Births, Jackson, MS: MSDH, 2006.

#### 27. Physical abuse by a partner during pregnancy

Characteristic	%
All women	4.6

Source: Office of Health Data and Research, MSDH. Mississippi PRAMS Surveillance Report, Year 2006 Births, Jackson, MS: MSDH, 2006.

### II.3.C. Children and Adolescents

#### 1. Immunization- children immunizations

	MS	US
Children aged 19-35 months	79.0%	80.0%

#### 2. Lead contamination

	MS
Children < 5 yrs living <129% of FPL diagnosed with lead poisoning in the blood	38.0% (national ranking, 3)

Source: [http://www.scorecard.org/env-releases/lead/rank-states.tcl?how\\_many=100&drop\\_down\\_name=Percent+of+children+under+5+below+poverty](http://www.scorecard.org/env-releases/lead/rank-states.tcl?how_many=100&drop_down_name=Percent+of+children+under+5+below+poverty)

#### Number of Children Tested and Confirmed by Blood Levels of Children < 72 months old

Total Population	# Children Tested	# Confirmed	% Children Tested/Confirmed
MS: 264,449	40,794	357	0.88%
US: 23,485,435	3,262,866	39,526	1.21%

Source: [http://www.cdc.gov/nceh/lead/data/State\\_Confirmed\\_byYear\\_1997\\_to\\_2006.xls](http://www.cdc.gov/nceh/lead/data/State_Confirmed_byYear_1997_to_2006.xls)

#### 3. Percentage of children ≤ 18 who were uninsured in 2005

MS %	US %
12.3%	11.7%

Source: Region IV Network for Data Management and Utilization. The University of North Carolina at Chapel Hill, the Cecil G. Sheps Center for Health Services Research. Available online at: <http://www.shepscenter.unc.edu/data/Rndmu/Databook2009.pdf>

#### 4. Number of births, birth rates, fertility rates, total fertility rates, and birth rates for teenagers (ages 15-19)

	# of Births	Birth Rate	Fertility Rate	Total Fertility Rate
MS	46,056	15.8	75.7	2, 264
US	4, 265,555	14.2	68.5	2,100.5

#### Teenage birth rate (per 1,000 females aged 15-19)

%	Total	Ages 15-17	Ages 18-19
MS	68.4	39.6	112.6
US	41.9	22.0	73.0

Martin JA, Hamilton BE, Sutton PD, Ventura SJ, et al. Births: Final data for 2006. National Vital Statistics Reports, 57(7). Hyattsville, MD: National Center for Health Statistics, 2009.

5. Birth rates for teenagers (Ages 15–19) by State: 1991, 2005 and 2006, and percentage change 1991–2005 and 2005–2006: United States and each state and territory

	1991	2005	2006	Percentage Change
MS	85.3	60.5	68.4	1991- 2005: ↓29% / 2005-2006: ↑13%
US	61.8	40.5	41.9	1991- 2005: ↓34% / 2005-2006: ↑3%

Source: Martin JA, Hamilton BE, Sutton PD, Ventura SJ, et al. Births: Final data for 2006. National Vital Statistics Reports; vol. 57 no 7. Hyattsville, MD: National Center for Health Statistics. 2009.

6. Annie E. Casey Foundation, Mississippi 2009 Kids Count

Key Indicators	Year	MS	US	US Rank
Child Death Rate (per 100,000 ages 1-14)	2000	37	22	47
	2006	30	19	
Teen Death Rate (per 100,000 ages 15-19)	2000	103	67	44
	2006	91	64	
Percent of Teens Who are High School Dropouts (ages 16-19)	2000	15	11	36
	2007	8	7	
Percent of Teens Not Attending School or Working (ages 16-19)	2000	11	9	40
	2006	10	8	
Percent of Children Living in Families Where Neither Parent Has Full-time, Year Round Employment	2000	36	32	50
	2006	43	33	
Percent of Children in Poverty (Below \$21,027 for a Family of 2 Adults and 2 Children)	2000	26	17	50
	2007	29	18	
Percent of Children in Single Parent Families.	2000	43	31	50
	2006	44	32	

Source: Annie E. Casey Foundation, 2009 Kids Count available online at: <http://datacenter.kidscount.org/databook/2009/Default.aspx>

7. Percentage of children (ages 19-35 months) who are immunized

MS	79%	US	80%
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Sources: Estimated Vaccination Coverage with Individual Vaccines and Selected Vaccination Series Among Children 19-35 Months of Age by State -- U.S., National Immunization Survey, Q1/2007-Q4/2007. National Immunization Program, Centers for Disease Control and Prevention. Available at [http://www.cdc.gov/Vaccines/stats-surv/nis/tables/07/tab03\\_antigen\\_state.xls](http://www.cdc.gov/Vaccines/stats-surv/nis/tables/07/tab03_antigen_state.xls). <http://statehealthfacts.org/profileind.jsp?ind=54&cat=2&rgn=26>

8. Rate of child deaths (ages 1-14) per 100,000 children

MS	33	US	20
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Source: <http://www.statehealthfacts.org/comparemtable.jsp?ind=61&cat=2>

## 9. Comparison between MS students and US students

Behaviors that Contribute to Unintentional Injuries and Violence	MS Students %	US Students %	MS Students Are At Risk
Rarely or Never Wore a Seat Belt	19.4	11.1	Greater Risk
Seriously Considered Attempting Suicide	13.4	14.5	Equal Risk
Current Cigarette Use	19.2	20.0	Equal Risk
Current Alcohol Use	40.6	44.7	Less Risk
Currently Sexually Active	42.3	35.0	Greater Risk
Watched TV for 3 or More Hours per Day	47.5	35.4	Greater Risk
Were Obese	17.9	13.0	Greater Risk

Source: [http://www.cdc.gov/HealthyYouth/yrbs/state\\_district\\_comparisons.htm](http://www.cdc.gov/HealthyYouth/yrbs/state_district_comparisons.htm), 2007 YRBS.

