
Maternal and Child Health



Five-Year Needs Assessment 2005



Missouri Department of Health and Senior Services • Division of Community Health

Missouri Maternal and Child Health Five-Year Needs Assessment: 2005

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Acronyms

| | |
|--------|---|
| A to A | Alternatives to Abortion |
| ACS | American Cancer Society |
| ACT | Association of Community Task Forces |
| AIDS | Acquired Immune Deficiency Syndrome |
| AMCHP | Association of Maternal and Child Health Programs |
| BRFSS | Behavior Risk Factor Surveillance System |
| CAHMI | Child and Adolescent Health Measure Initiative |
| CAT | Comprehensive Assessment Tool |
| CDC | Centers for Disease Control and Prevention |
| CEI | Center for Economic Information |
| CF | Cystic fibrosis |
| CHART | Community Health Technical Assistance, Resources and Training |
| CHIME | Center for Health Information Management and Evaluation |
| CHSS | Section for Community Health Systems and Support |
| CLPHS | Center for Local Public Health Services |
| CPS | Division of Comprehensive Psychiatric Services of DMH |
| CSHCN | Children with Special Health Care Needs |
| DCH | Division of Community Health |
| DESE | Department of Elementary and Secondary Education |
| DHSS | Department of Health and Senior Services |
| DMH | Department of Mental Health |
| DMS | Division of Medical Services of DSS |
| DSS | Department of Social Services |
| ECCS | Early Childhood Comprehensive Systems |
| ED | Emergency Department |
| EMS | Emergency Medical Services |
| EMSC | Emergency Medical Services for Children |
| FFY | Federal Fiscal Year |
| FQHC | Federally qualified health center |
| GRC | Geographic Resources Center |
| HCY | Healthy Children and Youth |
| HFFQ | Harvard Food Frequency Questionnaire |
| HIC | Health insurance coverage |
| HRSA | Health Resources and Services Administration |
| ISDI | Integrated Services Development Initiative |
| LEND | Missouri Partnership for Leadership Education |

Acronyms continued

LPHA Local Public Health Agencies
MC+ Medical Services - MC+ (Medicaid) provides healthcare coverage to persons eligible for: MC+ for Kids (Missouri's State Health Insurance for Children Program [SCHIP]), MC+ for pregnant women and newborns, Medical Assistance for Families (MAF), Transitional Medical Assistance (TMA) and Extended TMA.

Some persons receive MC+ benefits through a "fee-for-service" arrangement, while others receive benefits through a MC+ managed health care plan.

MCFH Section for Maternal, Child and Family Health in DCH
MCH Maternal and Child Health
MCHB Maternal and Child Health Bureau
MCO Managed Care Organization
MHIA Missouri Head Injury Advisory Council
MICA Missouri Information for Community Assessment
MO-PEDS Missouri Partnership for Enhanced Delivery of Services
MOHSAIC Missouri Health Strategic Architecture and Information Cooperative
MPCA Missouri Primary Care Association
MRDD Mental Retardation and Developmental Disabilities
MSCHSP Missouri School Children's Health Service Program
OHNM Oral Health Network of Missouri
OSED A Office of Social and Economic Data Analysis
OSPHI Office of Surveillance, Evaluation, Planning and Health Information
PAT Parents As Teachers
PDW Physical Disabilities Waiver
PedNSS Pediatric Nutrition Surveillance System
PNSS Pregnancy Nutrition Surveillance System
PRIMO Primary Car Resources Initiative for Missouri
SCHIP State Children's Health Insurance Program
SHCN Special Health Care Needs
SLAITS State and Local Area Integrated Telephone Survey
SMHW Show Me Healthy Women
TANF Temporary Assistance to Needy Families (Missouri's Temporary Assistance Program)
TBI Traumatic Brain Injury
TVIS Title V Information System
VLBW Very Low Birth Weight
WIC Special Supplemental Nutrition Program for Women, Infants and Children

A. Needs Assessment Process of the Maternal and Child Health Populations

In Federal Fiscal Year 2005 (FFY05), the Title V agency for Missouri (Missouri Department of Health and Senior Services [DHSS]/Division of Community Health [DCH]) completed a five-year maternal and child health (MCH) needs assessment identifying the need(s) for:

- Preventive and primary care services for pregnant women, mothers, and infants;
- Preventive and primary care services for children; and
- Services for children with special health care needs (CSHCN).

Multiple methods were applied by this agency to support the Title V need/capacity assessment. While any one method represents a unique but imperfect perspective, the use of multiple methods has the advantage of identifying need and capacity more fully.

B. Five-Year Needs Assessment

1. Process for Conducting Needs Assessment:

1.1. Describe the State's overall needs assessment methodology. This assessment included but was not limited to the following methods:

- Review of Missouri state profiles compiled by Health Resources and Services Administration (HRSA), Centers for Disease Control and Prevention (CDC), and Association for Maternal and Child Health Programs (AMCHP) to ascertain external perspectives of MCH needs in Missouri
- Qualitative primary data generated through 12 focus groups conducted throughout Missouri divided into two cohorts:
 - Client (user) group cohort
 - Provider or agency group cohort
- Review of Community Health Technical Assistance, Resources and Training (CHART) survey of local coalition members, state and county profiles (with selected MCH indicators and related priorities) generated by the Center for Health Information Management and Evaluation (CHIME) and local public health priorities formulated by the Center for Local Public Health Services (CLPHS)
- MCH population group(s) forecasts developed from demographic data drawn from the U.S. Census and from analysis provided by the Missouri State Demographer's Office
- A composite analysis of selected MCH indicators to compare (county by county) the relative MCH health status of women and children living in different geographical regions in Missouri:
 - Infant mortality
 - Unintended pregnancies (teenage pregnancies)
 - Tobacco use among mothers during pregnancy
 - STDs among women of childbearing age
 - Abortions
 - Obesity
 - Percentage of MCH population groups with insurance coverage
- Data provided by the Missouri Department of Social Services (DSS), Missouri Department of Mental Health (DMH), Missouri Primary Care Association (MPCA), and other professional associations concerning the infrastructure capacity (in Missouri) to deliver basic health services to MCH population groups
- Nominal group process was used by selected MCH stakeholders to suggest possible MCH priorities for Missouri. Stakeholders reviewed a draft version of the assessment presented in this application, reflected upon their own experiences, and applied the following criteria in delineating MCH priority need areas for Missouri:
 - **Criterion 1:** Degree to which the need can be impacted by known effective interventions

- **Criterion 2:** Degree of health-related consequences of not addressing need
- **Criterion 3:** Degree of state and national support other than Title V for impacting need (i.e., considering the “big picture” – finances, politics, service system priorities, socio-cultural issues, etc.)
- **Criterion 4:** Degree of current demographic disparity regarding need (e.g. race, gender, income, place of residence)
- **Criterion 5:** Degree to which other local providers of service consumers identify a particular need as a high priority
- An MCH priority setting methodology developed by the Office of Epidemiology and CHIME (Missouri Information for Community Assessment [MICA] priorities) was constructed and applied to data collected for MCH population groups in Missouri. This methodology relies upon the selection of diseases or risk factors most directly impacting upon the health status of MCH population groups; selection of priority criteria such as deaths, racial disparity, hospitalizations, prevalence, and amenability to change and application of criteria to diseases/risk factors by state and geographic region to rank priority MCH needs.

The group nominal (qualitative) results and the MICA priorities (quantitative) results were blended to set Missouri’s MCH priorities for the next five years.

1.2. Reference formal and informal collaboration processes and partnerships with the public and private sector and State and local levels of government. DCH relied on a variety of formal and informal collaboration/partnerships to conduct this five-year need assessment:

- CHART: Operational unit within DCH provided assistance and workshops for department contractors, work groups, local public health agencies, and communities in Missouri striving to build skills in areas such as assessing health status of communities, determining local priorities and needs, identifying local resources and intervention models, and developing community-based plans sustaining initiatives leading to improved health outcomes.
- Missouri Census Data Center: Network of agencies works in cooperation with the Missouri State Library to provide information, products, systems development, and user support services related to census data. Coordinating members include:
 - State Demographer at the Missouri Office of Administration, Division of Budget and Planning
 - Staff at the Office of Social and Economic Data Analysis (OSED)
 - Geographers at the Geographic Resources Center (GRC)
 - Economists at the Center for Economic Information (CEI)
- Center for Local Public Health Services: Center supports the leadership and administrative capabilities of local public health agencies to implement a comprehensive public health program based on the core public health functions that include some essential MCH services.
- Focus Groups: Series of focus groups was organized and facilitated specifically to support this MCH five-year needs assessment.

- MCH coalitions: Coalitions serve the greater St. Louis region and the greater Kansas City region.
- State Maternal and Child Health Early Childhood Comprehensive Systems (ECCS) Planning Coalition: Coalition, of which DCH (Missouri's Title V agency) is the founding member, is developing a state ECCS plan with consensus indicators and outcomes for early childhood development.
- Family Voices and CSHCN family advisory group: Representatives of children with special health needs advocacy groups participated in the MCH stakeholders session where MCH priorities for Missouri were "nominally ranked."

1.3. Describe the quantitative and qualitative methods used to assess the needs of MCH populations in Missouri. These methods are described under Section 1.1 of this section (**Describe the State's Overall Needs Assessment Methodology**). These methods will be applied to specific life stages and MCH special populations:

- Pregnant women, mothers, and infants
- Children
- Children with special health care needs

1.4. Describe the methods used to assess the State's capacity to provide direct health care, enabling, population-based, and infrastructure building services. The methods used to assess capacity to provide MCH services in Missouri can be summarized as follows:

- Close collaboration with the former Section for Community Health Systems and Support (CHSS) and MPCA to assess primary care and dental care capacity to deliver MCH services in Missouri.
- Close collaboration with the Missouri DMH to assess capacity to deliver basic mental health services to MCH populations in Missouri.
- Close collaboration with the Missouri DSS to assess the capacity to deliver MCH-related services to low income pregnant women, mothers, infants, children, and children with special health needs in Missouri.
- Close collaboration with the Missouri State Medical Society and other medical associations to assess the impact of the malpractice insurance crisis upon the capacity to deliver primary (family) care, pediatric care, obstetric care, and specialty medical care to MCH populations in Missouri.

1.5. Describe all sources used. The primary sources of data and information used to compile this MCH five-year needs assessment can be summarized as follows:

- HRSA, Maternal and Child Health Bureau (MCHB), Division of State and Community Health's Technical Assistance Workshop on Needs Assessment and State Performance Measures, February 12-13, 2004.
- Maternal and Child Health Needs Assessment and Its Uses in Program Planning: Promising Approaches and Challenges.

- Promising Practices in Maternal and Child Health Needs Assessment: A Guide Based on a National Study.
- Missouri Maternal and Child Health Vital Statistics as provided through CHIME, Missouri Department of Health and Senior Services:
 - Live Births and Fetal Deaths (Birth and Death Certificates)
 - Induced Termination of Pregnancies
 - Birth Defects Registry
- CHIME, Missouri Department of Health and Senior Services: MICA, Community (MCH) Health Profiles and Focus articles. The MICA system includes many key MCH indicators that can be analyzed for state and/or county impact.
- County profiles that contain selected MCH data and key health issues by county that in some instances reflect key health indicators of MCH populations. These profiles are also maintained by CHIME.
- Missouri county level study with key chronic disease indicators for every county in Missouri.
- Maternal and child health surveillance information system including data generated to track MCH Title V national and state performance measures.
- Missouri Division of Community Health MCH-Related Surveillance Systems that collect and monitor self-reported and empirical data on the nutritional health status and dietary practices of Missourians and chronic-disease and national health objectives.
 - Missouri Pediatric Nutrition Surveillance System (PedNSS) monitors the growth, anemia, and breastfeeding status of children in Missouri who participate in federally funded child health and nutrition programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).
 - Missouri Pregnancy Nutrition Surveillance System (PNSS) monitors behavioral and nutritional risk factors among pregnant and postpartum women in the state enrolled in public health programs such as WIC.
 - Harvard Food Frequency Questionnaire (HFFQ) is used to monitor the food intake and physical activities of women and children participating in WIC and school-age children.
 - Behavioral Risk Factor Surveillance System (BRFSS) Program tracks the prevalence of chronic-disease related characteristics and monitors progress toward national health objectives related to decreasing high-risk behaviors, increasing awareness of medical conditions, and increasing the use of preventive health services of persons aged 18 years and older.
 - Pregnancy Related Assessment Monitoring System (PRAMS) has a pilot survey in progress. PRAMS collects state-specific, population-based data on maternal attitudes and experiences prior to, during, and immediately following pregnancy.
- Qualitative primary data generated through 12 focus groups formed specifically to support this five-year MCH needs assessment for Missouri:
 - Consumer/user group cohort
 - Provider/agency group cohort