## 10. Prevalence of household-level food insecurity and very low food security by state average

State	Number of Households	Food Insecurity	Very Low Food Security
	Average Number	Prevalence %	Prevalence %
MS	1,149,000	17.4	7.4

Source: Nord, Mark, Margaret Andrews, and Steven Carlson. Household Food Security in the United States, 2008. ERR-83, U.S. Dept. of Agriculture, Econ. Res. Serv, November 2009. <http://www.ers.usda.gov/Publications/ERR83/ERR83.pdf>

## 11. Childhood hunger

% MS children <18 living in food insecure households	21.5
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Cook, John. Feeding America. Child Food Insecurity in the United States: 2005-2007.

## 12. National Survey of Children's Health: Mississippi Profile Page (n = 622,709)

Indicator	Explanation	MS %	US%
Health Status	Child Health Status, percent of children in excellent or very good health	82.2	84.4
	Oral Health Status, percent of children with excellent or very good oral health	66.8	70.7
	Injury, percent of children age 0-5 with injuries requiring medical attention in the past year	8.2	10.4
	Breastfeeding, percent of children age 0-5 who were ever breastfed	52.7	75.5
	Missed School Days, percent of children age 6-17 who missed 11 or more days of school in the past year	6.1	5.8
Health Care	Current Health Insurance, percent of children currently insured	90.7	90.9
	Insurance Coverage Consistency, percent of children lacking consistent insurance coverage in the past year	21.0	15.1
	Preventive Health Care, percent of children with a preventive medical visit in the past year	82.3	88.5

	Preventive Dental Care, percent of children with a preventive dental visit in the past year	75.5	78.4
	Developmental Screening, percent of children age 10 months to 5 years who received a standardized screening for developmental or behavioral problems	20.0	19.5
	Mental Health Care, percent of children age 2-17 with problems requiring counseling who received mental health care	43.0	60.0
	Medical Home, percent of children who received care within a medical home	51.6	57.5
School & Activities	Repeating a Grade, percent of children age 6-17 who have repeated at least one grade	21.2	10.6
	Activities Outside of School, percent of children age 6-17 who participate in activities outside of school	75.0	80.7
	Screen Time, percent of children age 1-5 who watched more than one hour of TV or video during a weekday	62.1	54.4
Child's Family	Reading to Young Children, percent of children age 0-5 whose families read to them everyday	37.4	47.8
	Religious Services, percent of children who attend religious services at least weekly	73.3	53.7
	Mother's Health, of children who live with their mothers, the percentage whose mothers are in excellent or very good physical and emotional health	50.4	56.9
	Father's Health, of children who live with their fathers, the percentage whose fathers are in excellent or very good physical and emotional health	60.4	62.7
	Smoking in the Household, percent of children who live in households where someone smokes	35.1	26.2
	Child Care, percent of children age 0-5 whose parents made emergency child care arrangements last month and/or a job change for child care reasons last year	33.7	30.7
Child & Family's Neighborhood	Neighborhood Amenities, percent of children who live in neighborhoods with a park, sidewalks, a library, and a community center	23.5	48.2

Estimates based on sample sizes too small to meet standards for reliability or precision. The relative standard error is greater than or equal to 30%.

Source: Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children's Health, Data Resource Center for Child and Adolescent Health website. Retrieved December 22, 2009 from [www.nschdata.org](http://www.nschdata.org)

### II.3.D. CYSHCN

#### 1. Children/Youth with Special Health Care Needs: Mississippi Chartbook Page (n = 111,852)

Prevalence of CYSHCN	MS %	US %
Percent of children who have special health care needs	15.0	13.9
CYSHCN Prevalence by Sex		
Male	17.1	16.1
Female	12.9	11.6
CYSHCN Prevalence by Poverty Level		
0-99% FPL	17.4	14.0
100-199% FPL	14.4	14.0
200-399% FPL	13.0	13.5
400% FPL or more	15.0	14.0

National Chartbook Indicators	MS %	US %
Health Insurance Coverage		
CYSHCN Without Insurance at Some Point in Past Year	11.9	8.8
Access to Care		
CYSHCN with Any Unmet Need for Specific Health Care Services	16.7	16.1
CYSHCN with Any Unmet Need for Family Support Services	2.9	4.9
CYSHCN Needing a Referral Who Have Difficulty Getting it	18.8	21.1
CYSHCN without a usual source of care when sick (or who rely on the emergency room)	6.2	5.7
CYSHCN without any personal doctor or nurse	8.7	6.5
Family Centered Care		
CYSHCN without family-centered care	38.4	34.4
Impact on Family		
CYSHCN whose families pay \$1,000 or more out of pocket in medical expenses per year for the child	16.5	20.0
CYSHCN whose conditions cause financial problems for the family	19.4	18.1
CYSHCN whose families spend 11 or more hours per week providing or coordinating child's health care	14.0	9.7
CYSHCN whose conditions cause family members to cut back or stop working	23.1	23.8

MCHB Core Outcomes	MS %	US %
CYSHCN whose families are partners in decision making at all levels, and who are satisfied with the services they receive	60.3	57.4
CYSHCN who receive coordinated, ongoing, comprehensive care within a medical home	45.0	47.1
CYSHCN whose families have adequate private and/or public insurance to pay for the services they need	58.7	62.0
CYSHCN who are screened early and continuously for special health care needs	51.4	63.8
CYSHCN whose services are organized in ways that families can use them easily	90.9	89.1

Youth with special health care needs who receive the services necessary to make appropriate transitions to adult health care, work, and independence	30.9	41.2
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Sources: Child and Adolescent Health Measurement Initiative. 2005/2006 National Survey of CYSHCN, Data Resource Center for Child and Adolescent Health website. Retrieved December 22, 2009 from [www.cshcndata.org](http://www.cshcndata.org)

#### II.4. Assessment of capacity by pyramid level

Agency capacity is described in greater detail with the Agency Capacity section of the block grant application. The following section highlights many examples of agency capacity by MCH pyramid tier.