- Missouri Census Data Center that maintains census data and application archives and prepares current population estimates and projections for Missouri and performs analysis of state economic trends:
 - Missouri Office of Administration
Division of Budget and Planning (State Demographer's Office)
Jefferson City, Missouri
 - Office of Social and Economic Data Analysis
University of Missouri, Columbia, Missouri
 - Geographic Resources Center
University of Missouri, Columbia, Missouri
 - Center for Economic Information
University of Missouri, Kansas City, Missouri
- National Survey of Children with Special Health Care Needs (also referred to as SLAITS [State and Local Area Integrated Telephone Survey]), 2001. Centers for Disease Control and Prevention and National Center for Health Statistics. Results of Missouri specific questions.
- Community Health Technical Assistance, Resources and Training (CHART) 2000 survey results.
- Injuries in Missouri: A Call to Action. An injury prevention surveillance baseline for Missouri completed in 2002.
- *Growth in the Heartland: Challenges and Opportunities for Missouri*. The Brookings Institution Center on Urban and Metropolitan Policy 2002.
- Center for Local Public Health Services with the Missouri Department of Health and Senior Services: LPHA Capacity Assessment for 2003.
- Association of Maternal and Child Health Programs: MCH State Profiles for 2004.
- Section for Community Health Systems and Support: Federal Health Insurance Planning Grant Application for 2003 and related services
- Maternal and Child Health Bureau, U.S. Department of Health and Human Services, Health Resources and Services Administration, Title V Information System (TVIS) Web-based system for 2003 National Performance Measures Comparison.
- Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, 2003 State Health Profiles.
- Office of Surveillance, Division of Environmental Health and Communicable Disease Prevention, Missouri Department of Health and Senior Services: 2003 Epidemiologic Profiles of HIV Disease and STDs in Missouri.
- Office of Epidemiology, Department of Health and Senior Services, Jefferson City, Missouri.
- U.S. Census.
- Missouri Department of Economic Development.
- Missouri Department of Elementary and Secondary Education, Youth Risk Behavior Survey.
- National Survey of Children's Health.
- Child and Adolescent Health Measurement Initiative (CAHMI).
- Newborn Screening.

- Lead Poisoning.
- Missouri Primary Care Association Web site.
- *Governors Join Forces: State leaders want Medicaid Freedom.* Columbia Tribune, Columbia, Missouri. February 20, 2005.
- *Making the Grade on Women's Health: A National State by State Report Card.* National Women's Law Center, and Oregon Health and Science University. 2004 Edition.
- *Shortchanging America's Health: A State-by-State Look at How Federal Public Health Dollars are Spent.* Trust for America's Health, February 2005.
- Missouri Women's Health and Preventive Practices Report: Status Report from the 2003 Missouri County-level Study. Office of Surveillance, Evaluation, Planning and Health Information. March 2005.

1.6. Describe the strengths and weaknesses of current methods and procedures used for the comprehensive MCH five-year needs assessment.

The strengths and weaknesses of the methods employed to conduct this assessment can be summarized as follows:

Strengths

1. Mature and comprehensive MCH surveillance systems housed at DHSS that rank near or at the top of MCH information systems across the nation.
2. Blending of quantitative and qualitative methods to identify MCH needs and priorities for allocation of MCH resources in Missouri.
3. Organizational merger of three divisions and one center into the Division of Community Health (DCH) in 2003. Most MCH-related programs housed in DHSS now have an organizational home in the same division (DCH).
4. Creation of the Office of Surveillance, Evaluation, Planning and Health Information (OSEPHI) within the new DCH. Many of the MCH-related surveillance systems supported by DHSS are now integrated within this new office OSEPHI.
5. Solid working relationships with sources of MCH data (agencies that house that data) that are outside of DCH and outside of the DHSS.
6. Growing epidemiological research and analysis capacity as related to MCH populations and systems of care. Since the last MCH five-year needs assessment was conducted, the Office of Epidemiology and DCH have hired four full time epidemiologists that now analyze health status of MCH populations. All of these epidemiologists and the state epidemiologists provide direct support for this MCH five-year needs assessment.

Weaknesses

1. MCH data generated at the program level has lower validity than population-based data that is generated through more reliable collection methods.

2. A more consistent methodology for identifying local community health needs (MICA Priorities) has been developed by CHIME. However, despite the process previously followed by CHART Teams and the development of MICA Priorities, there is still no overall “buy in” to one consistent needs assessment methodology that can be employed among local public health agencies and other local community groups in Missouri.
3. The executive and legislative branches of Missouri government are increasingly applying “cost effective judgments” on whether to invest in MCH-related initiatives. It is difficult to predict whether over the next five years a robust economy will return to Missouri or whether the state economy will continue to be depressed. A stagnant economy in Missouri will mean that, whatever priority MCH needs are identified in this assessment, they will be competing for funds with a growing host of other state priorities resulting from the state budget shortfall occurring since the last five-year needs assessment was completed. Therefore, while this assessment provides a framework for delineating MCH priorities for Missouri and solutions for better meeting MCH needs in this state, increased resource allocations to meet those needs (where required) may or may not necessarily follow.

2. Needs Assessment Partnership Building and Collaboration

Since the last MCH five-year needs assessment was conducted in Missouri, the majority of MCH-related units and programs (supported by Missouri DHSS) have been merged within the new Division of Community Health (DCH). In addition to programs that were in the former Division of Maternal, Child and Family Health (such as Genetic Services, Children with Special Health Care Needs, and Injury Prevention), nutrition programs, chronic disease prevention programs, health promotion, school health, adolescent health, primary care, rural health, and coordinated MCH community services development are now in DCH. Programs outside DCH impacting MCH populations, such as immunizations and HIV/AIDS, provided input for this assessment. DCH continues to collaborate with MCH coalitions in St. Louis and Kansas City and with MCH advocacy groups such as the Children's Trust Fund, Family Voices, and Citizens for Missouri's Children (Kids Count). Staff within DCH now support and participate within several emerging state coalitions and federal initiatives (e.g., State Infant Mortality Collaborative; Perinatal Periods of Risk analysis - collaborative effort between OSEPHI and Office of Epidemiology) that are collaborating to analyze the needs of MCH populations, assess capacity, focus on priority needs, and identify and implement activities to meet those needs:

- **The Missouri Injury Prevention Advisory Committee** with representatives from state agencies, regional safety and injury agencies, other injury prevention stakeholders from across Missouri, and DCH staff produced "Injuries in Missouri: A Call to Action" that provided a snapshot of injuries from a statewide and county perspective. Each county profile in this injury surveillance baseline consisted of intentional and unintentional indicators that were collectively ranked against the same indicators for all other counties in Missouri. This provided a state composite index of injuries that depicts the geographical severity of injuries in Missouri.
- **The Missouri Early Childhood Comprehensive Systems Initiative (ECCS)** includes a coalition of early childhood development advocates in Missouri who are, with DCH staff support, working to complete the following ECCS state plan components:
 - ECCS needs assessment
 - ECCS resources inventory
 - ECCS "success indicators" with baselines and targets to measure state performance
 - ECCS gap analysis
 - Priority interventions to be pursued to reduce gaps and move indicators
- **State Planning Grant** was awarded to Missouri in 2003 to study the issue of the uninsured and to develop a state plan with models and options for increasing access to affordable health insurance coverage for Missouri residents. DCH provides staff support to an Advisory Council on the Accessibility and Affordability of Health Insurance Coverage that was established through this

grant. This council will make policy recommendations on programs, models, and options based on data collected and evidenced-based practice.

- **Missouri Coalition for Oral Health** was formed under the leadership of the Missouri Primary Care Association and has since transitioned to the Missouri Head Start Collaboration Office. The Coalition conducted a statewide needs assessment (that is referenced in this broader assessment) and is developing a comprehensive oral health plan for Missouri based on the Surgeon General's report on oral health and the Healthy People 2010 Oral Health objectives.
- **Center for Local Public Health Services** facilitates development of professional standards and continuous learning opportunities for the local public health workforce and provides leadership and technical assistance to develop processes, such as strategic planning, continuous quality improvement, and defining and implementing core public health functions. The Title V agency works with the center as funds are directed to local public health agencies for implementation of core public health functions and essential services as well as to contract with local public health agencies to support MCH contracts.
- **Community Health Technical Assistance Resources and Training Program (CHART)**, developed in 1994, provided a framework for community health improvement that provided technical assistance and workshops for department contractors, work groups, local public health agencies, and communities striving to build skills in areas such as assessing health status of communities; determining local priorities and needs; identifying local resources and intervention models; and developing community-based plans sustaining initiatives leading to improved health outcomes.
- **DHSS's Partnership with Medicaid Agency** continues. Missouri's DSS is officially designated as the single state agency charged with administration of the Missouri Medicaid program including the MC+ for Kids, Missouri's SCHIP (1115 Demonstration Waiver). While Family Support Division (FSD) within DSS determines recipient eligibility for the Medicaid programs, the Division of Medical Services (DMS) directs, through a fiscal agent, the payment of claims for medical services performed by fee-for-service providers and encounter data submitted by MC+ managed care health plans. Hence, DHSS works closely with DSS to coordinate efforts to identify and enroll children in Missouri's SCHIP and Medicaid. DHSS's CSHCN Service Coordination has shifted a significant portion of direct CSHCN services it once provided to the SCHIP program. Many of the CSHCN enabling services such as care coordination have been decentralized through contracts to local public health agencies (LPHAs). MCH Coordinated Systems contracts with LPHAs establish and maintain an integrated multi-tiered service coordination system to address targeted risk factors such as percent of children without health insurance. DHSS and DMS collaborate in the exchange of program data to monitor quality indicators and for health data analysis.

DCH also continues to work with MCH coalitions across the state and to support other state planning coalitions and workgroups focused on chronic conditions such as asthma and diabetes.

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3. Assessment of Needs of the Maternal and Child Health Population Groups

3.1. MCH Demographic Overview

Selected demographic information comparing Missouri to the nation as a whole is available from the Bureau of the Census:

TABLE 1

| Selected Demographic Information Missouri and United States | | |
|--|-----------------|----------------------|
| | Missouri | United States |
| Population (2000) | 5,595,211 | 281,421,906 |
| Population Density: Persons/square mile (2000) | 81.2 | 79.6 |
| Median Age (2000) | 36.1 | 35.3 |
| Percentage of Population | | |
| • Age > 65 Years (2000) | 13.5 | 12.4 |
| • Age > 85 Years (2000) | 1.8 | 1.5 |
| Percentage of Population Male/Female (2000) | 48.6/51.4 | 49.1/50.9 |
| Percentage of Population Below Poverty Level (2002) | 9.9 | 12.1 |
| Percentage of School-Aged Children Below Poverty Level (2002) | 15.3 | 16.7 |
| Percentage of Live Births to Females Aged 10-17 (2001) | 3.9 | 3.8 |
| Racial/Ethnic Distribution of Population (2000) | | |
| • Percentage White | 84.9 | 75.1 |
| • Percentage Black or African | 11.2 | 12.3 |
| • Percentage Asian/Native Hawaiian/Pacific Islander | 1.2 | 3.7 |
| • Percentage American Indian/Alaskan Native | .4 | .9 |
| • Percentage Hispanic or Latino Origin | 2.1 | 12.5 |
| Educational Attainment: ≥ 25 Years (2000) (Age ≥ 25 years) | | |
| • High school graduate or more | 81.3 | 80.4 |
| • Completed bachelor's degree or more | 21.6 | 24.4 |
| Number of Counties (2002) | 115 | 3,034 |
| Number of Local Health Departments (2003) | 114 | 3,000 estimate |

Source: Most data are from the U.S. Census Bureau and are available on the Internet at <http://www.census.gov>. Percentage of live births to females aged 10-17 years are from the National Vital Statistics System (NVSS) of CDC's National Center for Health Statistics (NCHS), which derives its data from registrars in all 50 states, New York City, and the District of Columbia and from Data and Statistical Reports at www.dhss.mo.gov. Numbers of counties and local health departments are updated by state health officers and National Association of County and City Health Officials (NACCHO).