##### *II.4.A. Direct and Enabling Services*

*Children's Medical Program:* The Children's Medical Program (CMP) is Mississippi's Children/Youth with Special Health Care Needs (CYSHCN) Program and provides medical and/or surgical care to children with chronic or disabling conditions. Conditions covered include major orthopedic, neurological, and cardiac diagnoses, and conditions such as cleft lip and/or palate, asthma, cystic fibrosis, sickle cell anemia, and hemophilia. Program services are available to state residents through 20 years of age who meet eligibility criteria. The program provides community-based specialty care through 15 clinic sites in which 263 specialty clinic sessions are held throughout the state, including a multi-disciplinary clinic centrally located in Jackson at the Blake Clinic for Children in the Jackson Medical Mall. The program is described in greater detail in the Agency Capacity section of the block grant application.

*Family Planning Program:* The Family Planning Program promotes awareness and assures access to reproductive health benefits by encouraging individuals to make informed choices that provide opportunities for healthier lives. More than 62,189 Mississippians received comprehensive family planning services in CY 2009, and approximately 18,088 of those were age 19 years or younger. The target populations are females aged 13-44 at or below 150 percent of poverty level. A fee system with a sliding scale is used where clients with an income at or below 100 percent poverty level are not charged for services. Reimbursement is sought for Medicaid eligible clients.

The family planning program provides:

Medical and non-medical contraception methods, education, and counseling
Comprehensive medical examination including a thorough history, blood pressure, and certain related services, and provision of contraceptive method
Pregnancy testing and counseling
STD/HIV testing & counseling
Family planning waiver

*Maternity:* MSDH Maternity Services Program aims to reduce low birthweight, infant and maternal mortality, and morbidity in Mississippi by providing comprehensive, risk-appropriate prenatal and postpartum care through county health departments. During CY 2009, approximately 17 percent of the women who gave birth in MS received their prenatal care in county health departments (compared to 19 percent in CY 2007). Public health nurses, nurse practitioners, physicians, nutritionists, and social workers provide this cost-effective, comprehensive primary care. WIC is a critical component of the maternity care effort.



*Perinatal High Risk Management/Infant Services System:* Perinatal High Risk Management/Infant Services System (PHRM/ISS) is a comprehensive case management program targeting Women's Health Services to Medicaid eligible pregnant/postpartum women and infants up to their first birthday. The program consists of a multidisciplinary team (Mississippi licensed RN, Nutritionist/Registered Dietitian, and Social Worker) who provide a comprehensive approach to high-risk mothers and infants for enhanced services. The target population includes women with issues such as history of previous poor birth outcome, substance use, or medical conditions such as chronic hypertension. Targeted case management combined with the team approach establishes better treatment of the whole patient, improves the patient's access to available resources, provides for early detection of risk factors, and allows for coordinated care, all in order to reduce the incidence of low birthweight, and infant and maternal mortality and morbidity. This team of professionals provides risk screening, counseling, health education, home visiting, and monthly case management.

*Early Intervention:* First Steps is Mississippi's early intervention system for infants and toddlers with developmental delays and disabilities and their families. The MSDH is the lead agency that assures an effective and appropriate implementation of IDEA, Part C. Other agencies such as the Mississippi Departments of Mental Health, Education, Division of Medicaid, and Human Services collaborate with the MSDH and assist with the direct provision of early intervention services, referrals of potentially eligible infants and toddlers, and funding of the delivery of early intervention services.

*CDC Coordinated School Health Initiative:* The MSDH Bureau of School Health and the MS Department of Education Office of Healthy Schools teamed to form the CDC Coordinated Approach to School Health Initiative. This initiative is funded through a five year cooperative agreement with the CDC to implement coordinated school health programs across the state and provide professional development and technical assistance in school districts with high levels of health disparities to improve the health of middle and high school students across the lifespan. The CDC coordinated approach is a multi-component model that focuses on health and physical education; health, nutrition, and counseling and psychological services; a healthy school environment; health promotion for staff; and family/community involvement. Monitoring and assessment of effectiveness will focus on coordinated school health, physical activity, and nutrition programs; tobacco policy and cessation services; HIV, STD, and teen pregnancy prevention; and Youth Risk Behavior Surveillance activities.

*Delta Infant Mortality Elimination (DIME) and Metropolitan Infant Mortality Elimination (MIME) Projects:* The DIME project's primary focus is to reduce infant mortality in the Mississippi Delta. DIME targets gaps in women's and infants' health services in the 18 counties of the Delta Health Alliance initiative. DIME is a multidimensional, multi-collaborative effort including the MSDH, the University of Mississippi School of Medicine, and Federally Qualified Health Centers. The DIME project proposes to accomplish its goal of decreasing infant mortality in the Mississippi Delta by: 1) Filling gaps in healthcare services for women and infants that include inadequate preventive health resources, inefficient chronic disease management, low utilization of family planning services, high sexually transmitted disease rates, and limited access to prenatal care; 2) Increasing efficiency and utilization of available healthcare services for women and infants; and 3) Enhancing knowledge and skills of healthcare consumers

and providers in the Delta. The MIME project is the sister project of the DIME program. The MIME project is being piloted in the Jackson Metropolitan Area utilizing the same interpregnancy care project components used in the DIME project. The ultimate goal of the DIME and MIME projects is to establish evidence base documenting improved physical and fiscal outcomes for high risk women and infants. This evidence will be utilized to justify the need for and seek funding for expansion of interpregnancy programs to the statewide level.

*Health Education:* In addition to partnering with other providers to improve the provision of services to the MCH population, MSDH currently provides an array of health education programs on a statewide basis through district and local county health departments. Health education is being provided to residents in the areas of poison prevention, child safety, immunization, infection control, nutrition, childhood obesity, fire safety, oral hygiene, and dental screenings. Many of these educational services are provided with the assistance of partners in communities, schools, and faith-based groups targeting youth and adolescents.

*Cultural Competency:* In an effort to develop cultural competency within the agency to better meet the needs of and improve service delivery to Mississippi's immigrant population, workshops were conducted in the last year by the MSDH Office of Health Disparity Elimination (OHDE) during which approximately 2,200 staff were provided training in cultural competency by experts from the Morehouse School of Medicine. The MSDH OHDE also employs an Outreach Coordinator to provide guidance on multicultural perspectives including those of the Middle Eastern and Hispanic communities and to assist with the certification of MSDH translators.

#### *II.4.B. Population-Based Services*

*Division of Injury and Violence Prevention:* The Division of Injury and Violence Prevention, located within the Office of Preventive Health, includes three federally-funded programs that focus on child safety through statewide educational programs. The Child Occupant Protection (COP) Program has targeted new mothers and other adults responsible for the transportation of children in motor vehicles. The COP Program recently collaborated with WIC to educate lactation consultants and other program staff regarding the importance of child safety issues. In addition, a Car Seat Incentive program has been piloted to encourage PHRM participants to keep clinic appointments and receive a new child safety seat free-of-charge. Unfortunately, children/youth with special health care needs (CYSHCN) are not currently being served by the COP program because they require modified child restraints that are very expensive and difficult for families to obtain. In addition, there are currently no certified Child Passenger Safety Technicians in Mississippi approved to install or provide education on properly transporting children with special health care needs or physical disabilities. This includes low birth weight babies who often need a car bed or other restraint if they leave the hospital weighing less than five pounds. Specialized training could be provided to some of the 250 certified technicians in Mississippi, including nearly 100 certified staff within the MSDH. This would allow these individuals to properly install child restraints for CYSHCN, and perhaps provide an opportunity for the purchase and distribution of these seats to families in need.

Other programs within the Division of Injury and Violence Prevention focus on safety within the home, community, and school. The Fire Prevention Program targets high-risk, low-income communities to ensure homes where small children live are equipped with working smoke detectors and preventive education. In addition to fire prevention, detailed checklists for home safety need to be used to assess other issues, including safe sleep environments, guard rails on windows and stairs, cabinet locks in homes with young children, and the presence of emergency contact information. Adding a quick inspection of home safety by a trained professional could significantly reduce the rate of unintentional injury-related deaths – the leading cause of death for Mississippians ages 1 to 44 years.

The Division of Injury and Violence Prevention has the potential to reach parents and caregivers throughout the state. A statewide educational campaign is needed to teach Mississippians the signs of child abuse and neglect, resources for helping children in need, and step-by-step instructions for reporting suspected abuse. This includes promotion of safe sleep environments and the prevention of Sudden Infant Death Syndrome, which should be incorporated into programs promoting breastfeeding and general infant health.

*Genetic Services:* The Genetics Services Program provides comprehensive services statewide for a broad range of genetic related disorders. Priority is given to prevention measures to minimize the effects of these disorders through early detection and timely medical evaluation, diagnosis and treatment. Newborn screening is mandated by law in Mississippi. In 2003, the MSDH expanded the screening panel to include the American College of Medical Genetics (ACMG) and March of Dimes (MOD) universal panel along with other disorders/diseases recommended by the Mississippi Genetics Advisory Committee. The program provides newborn screening for 40

disorders to identify these problems early and allow for immediate intervention to prevent irreversible physical conditions, developmental disabilities or death. Professional and patient education is provided on a yearly basis to ensure that information is readily available to the population at risk, as well as to hospitals, physicians, and other health care providers.

*State Oral Health Program:* The MCH Block Grant employs a full-time dental director who leads the State Oral Health Program (SOHP). Dedicated leadership is essential to assessing the oral health needs in populations, increasing awareness of oral health issues, formulating and promoting sound oral health policy, and advocating for the development of programs to prevent oral disease and promote health.

The MCH Block Grant also supports one full-time statewide sealant program coordinator who is working with dentists at Federally Qualified Health Centers to provide school-based delivery of dental sealants to eligible children. Supplies and travel costs are reimbursed by the program. During the 2009-2010 school year, MSDH completed an open-mouth survey of third grade children in public schools. Results of the survey are detailed in both the data and narrative sections of National Performance Measure # 9.

MCH Block Grant support helps the SOHP leverage additional resources through the Office of Tobacco Control, the Women, Infant and Children's (WIC) Program, the Office of Preventive Health, and the Bower Foundation, a philanthropic organization. For example, the SOHP supports seven dental hygienists who provide oral health screening and caries risk assessment and deliver preventive fluoride varnish to children in nine public health districts. The SOHP also provides funding to design and install new community water fluoridation systems. In FY 2009, the SOHP discontinued a weekly school fluoride rinse program for children in K through fifth grades.

The SOHP provided leadership to create the Mississippi Oral Health Community Alliance (MOHCA) a statewide oral health coalition to build community partnerships to promote oral health. MOHCA appointed an Executive Board, adopted by-laws, and prepared an action plan. MOHCA obtained tax-exemption status from the IRS as a 501(c)(3) organization in December 2009. A website for MOHCA is located at <http://www.HealthyMS.com/MOHCA>.

The SOHP provides case management for children diagnosed with cleft lip and/or palate or a craniofacial syndrome that are eligible for coverage of procedures involving the oral cavity and related affected structures through the Children's Medical Program. In CY 2009, there were 236 payment authorizations for CMP patients with the primary diagnosis of cleft lip/palate.

*Immunization Program:* MCH staff support the provision of immunizations designed to eliminate morbidity and mortality due to childhood vaccine-preventable diseases such as diphtheria, tetanus, pertussis, polio, measles, influenza, and pneumonia in all MSDH county health departments and strive to increase immunization rates throughout the lifespan for children, adolescents and adults. Services include vaccine administration, monitoring of immunization levels, disease surveillance and outbreak control, information and education, and enforcement of immunization laws.

*Breast and Cervical Cancer Program:* The central aim of the Mississippi Breast and Cervical Cancer Early Detection Program (BCCP) is to address the breast and cervical cancer screening needs of medically underserved women in the state through outreach education and promotion of awareness. For example, the Praises in Pink program educates church members on how to coordinate a breast cancer prevention project for their respective congregation. Participants learn about risk factors and the importance of prevention and early detection.