Before specific MCH trends and vital statistics are detailed in this assessment, it is useful to provide a backdrop on the social and geographical growth of Missouri. That background has been expertly provided by the Center on Urban and Metropolitan Policy at the Brookings Institution in their preparation of a timely report, copyrighted 2002: *Growth in the Heartland: Challenges and Opportunities for Missouri*. In assembling this report, the Brookings team drew heavily on the Missouri Census Data Center, OSEDA, and metropolitan planning organizations in Kansas City and St. Louis. The executive summary of this report, provides an ideal framework from which to assess the health needs of maternal and child health needs in Missouri:

Situated in the heartland, Missouri reflects the full range of American reality. The state is highly urban yet deeply rural. It contains two bustling metropolises, numerous fast growing suburbs, and dozens of typically American small towns. Elsewhere lie tranquil swaths of open country where farmers still rise before dawn and the view consists mainly of rich cropland, trees and sky. Missouri sums up the best of the nation but also mirrors the country's experiences in more problematic ways. The spread of the national economic downturn to Missouri, most immediately, has depressed tax collections and increased demand for social services, resulting in troublesome state and local fiscal pressures. This has highlighted pocketbook concerns and underscored that the state must make the most of limited resources.

At the same time, Missourians, like many Americans, have many opinions about how their local communities are changing. They are divided--and sometimes ambivalent--in their views of whether their towns and neighborhoods are developing in ways that maintain the quality of life and character they cherish. Growth in the Heartland: Challenges and Opportunities for Missouri brings together for the first time a large body of new information about both the nature and costs of development patterns in the Show-Me-State. In assessing these patterns, the Brookings team concludes that:

1. *Missouri grew in the 1990s, but growth has slowed significantly since the turn of the century. In this, Missouri's experience has followed that of the nation. Significant growth in the last decade--as reflected in population increases, job creation, and income gains--has stalled since 2000:*
 - *Between 1990 and 2000, Missouri added 478,138 new residents, as its population grew 9.3 percent to 5,595,211 people. This modest pace of growth doubled rates posted in the 1970s and 1980s and placed Missouri's growth in the middle rank of states. Employment also grew in the 1990s--by 521,637 new jobs or 17.4 percent. As the nation's economy faltered, however, Missouri shed 55,000 jobs between July 2001 and July 2002, losing about 10 percent of the positions it had gained in the previous decade.*
 - *Growth has been well distributed around the state. In particular, many (though not all) Missouri rural areas gained ground during the 1990s, as rural growth outpaced that of the state as a whole. These areas grew by 10.7 percent in the decade, gaining 174,208 additional people--about four times their anemic 41,000-person growth of the 1980s. In that decade, 51 of Missouri's rural counties lost population; in the 1990s only 17 did. The pace of rural job growth (until the economic recession) also exceeded statewide growth. Exceptions to this trend*

- were the northern agricultural counties and the Bootheel, which continued to struggle.*
- *Missouri's four smaller metropolitan areas emerged as some of the fastest growing regions in the state. As a group, the St. Joseph, Joplin, Columbia and Springfield metropolitan areas grew at twice the state's overall population growth rate by expanding 18.3 percent during the 1990s, and adding a total of 111,637 new residents. During the decade the four smaller metros also added 107,000 jobs as they expanded their combined job base by 28.8 percent--significantly faster than the combined Missouri-side growth of the Kansas City and St. Louis metro areas.*
2. *The state is decentralizing. As it grew in the 1990s, the state's population moved ever outward across the state's landscape:*
- *Growth, meaning population and job gains, dispersed far beyond the major metropolitan areas in the decade. Fully 60 percent of the state's population growth in the 1990s took place outside the Kansas City and St. Louis regions, often in the smaller cities.*
 - *Population and job growth also moved beyond the smaller metro areas and towns into the unincorporated areas of the state. In fact, residency in unincorporated or "open-county," areas grew faster in Missouri on balance than residence within cities and towns. Overall, the population living in unincorporated areas grew by 12.3 percent in the 1990s--a rate 50 percent faster than the 8.1 percent growth of towns and cities.*
 - *Rural Missouri epitomized residents' move out of town, as open-country living increased in all but 17 of the state's 93 rural counties. In these counties, fully 71 percent of all growth in the 1990's took place in areas outside of towns' borders.*
 - *As Missourians have spread out, so has residential, commercial, and other development--even though population has been growing only modestly. All told, the dispersal of population and jobs in Missouri required the conversion of 435,400 acres--680 square miles--of fields, farmland, forests, or otherwise green space to "urban" use between 1982 and 1997. This development represented a 35-percent increase in the expanse of the state's urbanized areas, even though the state's population grew just 9.7 percent during the period.*
 - *The pace of the state's land consumption has been increasing. Specifically, more land was developed in the five years between 1992 and 1997 (219,600 acres) than over the preceding 10 years, when 215,800 acres of Missouri countryside was converted to more urban uses.*
3. *Many Missourians have benefited from the state's economic growth, but the low-density, decentralizing form of development is taking undercuts some of those gains, and affects all types of communities.*

Several negative impacts of spread-out growth appear especially costly at a moment of fiscal distress and faltering economic performance:

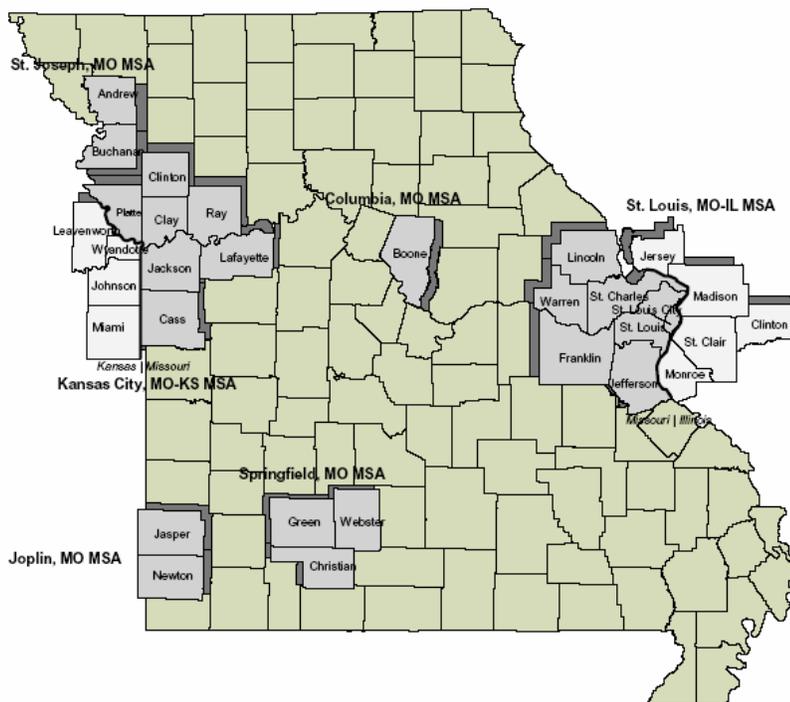
- *Missouri's current pattern of growth imposes significant costs on communities and taxpayers. Specifically, highly dispersed, low-density development patterns increase the capital and operation costs governments incur when they provide roads, sewer and water infrastructure, schools, and police or fire services. Sometimes these added costs even turn growth into a net money-loser for taxpayers.*
- *Missouri's current pattern of growth is eroding the state's rural heritage. The state's widespread scatter of residential developments, retail centers, and fast-food outlets is gradually effacing the farm traditions, rural scenery, and small-town atmosphere that connects the state to its roots.*
- *Missouri's current pattern of growth is threatening the environment and natural areas. For example, low-density development has increased the amount of land consumed by urbanizations and tainted the Ozark lakes, where septic seepage has created a serious water quality problem.*
- *Missouri's current pattern of growth is hurting Missouri's competitiveness by eroding its quality of life. In particular, the state's weak downtown cores, spread-out metro areas, and environmental challenges deprive the state of the urban vitality, convenience, and ecological strengths, increasingly valued by leading companies and workers. Damage to Ozark lakes and landscapes also threatens a \$1.6 billion tourist industry there.*
- *Missouri's current pattern of growth is straining the state's transportation system and burdening Missourians with increasing travel costs. Most notably, the widening area that needs to be served by high-capacity roads has increased the costs of building and maintaining an adequate highway network. Rectifying the state's current maintenance backlog will require up to \$645 million a year over the next ten years--some \$242 million more than current funding provides.*
- *Missouri's current pattern of growth is isolating low income and minority Missourians from opportunity. More and more, as middle-class residents and employment move outward, a wide physical distance separates the state's neediest families and workers from the state's best schools, job paths, and social networks. This further impedes these families ability to move up the ladder of opportunity.*

Growth in the Heartland concluded that while Missouri had enjoyed enviable growth in the nineties, and many new residential communities had sprouted up during that decade, a slowing economy in the new century raises many questions concerning how best to support the needs of communities that are increasingly dispersed

geographically. The following map depicts Missouri's metropolitan areas that are all experiencing the "open country" shift of their core populations shrinking as growing numbers of residents leave the central city and even older suburban areas for newer residential developments away from urban congestion:

FIGURE 1

Missouri's Metropolitan Areas



Source: *Growth in the Heartland, Challenges and Opportunities for Missouri*, The Brookings Institution Center on Urban and Metropolitan Policy, 2002.

3.1.1. Vital Statistics

The most recent vital statistics available for Missouri that are compared to the benchmark year of 1993, can be summarized as follows in Table 2:

TABLE 2

| Vital Statistics for Missouri: 1993, 2002 and Provisional 2003 | | | | | | |
|--|---------|--------|----------------|----------------------------|--------|----------------|
| | Numbers | | | Rates per 1,000 Population | | |
| | 1993 | 2002 | 2003 (Prov) | 1993 | 2002 | 2003 (Prov) |
| Births | 75,146 | 75,167 | 76,960 | 14.3 | 13.2 | 13.5 |
| Deaths | 53,655 | 55,636 | 55,195 | 10.2 | 9.8 | 9.7 |
| Natural increase | 21,491 | 19,531 | 21,765 | 4.1 | 3.4 | 3.8 |
| Marriages | 44,380 | 41,552 | 41,295 | 8.4 | 7.3 | 7.2 |
| Divorces | 26,438 | 22,593 | 22,166 | 5.0 | 4.0 | 3.9 |
| Infant deaths | 630 | 638 | 599 | 8.4* | 8.5* | 7.8* |
| Abortions | 15,415 | 12,250 | 12,476 | 205.1* | 163.0* | 162.1* |
| Population (1000s) | 5,271 | 5,673 | 5,709 | | | |

*Per 1,000 live births

Source: Table 1 of August 2004 *Focus*, a publication of Missouri Department of Health and Senior Services Center for Health Information Management and Evaluation

In the year 2000, Missouri's population was 5,595,211 persons. By the year 2003, that total population grew by an estimated 109,273 persons for a total population of 5,704,484. In 2000, of the total population 2,720,177 or 48.6% were males and 2,875,034 or 51.4% were females. Of the total Missouri population in 2000, it is estimated that 84.9% of persons living in Missouri were white; 11.2% were African-American, and 3.9% were of other racial groups. It is estimated that in 2003 there were 130,928 Hispanics living in Missouri, this is a 9.3% increase over 2000 census numbers. The total percentage of whites living in Missouri increased slightly by 1.2% during this time period and the percentage of African-Americans within the total population has increased by 3.6% from the 2000 census.

In Missouri, the population of women of childbearing age in 2000 was 1,206,615. In 2005 that population is estimated to decrease by slightly more than two percent to 1,181,916. Most of this decrease is in the 35-44 year old age cohort. Between 1998 and 2003, the number of live births among whites increased by 1.9% and the number of births among African-Americans for the same period declined by 3.1%. Between 1998 and 2003, the total number of births in Missouri increased from 75,242 to 76,960. During this period of time, the number of births among mothers eligible for Medicaid increased from 28,847 (38.3% of total births) to 33,436 (43.5% of total births).