Typically, these women are uninsured, medically underserved, poor, minority women, and elderly. The age criterion for the BCCP is 40-64 and incomes cannot exceed 250% of the Federal Poverty Level. In addition to breast and cervical cancer screening services provided for women 40-64, diagnostic procedures and case management services are also provided for women with abnormal findings. Women who are diagnosed with a malignancy or pre-cancerous condition of the cervix may be referred to Medicaid for treatment coverage. Staff of the BCCP provide professional and public educational programs.

*Office of Tobacco Control (OTC):* The mission of the MSDH OTC is to promote and protect the health of all Mississippians by reducing tobacco-related morbidity and mortality. The program accomplishes this by utilizing a systemic approach to tobacco prevention and control. Program components include: state and community interventions, health communication interventions, tobacco cessation interventions and surveillance and evaluation. Each program component is developed and implemented based on evidence-based strategies and the recommendations outlined in CDC Best Practices-2007.

Since its inception in July 2007, the MSDH OTC has worked diligently to develop the statewide and comprehensive tobacco education, prevention and cessation program. Through CDC Cooperative Agreement funds, the program has partnered with the MSDH Office of Preventive Health, Chronic Disease Bureau, to establish chronic disease coalitions that educate communities on cardiovascular disease, diabetes, asthma and tobacco use. The program has furthered its efforts to enhance established coalitions and strengthen partnerships by supporting the MSDH/American Lung Association of Mississippi's district-level asthma coalitions and partnering with MSDH Oral Health to promote tobacco cessation programs and awareness of the health risks associated with second-hand smoke exposure in Head Start. Other partnerships include collaboration with WIC to distribute tobacco awareness brochures; WIC certifiers also discuss smoking related issues with applicants.

*Pregnancy Risk Assessment Monitoring System (PRAMS):* Mississippi PRAMS is part of a CDC initiative to reduce infant mortality and low birth weight deliveries in Mississippi through the identification and monitoring of selected maternal experiences and behaviors including unintended pregnancy, prenatal care, breastfeeding, smoking, drinking, and mother and infant health. It is an ongoing, population-based, state-specific source of information about women's experiences occurring before and during pregnancy and during a child's early infancy.

#### *II.4.C. Infrastructure Building Services*

*Health Services District Program Review:* The MSDH Office of Health Services conducts an annual District Program Review at each of the nine public health districts in order to facilitate communication between central office and field staff to improve programmatic activities at the client service level. A team of central office directors, the State MCH Epidemiologist and health care professionals consisting of a nurse, nutritionist, and social worker, meets with district administrative staff to discuss the district's involvement in Health Services programs including all Maternal and Child Health program.

Programs such as Family Planning, Maternity, EPSDT, Newborn Screening, and Early Intervention are discussed to identify opportunities for improvement of services to MSDH clients. Additionally, data needs of the districts, program evaluation and epidemiologic studies planned to assist districts will be added to the agenda. District reviews occur annually.

## II.5. Selection of Priority Needs

The Needs Assessment team developed a plan to incorporate further face-to-face input from selected members of the external stakeholder list to whom the assessment survey was distributed. Each committee member reviewed the list of 106 external stakeholders and submitted recommendations for five members of an external stakeholder sub-committee. From those recommendations, the 25 individuals receiving the greatest number of recommendations was chosen and invited to attend a seminar and participate in a discussion panel to further prioritize the list of issues for each of the maternal child health population groups. Unfortunately, the event was very poorly attended and little assistance was derived from the panel. An alternate plan was developed to convene the in-house Needs Assessment committee to review the priority issues from the Survey Monkey results and establish a set of new priorities for the state. The committee convened in April 2010 to complete the selection of new state priorities and state indicators for the next five-year cycle of the Block Grant.

### *II.5.A. Review of 2005 Needs Assessment Priorities*

The 2010 Needs Assessment priority selection process began by first reviewing the last cycle's priorities. The 2005 state priorities were discussed by the Needs Assessment team as part of the process for adopting new state priorities. Some priorities were retained and revised for carryover into the new list of state priorities. Others were eliminated for various reasons such as discussion indicating that the priority issue was adequately covered with existing performance measures. Some of the 2005 priorities were simply enhanced to better focus on current needs or to improve tracking and measurement capacity. The remaining 2010 priorities are new.

The 2005 priorities were chosen utilizing the Hanlon Method of prioritization. The list of priorities addressed issues of each population in each pyramid level. The list of state performance measures derived from this set of priorities and progress towards achieving goals and indicators are listed in the forms in the Title V Block Grant.

2005 Priority	2010 Status	Explanation
1. Increase EPSDT/Preventive Health Services for children on Medicaid and SCHIP.	Eliminated	Adequately covered by activities at other agencies.
2. Decrease smoking among pregnant women.	Eliminated	Did not coincide with priorities identified through stakeholder survey. The MSDH Office of Tobacco Control has ongoing activities which address smoking among pregnant women.
3. Decrease cigarette smoking among sixth through twelfth graders.	Revised	The priorities identified through stakeholder survey suggested that substance use among adolescents change focus to include tobacco, alcohol, and substance use.
4. Reduce repeat teen pregnancies for adolescents less than 18 years old.	Revised	The priorities identified through stakeholder survey suggested that teenage pregnancy continue to be a focus for the MCH programs
5. Address child/adolescent obesity/overweight issues.	Revised	Decided to use a measure of intervention, i.e., physical activity rather than measure of outcome
6. Increase oral health care and preventive services for children.	Eliminated	Did not coincide with priorities identified through stakeholder survey
7. Reduce child/adolescent unintentional injuries.	Revised	Although infant abuse and neglect was listed as a priority in the stakeholder survey, it was deemed that abuse was more within the scope of the Department of Human Services; however, an indicator was



		developed related to adolescent health on bullying and school violence
8. Decrease unhealthy behaviors, specifically alcohol and drug use and risky sexual behavior, for teenagers sixth through twelfth grades.	Retained	The priorities identified through stakeholder survey suggested that substance use among adolescents include alcohol and other substances.
9. Maintain case management follow-up services for children with genetic disorders identified through MSDH newborn screening.	Eliminated	Adequately addressed within national performance measures
10. Continue to improve and maintain developed data collection capacity for Title V population.	Eliminated	Did not coincide with priorities identified through stakeholder survey

### *II.5.B. Selection of 2010 Needs Assessment Priorities*

The strengths and needs of the MCH population were gathered through the input of more than 450 MCH stakeholders across the state who participated in a web-based electronic survey. Additional details and methods for conducting that survey were previously discussed in section II.3 of the Needs Assessment report. The survey was developed by the Needs Assessment team and questions were posed to participants by the three priority MCH population groups including Women and Infants, Children and Adolescents, and Children/Youth with Special Health Care Needs (CYSHCN).