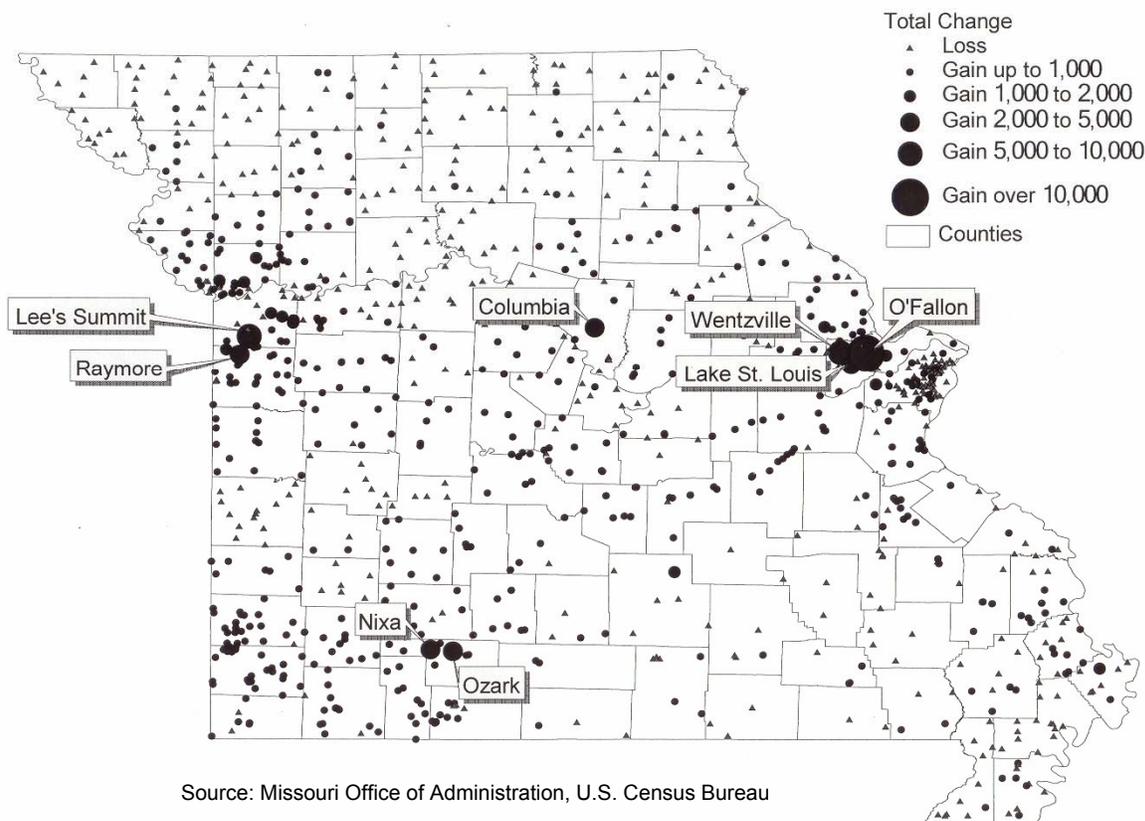
The size of the under age five group shrank from 11% of the state's total population in 1960 to 6.6% in 2000. Population forecasts predict it will shrink to an estimated 6.3% in 2020, to 382,000 children, fully 84,000 less than in 1960. The 5-13 age group also declined dramatically between 1960 and 2000, falling from 17% to 12.8% of the total population. By 2020, this age group will number an estimated 689,000 or 110,000 less than in 1960 due to an aging population and couples having fewer children. The 15-17 age group is somewhat larger than it was in 1960, numbering an estimated 304,000 persons in 2005. This age group is projected to fall to 292,000 persons in 2020.

3.1.2. Geographical Population Shifts

The pattern of geographical population shifts in Missouri remains essentially unchanged since the last MCH five-year needs assessment was conducted. The loss of population in St. Louis City has accelerated and St. Louis County is now also experiencing a loss of population. The New Madrid “boothel” area of Missouri continues to lose population, as does most of Missouri’s northern counties. The fastest growing counties in Missouri are for the most part counties such as St. Charles County in the east and Clay County in the west and Webster County in south-central that ring the older metropolitan areas of St. Louis, Kansas City, and Springfield. In Missouri, the flight from cities and towns to “open-country” settings (those that live outside of incorporated municipalities) continues unabated as municipalities intensify their efforts to annex unincorporated areas to make up lost tax revenues. However, some incorporated municipalities in Missouri have experienced significant population gains between 2000 and 2003:

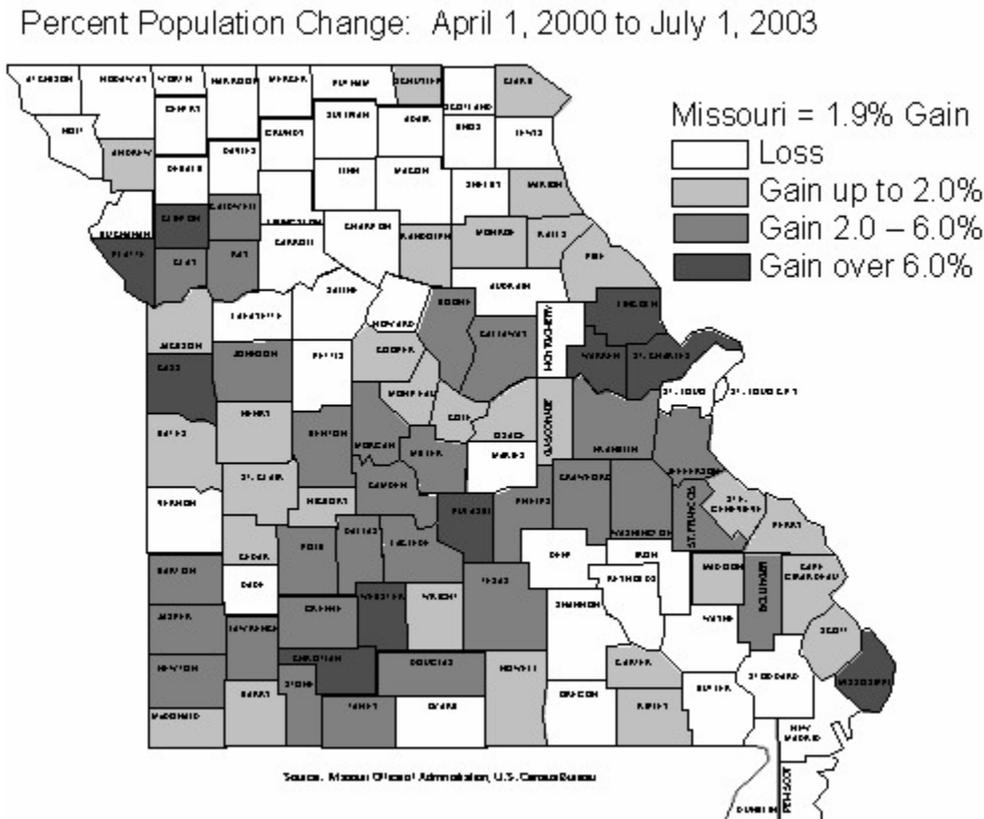
FIGURE 2

Total Population Change in Missouri Incorporated Places: 2000-2003



The following map depicts the overall county-to-county population change that has occurred in Missouri between 2000 and 2003:

FIGURE 3



In 2004, one new metropolitan area was added to Missouri and 12 counties reclassified as metropolitan. The new metro area is called the Jefferson City MSA and includes not only Cole County (Jefferson City) but neighboring Callaway, Osage, and Moniteau counties as well. In addition to the four new metro counties in the Jefferson City MSA, the following Missouri counties were added to existing metro areas:

- Bates and Caldwell counties were added to the Kansas City metro area increasing the number of Missouri counties in the KC metro area to nine.
- DeKalb County was added to Buchanan and Andrew as the three Missouri counties which comprise the St. Joseph MSA.
- Washington County was added to the St. Louis MSA giving the St. Louis metro area a total of eight Missouri counties.
- Dallas and Polk counties were added to the Springfield MSA giving it a new total of five Missouri counties.

- Howard County was added to the Columbia MSA making it a two county area.
- No counties were added to Joplin MSA. That area remains defined as Jasper and Newton counties.
- McDonald County was added to the Arkansas Fayetteville-Springdale MSA.

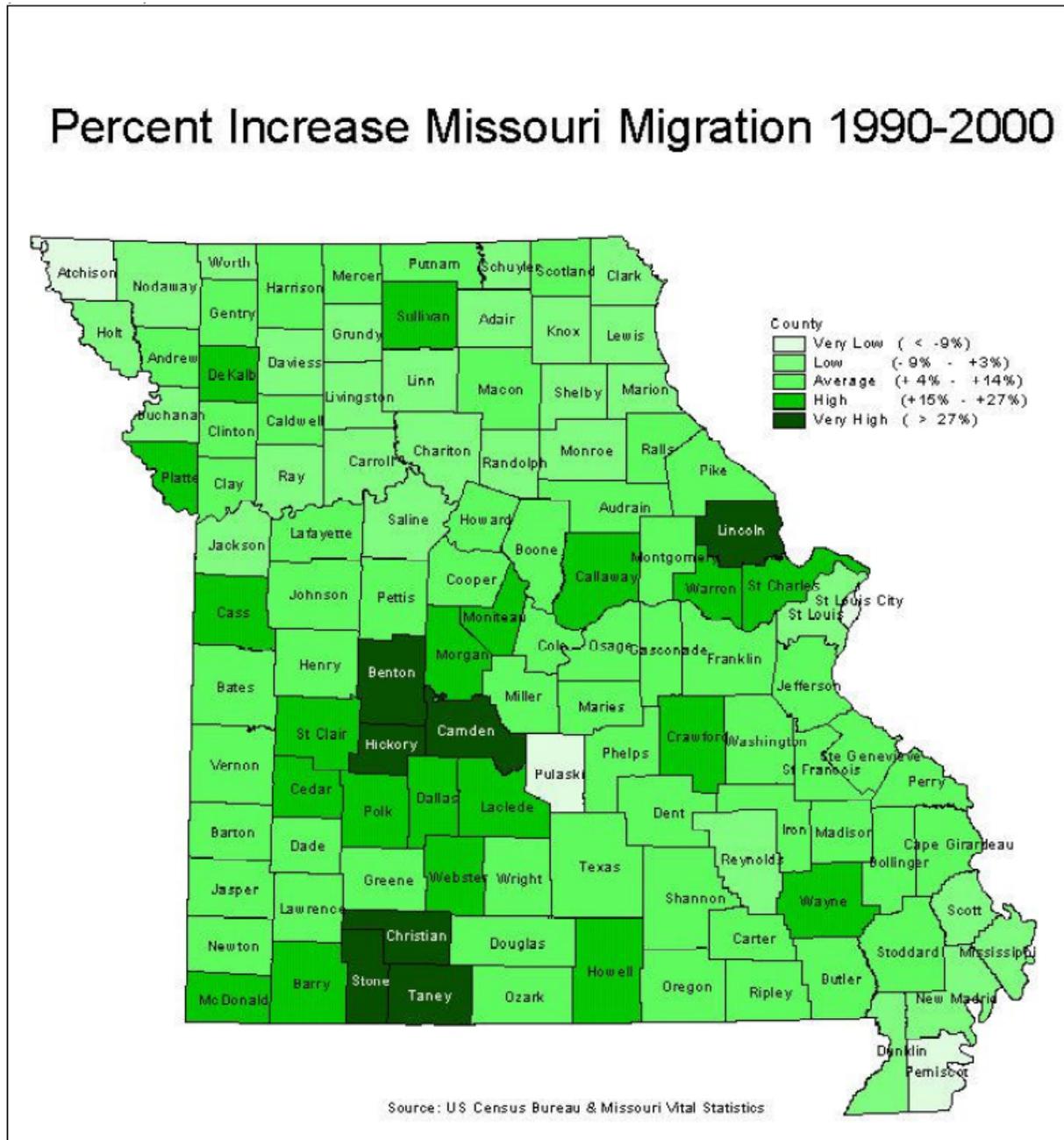
3.1.3. Migration Patterns

An assessment of Missouri's migration patterns by CHIME revealed the following findings:

Missouri's population increased by 478,138 persons (9.3%) during the 1990-2000 decade More than double the growth of the 1980's (200,307). This was the largest increase, both in terms of actual persons and percentage growth, in the past 70 years. However, Missouri was below the national population increase of 13.2% and ranked 30th among all states in terms of percentage increase. Of particular note, was the dramatic change in migration during the 1990-2000 time period. The net migration increase of 258,458 persons was far greater than anything Missouri had experienced in the recent past. Missouri had been at the break-even level of suffered net-migration losses of greater than 100,000 persons every decade going back to the 1930s. The large changes in migration during the decade of the 1990s fueled the doubling of Missouri's population growth rate. As geographical shifts in Missouri's population were analyzed for this assessment, it is clear that the composition of Missouri's population is increasingly more diverse. Minorities drove much of Missouri's population growth in the nineties and early part of the new century. "Between 1990 and 2000, the proportion of Hispanics and other persons of color in this state grew from 13.1 percent to 16.2 percent to reach a total of 908,737 Missourians." Missouri's minority residents now account for fully half of this state's population growth over the last decade. The Hispanic population in Missouri nearly doubled during the last decade, as that minority population grew from 61,702 residents in 1990 to 118,592 in 2000. In summary, Missouri's population (including all MCH population groups) increased by relatively large amounts during the past ten years with the rate of growth slowing during the economic recession beginning in 2000. In absolute terms, Missouri had the highest population increase of the past 50 years. In terms of percentage growth, Missouri migration matched the high water marks of the 1950s and 1960s. The difference between the 1950s era growth was that for the former decade, growth was bolstered by high birth rates; for the latter, it was the result of much higher migration totals. At the county level, Missouri had many fewer counties lose population through migration this decade, compared to the 1980s. However, as the following map depicts, the Kansas City and St. Louis metropolitan areas, the older central segments (Jackson County, St. Louis County and St. Louis City) all suffered losses in terms of net

migration, while many of the suburban counties surrounding them had relatively high in-migration rates:

FIGURE 4



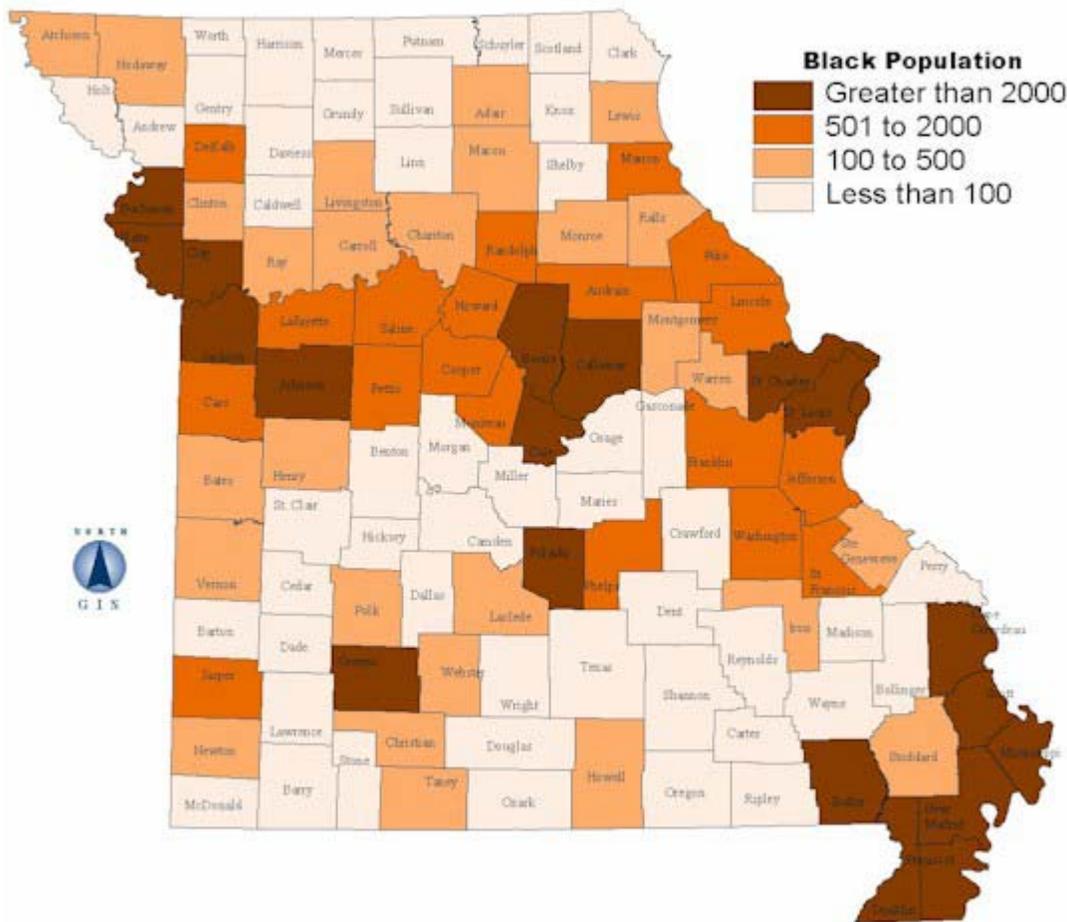
Source: Map 1 of July 2001 *Focus*, a publication of Missouri Department of Health and Senior Services Center for Health Information Management and Evaluation

As Missouri's MCH minority populations are generally at higher risk for health problems, it is instructive to assess concentrations and demographic shifts among those population groups.

3.1.4. Black/African-American Population in Missouri

Geographically, the greatest concentrations of the Black/African-American population of Missouri counties can be depicted as follows:

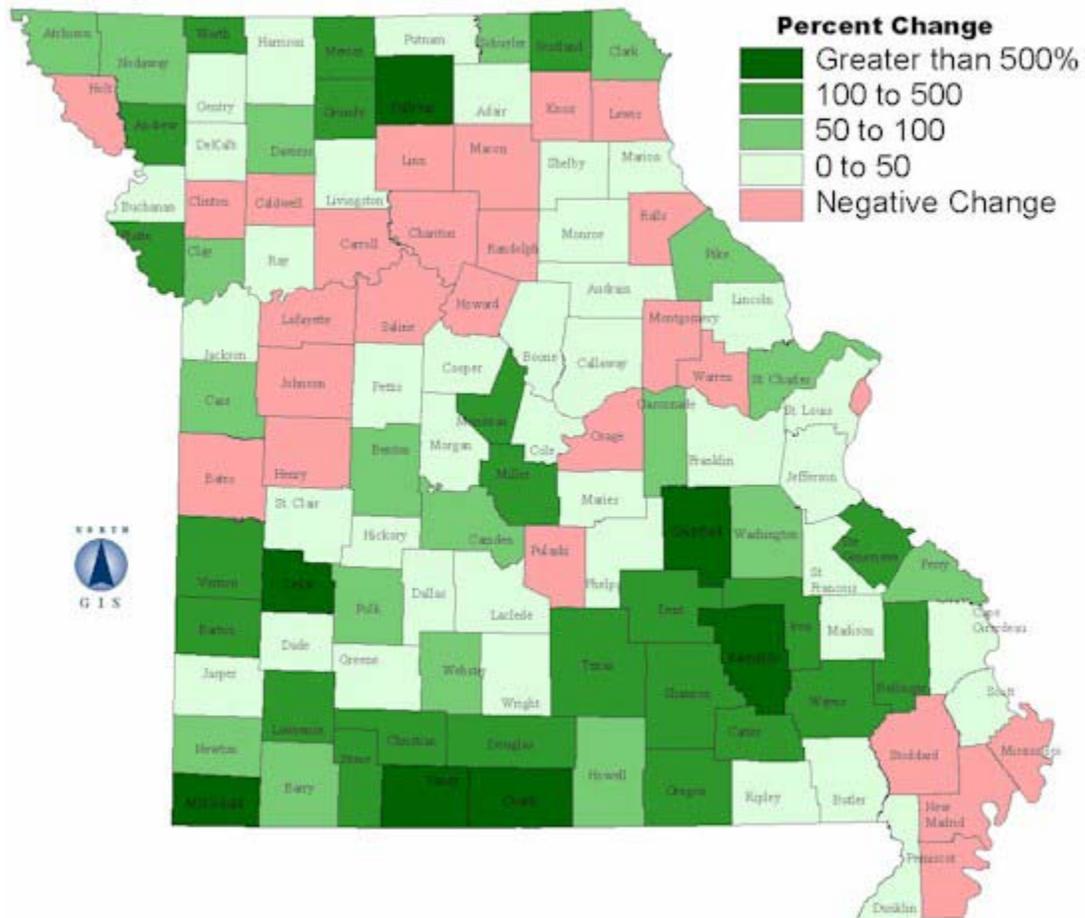
FIGURE 5
Total Black/African-American Population of Missouri Counties (Census 2000)



Source: http://www.dhss.mo.gov/HIV_STD_AIDS/2003EpidemiologicProfile.pdf, Figure 4 of 2003 Epidemiologic Profiles of HIV Disease and STDs in Missouri; <http://www.ded.mo.gov/researchandplanning/indicators/population> - Accessed April 2004

The following map of Missouri counties indicates where positive and negative growth among the black resident population occurred in Missouri between 1990 and 2000:

FIGURE 6
Percent change in Black Resident Population for Missouri Counties from 1990 to 2000 (Census 2000)

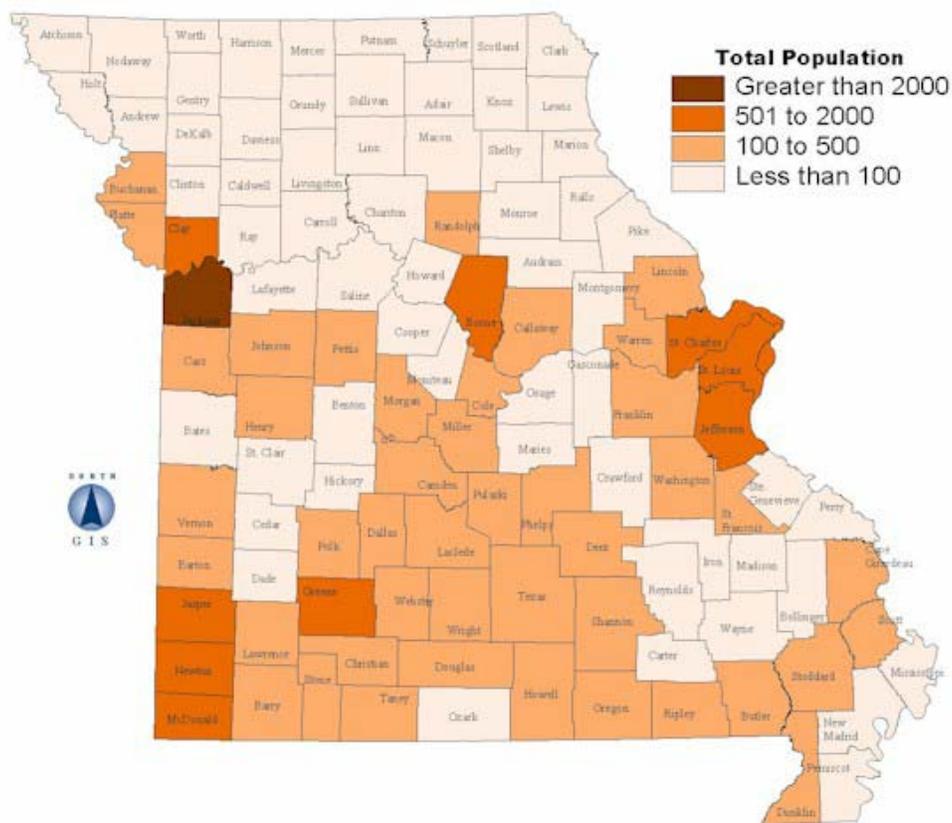


Source: http://www.dhss.mo.gov/HIV_STD_AIDS/2003EpidemiologicProfile.pdf. Figure 5 of 2003 Epidemiologic Profiles of HIV Disease and STDs in Missouri; <http://www.ded.mo.gov/researchandplanning/indicators/population> - Accessed April 2004

3.1.6. American Indian/Alaskan Native Population in Missouri

An important but sometimes overlooked population group in Missouri is that of American Indian(s)/Alaskan Native(s). This group is part of Missouri's growing diversity and is increasingly migrating to the urban areas of the state. Missouri's American Indian/Alaskan Native racial/ethnic category experienced 24% growth from 20,221 in 1990 to 25,076 in 2000. During that same period, Missouri's total population grew by 9.3% from just over 5.1 million in 1990 to slightly under 5.6 million in 2000. As reported by the 2000 Census, Jackson, St. Louis and Greene Counties led Missouri in American Indian/Alaskan Native populations with 3,168, 1,717, and 1,583 persons respectively. Greene County reported the largest increase in population with a growth of 290 persons or a 22.4% increase since 1990. Worth County reported the largest percent increase, 700%, growing from a population of 1 in 1990 to 8 in 2000. Overall, 21 Missouri counties experienced a percent increase since 1990 of 100% or higher. The collective concentrations of this population group can be presented as follows:

FIGURE 8
Total American Indian/Alaskan Native Population of Missouri Counties
(Census 2000)