Participants were asked three open-ended questions which were described earlier within section 11.3. Participants also were provided a list of issues for each of the primary populations including women and infants, children and adolescents, and children/youth with special health care needs. The full list of issues submitted for consideration via the survey is listed in the following tables 1, 2, and 3.

Table 1. Issues surveyed for pregnant women, women, and infants

Anemia/iron deficiency during pregnancy	Infant sleep safety
Breastfeeding initiation and duration	Linkage to community resources
Community based services, i.e., health ministry	Low birth weight and preterm births
Comprehensive well baby care	Male/father involvement
Dental health for women	Maternal and infant motor vehicle injury
Domestic and sexual violence screening	Maternal mental health screening, assessment, treatment
Early and adequate prenatal care	Medical complications during pregnancy
Environmental toxins exposure	Newborn blood spot screening
Folic acid levels during pregnancy	Newborn hearing screening
Genetic counseling	Planned pregnancies and child spacing
Health disparities in mothers and infants	Preconception and interconception care
Health insurance	Primary preventive health care
Immunizations	STD and HIV screening
Infant abuse and neglect	Substance/alcohol use during pregnancy
Infant developmental, social and emotional screening	Tobacco use during pregnancy
Infant injuries (falls, poisoning, drowning)	Very low birth weight infants delivered at tertiary care facilities
Infant mortality	Weight gain during pregnancy

Table 2. Issues surveyed for children and adolescents

Acute and infectious diseases	Immunizations
Alcohol and drug use	Mental health screening, assessment and treatment
Child abuse and neglect	Motor vehicle injuries (e.g., traffic, non-traffic)
Child care	Nutrition and physical activity

Chronic disease/conditions	Obesity
Community based services, i.e., health ministry	School based health services
Comprehensive healthcare, well child care	School readiness
Dental Health	STD and HIV
Developmental, emotional, social screening	Suicide prevention
Environmental hazards	Teen pregnancy and teen birth rate
Health insurance	Tobacco use
Healthy youth development	Unintentional injuries (e.g., burns, poisoning, falls)
Hearing loss	Violence(e.g., sexual assault, bullying, cyber-bullying)

Table 3. Issues surveyed for CYSHCN.

Access to specialty care and services	Mental health screening
Community-based support for children with behavior disorders	Mental health treatment
Condition specific health information	Organized system of care for CYSHCN
Dental health for CYSHCN	Parents as decision making partners
Developmental, social, emotional screening	Provider capacity and education to meet the needs of CYSHCN
Early identification of special health care needs	Quantify disease prevalence, issues, concerns of CYSHCN
Families receive needed services	Safe and stable environments for CYSHCN
Health care/medical homes	School based health services
Health insurance	Social isolation of children and families
Home care services	Training & family support for children with behavioral issues
Knowledge of child development	Transition to adulthood
Maltreatment or abuse of CYSHCN	

Participants were asked to rate the preceding issues according to the level of importance or priority they perceived each issue should hold for the given population. Issues were scored on a Likert scale of one to five with one representing the most important and five representing the least important. Thus, the lowest aggregate scores, or those nearest the value of one on the Likert scale, were deemed to be the issues having greatest importance or priority. The ten scores of highest priority were extracted for each of the population categories and are illustrated in figures 15, 16, and 17. The illustrations list the 10 priorities with the lowest (and most important) scores for each of the target population groups. Figure 15 illustrates priorities for Pregnant Women, Women, and Infants. Many of these issues were already covered by national performance measures such as low birthweight, prematurity, and timing of prenatal care entry. One issue listed in Figure 15 was “Immunizations.” Immunizations could be interpreted as either for pregnant women or for infants. Because infant and child immunizations were already addressed in a national performance measure, we selected a state performance measure related to women of child-bearing age.