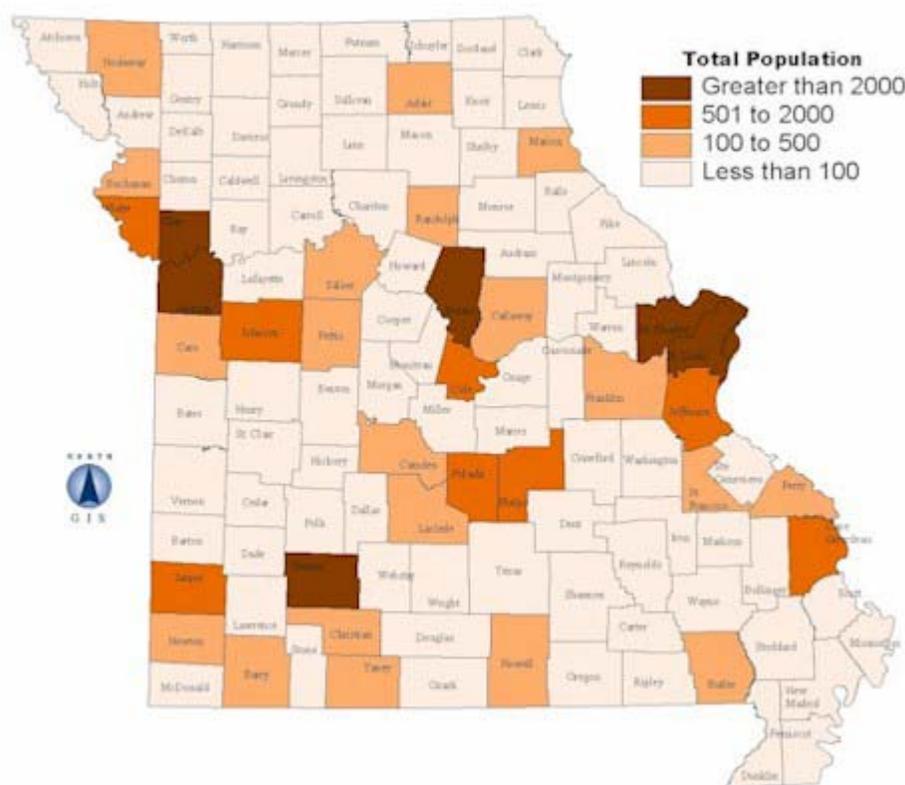


Source: http://www.dhss.mo.gov/HIV_STD_AIDS/2003EpidemiologicProfile.pdf. Figure 7 of 2003 Epidemiologic Profiles of HIV Disease and STDs in Missouri; <http://www.ded.mo.gov/researchandplanning/indicators/population> - Accessed April 2004

3.1.7. Missouri Asian/Pacific Islander Population

Second only in its rate of growth to Hispanics, is the minority population group of Asian/Pacific Islander. This group experienced a 55.1% growth from 41,758 in 1990 to 64,773 in 2000. Missouri's total population grew by 9.3% during the same period. Growth among this population group is more diffuse with several counties such as Pulaski and Polk experiencing a decrease. St. Louis County, Jackson County, and St. Louis City lead Missouri with Asian/Pacific Islander populations of 22,857, 9,580, and 6,985 persons respectively. (2000 Census) Concentrations of those populations are depicted as follows:

FIGURE 9
Total Asian/Pacific Islander Populations of Missouri Counties (Census 2000)



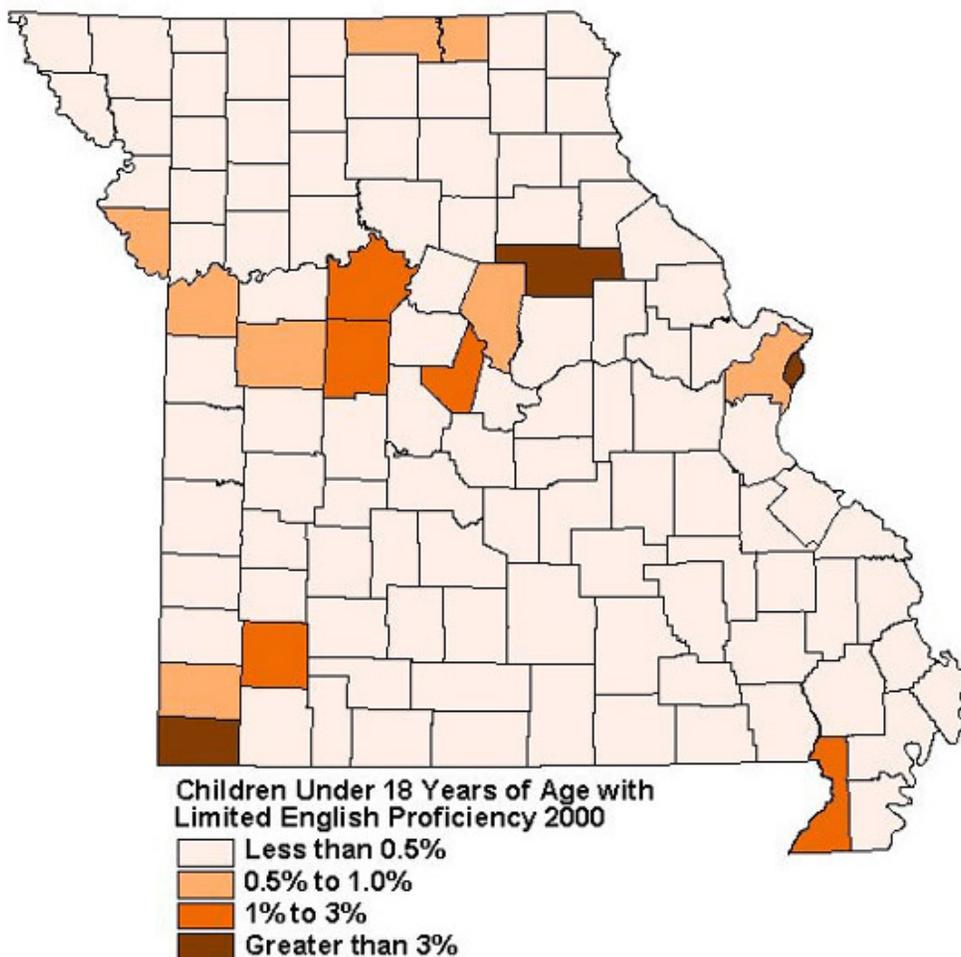
Source: http://www.dhss.mo.gov/HIV_STD_AIDS/2003EpidemiologicProfile.pdf. Figure 8 of 2003 Epidemiologic Profiles of HIV Disease and STDs in Missouri; <http://www.ded.mo.gov/researchandplanning/indicators/population> - Accessed April 2004

3.1.8. Children Under 18 with Limited English Proficiency

The burgeoning cultural and ethnic diversity of Missouri populations presents numerous health care delivery challenges for women, children, and adolescents among minority populations. Not the least of those challenges is the growing percentage of children under 18 in some Missouri counties with limited English proficiency. According to data analyzed by MERIC (compiled from DSS, the Department of Elementary and Secondary

Education [DESE], and Office of Administration) in 2000, the percent of children under 18 in Missouri that have limited English language proficiency was approximately 0.6 percent of the total population under age 18. Geographically, children with limited English language proficiency are situated along the I-70 corridor, around Kansas City and St. Louis, and in extreme southwest Missouri:

FIGURE 10
Percent of the Population of Missouri Counties in 2000
Having Children Under 18 with Limited English Proficiency



Source: http://www.dhss.mo.gov/HIV_STD_AIDS/2003EpidemiologicProfile.pdf. Figure 11 of 2003 Epidemiologic Profiles of HIV Disease and STDs in Missouri; <http://www.ded.mo.gov/researchandplanning/indicators/population> - Accessed April 2004

3.2 Benchmark Analysis

In an effort to develop more of a national “benchmark” perspective from which to conduct this assessment, Missouri used the following criteria to identify comparable benchmark states:

- Overall population size
- White/Black population ratio
- Percent of population in poverty
- Urban/Rural population ratio
- State revenue per capita
- State health expenditure per capita
- State revenue ranking among states
- State expenditure ranking among states

When the other states were ranked against Missouri using these criteria, the following states were identified as benchmark states for comparison of various MCH performance/outcome measures:

1. **Missouri** (most closely compares to)
2. Indiana
3. Kentucky
4. Oklahoma
5. Tennessee

An analysis of CDC maternal and child health related indicators was also conducted that assessed how Missouri compared to these benchmark states.

The information in the following tables was taken from charts in the Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm.

TABLE 3
Access to Health Care 2001

Age-adjusted percentage of persons 18-64 years (includes women of childbearing age) who report having health care coverage (United States rate: 87)

| | <i>Percentage</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average</i> 87 |
|--------------------------|-------------------|---|---------------------|--------------------------------|
| | | Positive Comparison | Negative Comparison | |
| Missouri | 88 | 1 | | |
| Indiana | 90 | 3 | | |
| Kentucky | 85 | | -2 | |
| Oklahoma | 82 | | -5 | |
| Tennessee | 90 | 3 | | |
| <i>Benchmark Average</i> | 87 | | | 87 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 4
Acquired Immunodeficiency Syndrome (AIDS) 2001

Rates per 100,000 population to AIDS cases reported among persons aged ≥ 13 years
 (United States rate: 17.1)

| | <i>Rate</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average</i> 9.62 |
|--------------------------|-------------|---|---------------------|----------------------------------|
| | | Positive Comparison | Negative Comparison | |
| Missouri | 9.4 | -0.22 | | |
| Indiana | 7.3 | -2.32 | | |
| Kentucky | 8.2 | -1.42 | | |
| Oklahoma | 8.3 | -1.32 | | |
| Tennessee | 14.9 | | 5.28 | |
| <i>Benchmark Average</i> | 9.62 | | | 9.62 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 5
Breast Cancer Deaths 2000

Age-adjusted death rates per 100,000 female population (United States rate: 27.1)

| | <i>Rate</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average</i> 27.12 |
|--------------------------|-------------|---|---------------------|-----------------------------------|
| | | Positive Comparison | Negative Comparison | |
| Missouri | 28.4 | | 1.28 | |
| Indiana | 28.2 | | 1.08 | |
| Kentucky | 26.3 | -0.82 | | |
| Oklahoma | 25.6 | -1.52 | | |
| Tennessee | 27.1 | -0.02 | | |
| <i>Benchmark Average</i> | 27.12 | | | 27.12 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 6
Heart Disease-Related Deaths 2000

Age-adjusted death rates per 100,000 population (United States rate: 196)

| | <i>Rate</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average</i> 219.2 |
|--------------------------|-------------|---|---------------------|-----------------------------------|
| | | Positive Comparison | Negative Comparison | |
| Missouri | 214 | -5.2 | | |
| Indiana | 196 | -23.2 | | |
| Kentucky | 206 | -13.2 | | |
| Oklahoma | 238 | | 18.8 | |
| Tennessee | 242 | | 22.8 | |
| <i>Benchmark Average</i> | 219.2 | | | 219.2 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 7
Infant Mortality 2000

Infant death rates per 1,000 live births (United States rate: 6.9)

| | | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average</i> 7.92 |
|--------------------------|------|---|----------------------------|----------------------------------|
| | | <i>Rate</i> | <i>Positive Comparison</i> | |
| Missouri | 7.2 | -0.72 | | |
| Indiana | 7.8 | -0.12 | | |
| Kentucky | 7.1 | -0.82 | | |
| Oklahoma | 8.4 | | 0.48 | |
| Tennessee | 9.1 | | 1.18 | |
| | | | | |
| <i>Benchmark Average</i> | 7.92 | | | 7.92 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 8
Low Birthweight 2001

Percentage of live births with birthweight <2,500 g (United States rate: 7.7)

| | | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average</i> 8.1 |
|--------------------------|-----|---|----------------------------|---------------------------------|
| | | <i>Percentage</i> | <i>Positive Comparison</i> | |
| Missouri | 7.6 | -0.5 | | |
| Indiana | 7.6 | -0.5 | | |
| Kentucky | 8.3 | | 0.2 | |
| Oklahoma | 7.8 | -0.3 | | |
| Tennessee | 9.2 | | 1.1 | |
| | | | | |
| <i>Benchmark Average</i> | 8.1 | | | 8.1 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 9
Obesity Among Adults 2001

Percentage of persons aged ≥ 20 years with a body mass index of ≥ 30.0 kg/m²
 (United States rate: 22.0)

| | | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average</i> 24.22 |
|--------------------------|-------|---|----------------------------|-----------------------------------|
| | | <i>Percentage</i> | <i>Positive Comparison</i> | |
| Missouri | 23.9 | -0.32 | | |
| Indiana | 25.1 | | 0.88 | |
| Kentucky | 24.9 | | 0.68 | |
| Oklahoma | 23.2 | -1.02 | | |
| Tennessee | 24 | -0.22 | | |
| | | | | |
| <i>Benchmark Average</i> | 24.22 | | | 24.22 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 10
Regular Physical Activity Among Adolescents 2001

Percentage of students in grades 9-12 who reported participating in vigorous physical activity
 (United States rate: 64.6)

| | <i>Percentage</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average 61.8 for 4 States</i> |
|--------------------------|---------------------------|---|----------------------------|--|
| | | <i>Positive Comparison</i> | <i>Negative Comparison</i> | |
| Missouri | 64.7 | 2.9 | | |
| Indiana | 61.5 | | -0.3 | |
| Kentucky | 59.8 | | -2 | |
| Oklahoma | <i>Data Not Available</i> | -- | -- | |
| Tennessee | 61.2 | | -0.6 | |
| <i>Benchmark Average</i> | 61.8 | | | 61.8 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 11
Regular Physical Activity Among Adults 2001

Age-adjusted percentage of adults aged \geq 18 years who report light or moderate physical activity
 (United States rate: 31.5)

| | <i>Percentage</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average 25.98</i> |
|--------------------------|-------------------|---|----------------------------|------------------------------------|
| | | <i>Positive Comparison</i> | <i>Negative Comparison</i> | |
| Missouri | 27.9 | 1.92 | | |
| Indiana | 32.9 | 6.92 | | |
| Kentucky | 15.9 | | -10.08 | |
| Oklahoma | 25.8 | | -0.18 | |
| Tennessee | 27.4 | 1.42 | | |
| <i>Benchmark Average</i> | 25.98 | | | 25.98 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 12
Prenatal Care 2001

Percentage of live births to females receiving prenatal care during the first trimester of pregnancy
 (United States rate: 83)

| | <i>Percentage</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average</i> 83.2 |
|--------------------------|-------------------|---|---------------------|----------------------------------|
| | | Positive Comparison | Negative Comparison | |
| Missouri | 88 | 4.8 | | |
| Indiana | 81 | | -2.2 | |
| Kentucky | 87 | 3.8 | | |
| Oklahoma | 77 | | -6.2 | |
| Tennessee | 83 | | -0.2 | |
| <i>Benchmark Average</i> | 83.2 | | | 83.2 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 13
Responsible Sexual Behavior 2001

Percentage of students in grades 9-12 who were sexually responsible
 (United States rate: 86.2)

| | <i>Rate / Percentage</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average for 3 States</i> 84.87 |
|--------------------------|---------------------------|---|---------------------|--|
| | | Positive Comparison | Negative Comparison | |
| Missouri | 85.30 | 0.43 | | |
| Indiana | <i>Data Not Available</i> | -- | -- | |
| Kentucky | 84.60 | | -0.27 | |
| Oklahoma | <i>Data Not Available</i> | -- | -- | |
| Tennessee | 84.70 | | -0.17 | |
| <i>Benchmark Average</i> | 84.87 | | | 84.87 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 14
Smoking Among Adolescents 2001

Percentage of students in grades 9-12 who smoked one or more cigarettes in the past 30 days
 (United States rate: 28.5)

| | <i>Percentage</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average for 4 States 30.23</i> |
|--------------------------|---------------------------|---|----------------------------|---|
| | | <i>Positive Comparison</i> | <i>Negative Comparison</i> | |
| Missouri | 30.30 | | 0.07 | |
| Indiana | 28.50 | -1.73 | | |
| Kentucky | 33.00 | | 2.78 | |
| Oklahoma | <i>Data Not Available</i> | -- | -- | |
| Tennessee | 29.10 | -1.13 | | |
| <i>Benchmark Average</i> | 30.23 | | | 30.23 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 15
Smoking Among Adults 2001

Percentage of adults aged ≥ 18 years who have smoked ≥ 100 cigarettes during their lifetime and who now report smoking cigarettes regularly (United States rate: 23.1)

| | <i>Percentage</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average 27.8</i> |
|--------------------------|-------------------|---|----------------------------|-------------------------------|
| | | <i>Positive Comparison</i> | <i>Negative Comparison</i> | |
| Missouri | 26.4 | -1.4 | | |
| Indiana | 27.8 | -- | -- | |
| Kentucky | 31.1 | | 3.3 | |
| Oklahoma | 29.1 | | 1.3 | |
| Tennessee | 24.6 | -3.2 | | |
| <i>Benchmark Average</i> | 27.8 | | | 27.8 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

TABLE 16
Vaccination Coverage Among Children 2001

Percentage of children aged 19-35 months who received the recommended vaccines
 (United States rate: 73.7)

| | <i>Percentage</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average</i> 74.44 |
|--------------------------|-------------------|---|----------------------------|-----------------------------------|
| | | <i>Positive Comparison</i> | <i>Negative Comparison</i> | |
| Missouri | 75.5 | 1.06 | | |
| Indiana | 71.1 | | -3.34 | |
| Kentucky | 75.9 | 1.46 | | |
| Oklahoma | 70 | | -4.44 | |
| Tennessee | 79.7 | 5.26 | | |
| <i>Benchmark Average</i> | 74.44 | | | 74.44 |

Centers for Disease Control and Prevention 2003 State Health Profiles, www.cdc.gov/epo/shp/index.htm

A closer analysis of these CDC indicators would appear to indicate that Missouri is average or above average when compared to benchmark states for more traditional MCH-related indicators such as prenatal care, responsible sexual behavior for ninth through twelfth grade students, low birthweight, regular physical activity among adolescents and adults, access to health care, infant mortality, obesity among adults, heart disease-related deaths, vaccination coverage among children, and smoking among adults. Missouri is about average in smoking among adolescents. Only Tennessee's number of Acquired Immune Deficiency Syndrome (AIDS) cases reported is worse than Missouri's number of cases reported. Missouri's number of breast cancer deaths is the worst when compared to benchmark states.

In comparison to the U.S. average percentages or rates, Missouri is as good as or better than the U.S. rate in the following: access to health care, Acquired Immune Deficiency Syndrome (AIDS) cases reported, low birthweight, regular physical activity among adolescents, prenatal care, and vaccination coverage among children. However, Missouri is worse than the U.S. rate for breast cancer deaths, heart disease-related deaths, infant mortality, obesity among adults, regular physical activity among adults, responsible sexual behavior, smoking among adolescents, and smoking among adults.

Any comparative assessment of Missouri with "benchmark" states should conclude with a comparison of federal and state funding available to Missouri and those benchmark states that is specifically targeted to improve the health status of maternal and child health populations:

TABLE 17

Budget Year: 2004 (October 1, 2003 – September 30, 2004)

| | <i>MCH Block Grant Funds</i> | <i>State MCH Funds</i> | <i>Total MCH Funding</i> |
|-----------------|------------------------------|------------------------|--------------------------|
| Missouri | \$13,318,533 | \$10,778,900 | \$24,097,433 |
| Tennessee | \$12,693,368 | \$13,322,400 | \$26,015,768 |
| Indiana | \$12,746,245 | \$27,324,290 | \$40,070,535 |
| Kentucky | \$12,411,575 | \$39,394,297 | \$51,805,876 |
| Oklahoma | \$8,041,242 | \$6,242,073 | \$14,283,315 |

A recent monograph produced by the Trust for America's Health, *Shortchanging America's Health: A State-by-State Look at How Federal Public Health Dollars are Spent*, analyzed the CDC per capita spending for public health programs in Missouri and other states. While many of those CDC programs (particularly chronic disease related programs) serve population groups other than infants, children, and mothers, those programs still impact the overall health of families and communities. In this analysis, Missouri fared better in comparison to the benchmark states of Kentucky, Kansas and Indiana with only Oklahoma receiving more CDC per capita funding than Missouri:

TABLE 18

| SUMMARY OF CDC DOLLARS – FY 2004 | | | |
|---|---|-----------------------------------|-----------------------------------|
| State | Total Dollars FY 2004 (All Categories) | CDC Per Capita Total (Dollars) | CDC Per Capita Ranking FY 2004 |
| Alaska | \$28,672,981 | \$45.74 | 1 |
| Vermont | \$19,718,842 | \$32.39 | 2 |
| Wyoming | \$14,134,785 | \$28.63 | 3 |
| North Dakota | \$17,015,155 | \$26.50 | 4 |
| Rhode Island | \$27,585,867 | \$26.31 | 5 |
| Hawaii | \$29,953,642 | \$24.72 | 6 |
| South Dakota | \$18,565,521 | \$24.60 | 7 |
| Maryland | \$125,226,620 | \$23.64 | 8 |
| New Mexico | \$42,283,490 | \$23.24 | 9 |
| Montana | \$20,923,761 | \$23.19 | 10 |
| Maine | \$28,973,672 | \$22.73 | 11 |
| New York | \$429,322,980 | \$22.62 | 12 |
| Delaware | \$17,279,894 | \$22.05 | 13 |
| New Hampshire | \$25,188,058 | \$20.38 | 14 |
| Massachusetts | \$127,571,981 | \$20.09 | 15 |
| Colorado | \$83,002,153 | \$19.30 | 16 |
| West Virginia | \$34,492,074 | \$19.07 | 17 |
| Nevada | \$35,563,729 | \$17.80 | 18 |
| Utah | \$39,235,972 | \$17.57 | 19 |
| Idaho | \$22,647,262 | \$17.50 | 20 |
| South Carolina | \$69,730,765 | \$17.38 | 21 |
| Washington | \$100,074,736 | \$16.98 | 22 |
| Georgia | \$138,587,142 | \$16.93 | 23 |
| Nebraska | \$28,715,872 | \$16.78 | 24 |
| Mississippi | \$46,801,607 | \$16.45 | 25 |
| Oregon | \$55,703,990 | \$16.28 | 26 |
| Iowa | \$47,009,832 | \$16.06 | 27 |
| Oklahoma | \$54,811,026 | \$15.88 | 28 |
| Alabama | \$70,611,561 | \$15.88 | 29 |
| Louisiana | \$70,488,486 | \$15.77 | 30 |
| North Carolina | \$124,895,139 | \$15.52 | 31 |
| Arizona | \$77,801,592 | \$15.16 | 32 |
| Connecticut | \$51,514,168 | \$15.13 | 33 |
| Arkansas | \$40,343,130 | \$15.09 | 34 |
| NATIONAL AVERAGE \$14.93 | | | |
| California | \$476,066,355 | \$14.06 | 35 |
| Minnesota | \$69,090,886 | \$14.04 | 36 |
| Missouri | \$73,073,352 | \$13.06 | 37 |
| Kentucky | \$52,388,721 | \$12.96 | 38 |
| Michigan | \$126,865,230 | \$12.77 | 39 |
| Texas | \$264,250,847 | \$12.67 | 40 |
| New Jersey | \$105,605,030 | \$12.55 | 41 |
| Illinois | \$152,851,012 | \$12.31 | 42 |
| Wisconsin | \$63,540,816 | \$11.85 | 43 |
| Tennessee | \$66,715,512 | \$11.73 | 44 |
| Kansas | \$30,904,064 | \$11.50 | 45 |
| Virginia | \$80,841,139 | \$11.42 | 46 |
| Florida | \$177,679,064 | \$11.12 | 47 |
| Pennsylvania | \$129,260,674 | \$10.53 | 48 |
| Ohio | \$110,031,680 | \$9.69 | 49 |
| Indiana | \$58,459,974 | \$9.61 | 50 |
| US TOTAL | \$4,202,071,841 | \$14.93 | NA |

Source: CDC.

Source: "Shortchanging America's Health, A State-by-State Look at How Federal Public Health Dollars are Spent", Trust for America's Health, February 2005.