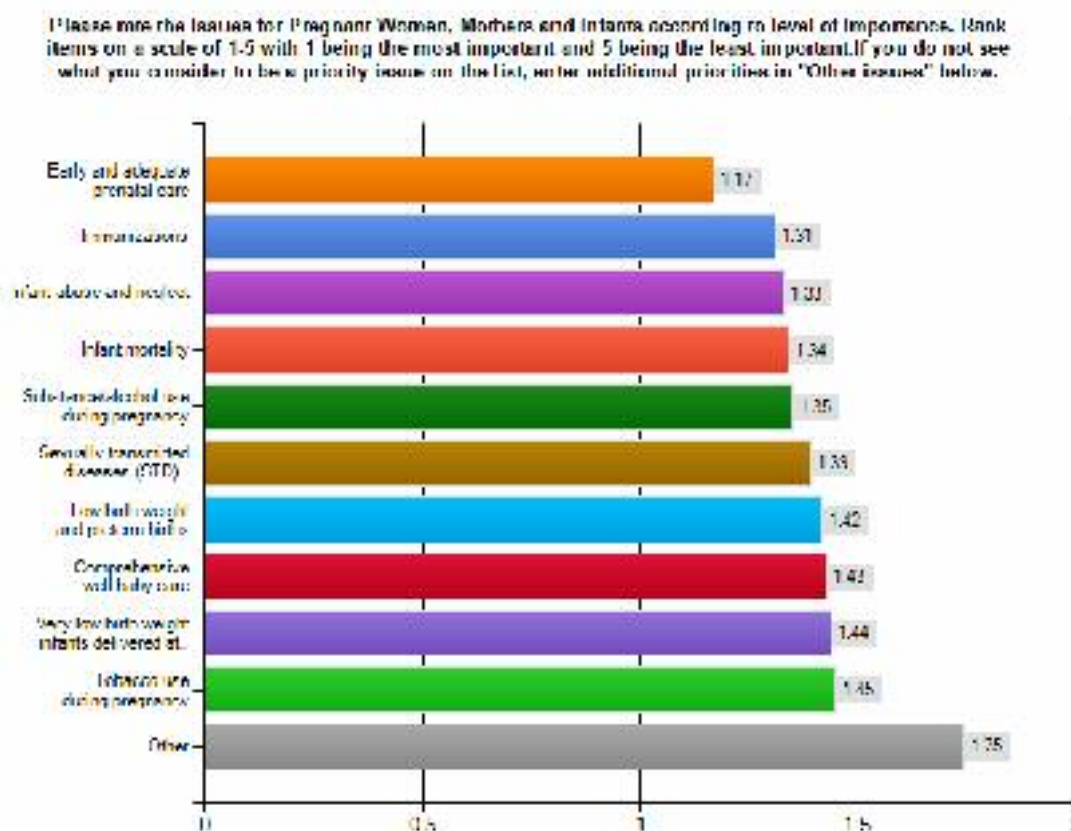


Figure 15

Figure 16 illustrates priorities for Children and Adolescents. Several of these issues were deemed to be adequately addressed by other activities. Child abuse was not chosen because that is more within the scope of another state agency. However, we did adopt a new indicator relevant to bullying and school violence.

Please rate the issues for Children and Adolescents according to level of importance. Rank items on a scale of 1-5 with 1 being the most important and 5 being the least important. If you do not see what you consider to be a priority issue on the list, enter additional priorities in "Other issues" below.

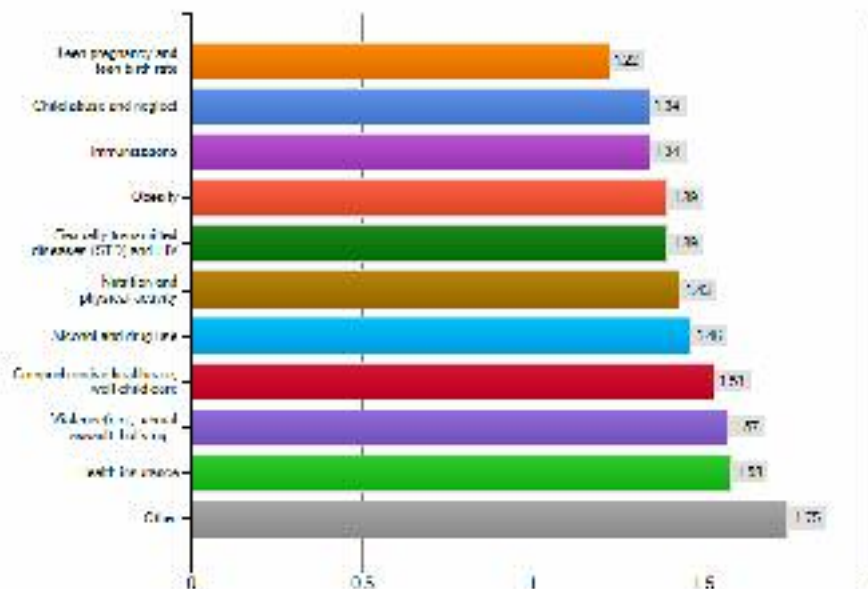


Figure 16

Please rate the issues for Children and Youth with Special Health Care Needs (CYSHCN) according to level of importance. Rank items on a scale of 1-5 with 1 being the most important and 5 being the least important. If you do not see what you consider to be a priority issue on the list, enter additional priorities in "Other issues" below.

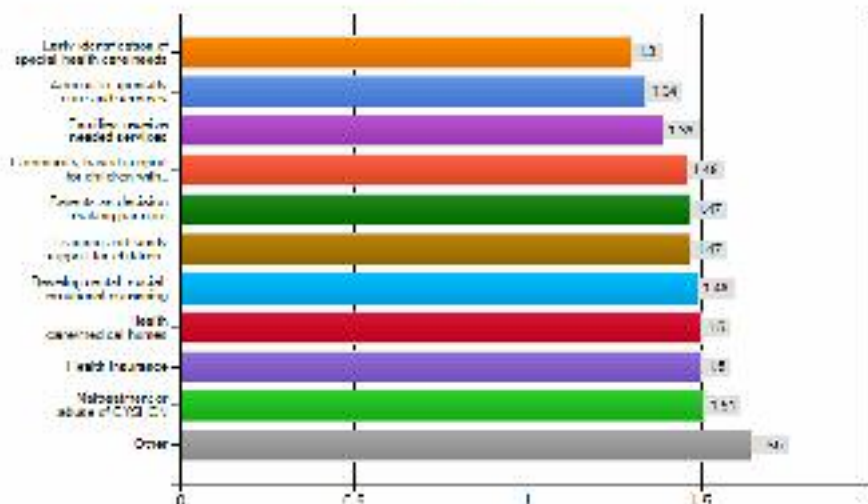


Figure 17

The ten priorities for each of the population categories were discussed by the Needs Assessment team as part of the process for adopting new state priorities. Ten priorities for each of the population categories were evaluated according to relevance, inclusion or overlap with other MCH activities, measurability, capacity, and need. In most cases, we eliminated those issues: 1) already addressed elsewhere, 2) that could not be measured, 3) that the Agency was not currently capable

of effectively addressing, 4) that were not within the scope of the Agency, i.e., those being addressed by other agencies, and 5) that did not match priority needs of the MCH population. One exception to these decision-making guidelines was made to accommodate the Agency priorities as mandated by the State Health Officer. One of the State Health Officer's priorities for the Mississippi State Department of Health to address is infant mortality. Because very low birthweight (VLBW) is known to be the leading contributor to infant death within the state, the decision was made to adopt VLBW as a state priority despite some overlap with federal health status indicators for infant health. Although the CYSHCN are recognized as one of the target populations for Title V funding, no new state priorities or measures were adopted to address this population. The committee felt that the needs of the CYSHCN were being adequately tracked by the numerous federal indicators for that population.

The remaining issues were adopted as the priority needs for the maternal child health programs and the new 5-year cycle of the Title V MCH Block Grant. A measurable state performance indicator was established for each of the priority issues, a data source was identified, base line data were extracted, and the state performance measures were entered into the appropriate forms within the TVIS block grant application (see table 4). The disposition of the final selection of state priorities and new state indicators are discussed in section 11.6.A.

1.	Low birthweight and preterm birth, preconception care
2.	Teen pregnancy and teen birth rate
3.	Nutrition and physical activity
4.	Adolescent alcohol and drug use
5.	Violence (e.g., sexual assault, bullying)
6.	Sexually transmitted disease
7.	Adult immunizations

Goals to address these priority issues are listed within the state measure detail sheets on Form 16. The following list summarizes the goals and significance of each priority and measure.

1.	To reduce the occurrence of very low birthweight deliveries in Mississippi: Very low birthweight deliveries account for more than half of Mississippi infant deaths.
2.	To reduce the rate of teen pregnancy among adolescents aged 15-19 years: Mississippi leads the nation in adolescent births.
3.	To reduce adolescent and childhood overweight and obesity: Mississippi leads the nation in obesity.
4.	To reduce tobacco use among adolescents: Tobacco use is highly associated with prevalence of cancer.
5.	To reduce adolescent use of alcohol and illegal drugs: Mississippi has a high rate of unintentional injuries
6.	To reduce adolescent violence and intentional injuries: Mississippi has a high prevalence of youth injuries and violence. Reducing risk behaviors that result in injury is a priority for reducing adolescent injuries and violence.
7.	To reduce the rate of sexually transmitted disease; Mississippi has a high prevalence of

	sexually transmitted disease.
8.	To increase adult immunizations; immunizations are primary disease prevention.
9.	To reduce occurrence of preterm or small-for-gestational-age deliveries: Previous negative birth outcomes are a predictor of risk for negative birth outcomes among subsequent pregnancies. Mississippi leads the nation in prematurity and low birthweight.

## II.6. Health outcomes measures

*Refer to forms in the MCH Block Grant Application for federal measures.*

### II.6.A State performance measures

The Needs Assessment committee discussed the newly adopted state priorities and developed nine new state performance measures. There is at least one measure for each priority. For each new measure, a numerator and denominator were defined and a data source was identified. The new state performance measures are as follows:

#### 2010 New State Performance Measures

Infant Health		
<b>1</b>	<b>Percent of infants born with birth weight less than 1,500 grams.</b>	2.2 %
Numerator	<i>Number of infants born with birth weight less than 1,500 grams.</i>	969
Denominator	<i>Number of live births.</i>	44,904
Data Source	Mississippi Vital Statistics, CY 2008	
Adolescent Health		
<b>2</b>	<b>Rate of pregnancy among adolescents aged 15-19 years (per 1,000).</b>	76.1
Numerator	<i>Number of pregnancies among adolescents aged 15-19 years.</i>	8333
Denominator	<i>Number of adolescents aged 15-19 years.</i>	109,461
Data Source	Mississippi Vital Statistics, CY 2008	
<b>3</b>	<b>Percent of students who met recommended levels of physical activity.</b>	39.7%
Numerator	<i>Number of students who met recommended levels of physical activity.</i>	53,687
Denominator	<i>Number of students surveyed.</i>	135,120
Data Source	Youth Risk Behavior Survey, 2009	
<b>4</b>	<b>Percent of students who reported current cigarette use, current smokeless tobacco use, or current cigar use.</b>	27.6%
Numerator	<i>Number of students who reported current cigarette use, current smokeless tobacco use, or current cigar use.</i>	35,838
Denominator	<i>Number of students surveyed.</i>	129,827
Data Source	Youth Risk Behavior Survey, 2009	
<b>5</b>	<b>Percent of students who reported current alcohol, marijuana or cocaine use.</b>	43.8%
Numerator	<i>Number of students who reported current alcohol, marijuana, or cocaine use.</i>	55,078
Denominator	<i>Number of students surveyed.</i>	125,662
Data Source	Youth Risk Behavior Survey, 2009	
<b>6</b>	<b>Percent of students who did not go to school on at least 1 day during the prior 30 days before because they felt they would be unsafe at school or on their way to or from school.</b>	4.1%
Numerator	<i>Number of students who did not go to school on at least 1 day during the prior 30 days before because they felt they would be unsafe at school or on their way to or from school.</i>	5,662



Denominator	<i>Number of students surveyed.</i>	136,548
Data Source	Youth Risk Behavior Survey, 2009	
<b>Maternal Health</b>		
<b>7</b>	<b>Rate of Chlamydia, gonorrhea, and syphilis cases per 100,000 women aged 13-44 years (per 100,000).</b>	3,198
Numerator	<i>Number of Chlamydia, gonorrhea, and syphilis cases among women aged 13-44.</i>	20,641
Denominator	<i>Number of women aged 13-44 years.</i>	645,432
Data Source	Mississippi State Dept of Health, Office of Epidemiology, CY 2008	
<b>8</b>	<b>Percent of women aged 13-44 years who received an influenza vaccination within the last year.</b>	1.63%
Numerator	<i>Number of women who received an influenza vaccination within the last year.</i>	10,540
Denominator	<i>Number of women aged 13-44 years.</i>	645,432
Data Source	Mississippi State Dept of Health, Office of Epidemiology, CY 2009	
<b>9</b>	<b>Percent of women having a live birth who had a previous preterm or small-for-gestational-age infant.</b>	1.00%
Numerator	<i>Number of women having a live birth who had a previous preterm or small-for-gestational-age infant</i>	456
Denominator	<i>Number of women having a live a birth</i>	44,904
Data Source	Mississippi Vital Statistics, CY 2008	