However, this table also indicates that other Region VII states in close proximity to Missouri such as Iowa and Nebraska were receiving an overall higher CDC per capita allocation than Missouri. Most importantly, Missouri, Indiana, Kentucky, Tennessee, Oklahoma, Nebraska, Kansas, and Iowa all received significantly lower per capita CDC funding than the majority of other states. Missouri's CDC per capita funding is not commensurate with its population rank. Missouri is the 17th largest state in the nation based on the 2000 Census but is ranked 37th in the per capita CDC funding it receives and is below the national average among states for CDC funding. The Trust for America's Health analysis also presented state-by-state profiles with selected health indicators that CDC funding is aimed at improving. A comparison of this profile for Missouri (\$13.06 CDC per capita funding) with the Alaska profile (\$45.74 CDC per

capita funding) does not reveal any great disparity in the severity of these indicators that would justify this large disparity in CDC funding:

TABLE 19

|  THE STATE OF YOUR HEALTH: MISSOURI | |
|---|-----------------------------------|
| Adult Health Indicators | |
| Percentage of Adults with Asthma (2003) | 11.9% |
| Percentage of Adults with Diabetes (2003) | 6.9% |
| Percentage of Obese Adults (2003) | 23.6% |
| New Cases of Cancer Per 100,000 Persons MEN (2001) | 517.0 |
| New Cases of Cancer Per 100,000 Persons WOMEN (2001) | 395.8 |
| Number of Deaths Due to Diseases of the Heart Per 100,000 Persons (2001) | 271.9 |
| Number of Human West Nile Cases (2004) | 37 |
| Number of Persons Living With AIDS (2003 Yr End) | 4,737 |
| Cumulative Number of AIDS Cases (2003 Yr End) | 9,885 |
| Child Health Indicators | |
| Percent of Children (Under 18) with Asthma (2002) | NA |
| Percent of High School Students with Overweight (2003) | 12.1% |
| Percent of Children 19-35 Months Fully Immunized (2003) | 83.3% |
| Infant Deaths Per 1,000 Live Births (2000-2002) | 7.7 |
| Number of Low Birthweight Live Births (2000-2002) | 7.74% |
| Other Public Health Indicators | |
| Number of Primary Care Health Professions Shortage Areas (As of 9/30/04) | 131 |
| Receipt of CDC Environmental Public Health Tracking Grant (Year) | ✓ (2002) |
| Federal Funding for Missouri's Health | CDC Per Capita Ranking: 37 |
| CDC Funds for State and Local Health Departments and Other Public/Private Agencies FY 2004 (Selected Line Items) | |
| Cancer Prevention | \$4,922,802 |
| Chronic Disease Prevention/Health Promotion | \$6,498,008 |
| Diabetes Control | \$463,500 |
| Environmental Health | \$2,913,327 |
| HIV Prevention | \$5,796,502 |
| Immunization | \$20,433,142 |
| Infectious Diseases | \$2,436,879 |
| Total FY 2004 Dollars (All Categories) | \$73,073,352 |
| CDC Per Capita Total FY 2004 (Dollars) | \$13.06 |
| Bioterrorism Preparedness Spending FY 2004 | |
| CDC Bioterrorism Preparedness FY 2004 | \$15,952,563 |
| HRSA Bioterrorism Preparedness FY 2004 | \$9,530,322 |
| CDC & HRSA Bioterrorism Preparedness Total FY 2004 | \$25,482,885 |
| HRSA Non-Research Specific Public Health Spending (Selected Line Items) | |
| Ryan White CARE Act FY 2003 | \$24,997,958 |
| Maternal and Child Health Block Grant FY 2004 | \$13,318,533 |
| Health Professions Grants FY 2004 | \$7,452,078 |

Source: "Shortchanging America's Health, A State-by-State Look at How Federal Public Health Dollars are Spent", Trust for America's Health, February 2005.

TABLE 20

|  THE STATE OF YOUR HEALTH: ALASKA | |
|---|--------------|
| Adult Health Indicators | |
| Percentage of Adults with Asthma (2003) | 13.3% |
| Percentage of Adults with Diabetes (2003) | 5.0% |
| Percentage of Obese Adults (2003) | 23.5% |
| New Cases of Cancer Per 100,000 Persons MEN (2001) | 529.9 |
| New Cases of Cancer Per 100,000 Persons WOMEN (2001) | 417.8 |
| Number of Deaths Due to Diseases of the Heart Per 100,000 Persons (2001) | 187.7 |
| Number of Human West Nile Cases (2004) | 0 |
| Number of Persons Living With AIDS (2003 Yr End) | 251 |
| Cumulative Number of AIDS Cases (2003 Yr End) | 543 |
| Child Health Indicators | |
| Percent of Children (Under 18) with Asthma (2002) | NA |
| Percent of High School Students with Overweight (2003) | 11.0% |
| Percent of Children 19-35 Months Fully Immunized (2003) | 79.7% |
| Infant Deaths Per 1,000 Live Births (2000-2002) | 6.8 |
| Number of Low Birthweight Live Births (2000-2002) | 5.71% |
| Other Public Health Indicators | |
| Number of Primary Care Health Professions Shortage Areas (As of 9/30/04) | 39 |
| Receipt of CDC Environmental Public Health Tracking Grant (Year) | None |
| Federal Funding for Alaska's Health CDC Per Capita Ranking: 1 | |
| CDC Funds for State and Local Health Departments and Other Public/Private Agencies FY 2004 (Selected Line Items) | |
| Cancer Prevention | \$5,562,767 |
| Chronic Disease Prevention/Health Promotion | \$4,563,391 |
| Diabetes Control | \$463,500 |
| Environmental Health | \$235,424 |
| HIV Prevention | \$1,937,339 |
| Immunization | \$6,938,874 |
| Infectious Diseases | \$550,496 |
| Total FY 2004 Dollars (All Categories) | \$28,672,981 |
| CDC Per Capita Total FY 2004 (Dollars) | \$45.74 |
| Bioterrorism Preparedness Spending FY 2004 | |
| CDC Bioterrorism Preparedness FY 2004 | \$5,205,459 |
| HRSA Bioterrorism Preparedness FY 2004 | \$1,958,803 |
| CDC & HRSA Bioterrorism Preparedness Total FY 2004 | \$7,164,262 |
| HRSA Non-Research Specific Public Health Spending (Selected Line Items) | |
| Ryan White CARE Act FY 2003 | \$4,604,965 |
| Maternal and Child Health Block Grant FY 2004 | \$1,230,580 |
| Health Professions Grants FY 2004 | \$1,085,279 |

Source: "Shortchanging America's Health, A State-by-State Look at How Federal Public Health Dollars are Spent", Trust for America's Health, February 2005.

Similar profiles are presented for the benchmark states of Oklahoma, Kentucky, Tennessee, and Indiana. These profiles would also seem to suggest that like Missouri the magnitude of chronic health conditions in these states is as severe as in states like Alaska, Vermont, New Mexico, and New York that receive much greater per capita CDC funding to prevent these conditions.

TABLE 21

|  THE STATE OF YOUR HEALTH: OKLAHOMA | |
|---|-----------------------------------|
| Adult Health Indicators | |
| Percentage of Adults with Asthma (2003) | 11.8% |
| Percentage of Adults with Diabetes (2003) | 7.2% |
| Percentage of Obese Adults (2003) | 24.4% |
| New Cases of Cancer Per 100,000 Persons MEN (2001) | 530.0 |
| New Cases of Cancer Per 100,000 Persons WOMEN (2001) | 395.0 |
| Number of Deaths Due to Diseases of the Heart Per 100,000 Persons (2001) | 298.1 |
| Number of Human West Nile Cases (2004) | 20 |
| Number of Persons Living With AIDS (2003 Yr End) | 1,947 |
| Cumulative Number of AIDS Cases (2003 Yr End) | 4,298 |
| Child Health Indicators | |
| Percent of Children (Under 18) with Asthma (2002) | NA |
| Percent of High School Students with Overweight (2003) | 11.1% |
| Percent of Children 19-35 Months Fully Immunized (2003) | 70.5% |
| Infant Deaths Per 1,000 Live Births (2000-2002) | 8.0 |
| Number of Low Birthweight Live Births (2000-2002) | 7.75% |
| Other Public Health Indicators | |
| Number of Primary Care Health Professions Shortage Areas (As of 9/30/04) | 80 |
| Receipt of CDC Environmental Public Health Tracking Grant (Year) | ✓ (2003) |
| Federal Funding for Oklahoma's Health | CDC Per Capita Ranking: 28 |
| CDC Funds for State and Local Health Departments and Other Public/Private Agencies FY 2004 (Selected Line Items) | |
| Cancer Prevention | \$4,209,239 |
| Chronic Disease Prevention/Health Promotion | \$4,948,377 |
| Diabetes Control | \$625,206 |
| Environmental Health | \$655,337 |
| HIV Prevention | \$3,143,271 |
| Immunization | \$21,402,023 |
| Infectious Diseases | \$757,220 |
| Total FY 2004 Dollars (All Categories) | \$54,811,026 |
| CDC Per Capita Total FY 2004 (Dollars) | \$15.88 |
| Bioterrorism Preparedness Spending FY 2004 | |
| CDC Bioterrorism Preparedness FY 2004 | \$10,899,049 |
| HRSA Bioterrorism Preparedness FY 2004 | \$6,250,131 |
| CDC & HRSA Bioterrorism Preparedness Total FY 2004 | \$17,149,180 |
| HRSA Non-Research Specific Public Health Spending (Selected Line Items) | |
| Ryan White CARE Act FY 2003 | \$10,645,926 |
| Maternal and Child Health Block Grant FY 2004 | \$8,041,242 |
| Health Professions Grants FY 2004 | \$4,981,114 |

Source: "Shortchanging America's Health, A State-by-State Look at How Federal Public Health Dollars are Spent", Trust for America's Health, February 2005.

TABLE 22

|  THE STATE OF YOUR HEALTH: KENTUCKY | |
|---|--------------|
| Adult Health Indicators | |
| Percentage of Adults with Asthma (2003) | 12.6% |
| Percentage of Adults with Diabetes (2003) | 8.5% |
| Percentage of Obese Adults (2003) | 25.6% |
| New Cases of Cancer Per 100,000 Persons MEN (2001) | 617.6 |
| New Cases of Cancer Per 100,000 Persons WOMEN (2001) | 439.8 |
| Number of Deaths Due to Diseases of the Heart Per 100,000 Persons (2001) | 294.0 |
| Number of Human West Nile Cases (2004) | 7 |
| Number of Persons Living With AIDS (2003 Yr End) | 2,228 |
| Cumulative Number of AIDS Cases (2003 Yr End) | 4,071 |
| Child Health Indicators | |
| Percent of Children (Under 18) with Asthma (2002) | NA |
| Percent of High School Students with Overweight (2003) | 14.6% |
| Percent of Children 19-35 Months Fully Immunized (2003) | 81.0% |
| Infant Deaths Per 1,000 Live Births (2000-2002) | 6.7 |
| Number of Low Birthweight Live Births (2000-2002) | 8.38% |
| Other Public Health Indicators | |
| Number of Primary Care Health Professions Shortage Areas (As of 9/30/04) | 97 |
| Receipt of CDC Environmental Public Health Tracking Grant (Year) | None |
| Federal Funding for Kentucky's Health CDC Per Capita Ranking: 38 | |
| CDC Funds for State and Local Health Departments and Other Public/Private Agencies FY 2004 (Selected Line Items) | |
| Cancer Prevention | \$4,810,568 |
| Chronic Disease Prevention/Health Promotion | \$6,472,025 |
| Diabetes Control | \$659,015 |
| Environmental Health | NA |
| HIV Prevention | \$2,353,501 |
| Immunization | \$14,966,993 |
| Infectious Diseases | \$1,541,557 |
| Total FY 2004 Dollars (All Categories) | \$52,388,721 |
| CDC Per Capita Total FY 2004 (Dollars) | \$12.96 |
| Bioterrorism Preparedness Spending FY 2004 | |
| CDC Bioterrorism Preparedness FY 2004 | \$12,105,282 |
| HRSA Bioterrorism Preparedness FY 2004 | \$7,156,894 |
| CDC & HRSA Bioterrorism Preparedness Total FY 2004 | \$19,262,176 |
| HRSA Non-Research Specific Public Health Spending (Selected Line Items) | |
| Ryan White CARE Act FY 2003 | \$12,092,647 |
| Maternal and Child Health Block Grant FY 2004 | \$12,411,575 |
| Health Professions Grants FY 2004 | \$9,392,116 |

Source: "Shortchanging America's Health, A State-by-State Look at How Federal Public Health Dollars are Spent", Trust for America's Health, February 2005.

TABLE 23

|  THE STATE OF YOUR HEALTH: INDIANA | |
|--|--------------|
| Adult Health Indicators | |
| Percentage of Adults with Asthma (2003) | 12.0% |
| Percentage of Adults with Diabetes (2003) | 7.8% |
| Percentage of Obese Adults (2003) | 26.0% |
| New Cases of Cancer Per 100,000 Persons MEN (2001) | 550.2 |
| New Cases of Cancer Per 100,000 Persons WOMEN (2001) | 413.3 |
| Number of Deaths Due to Diseases of the Heart Per 100,000 Persons (2001) | 258.0 |
| Number of Human West Nile Cases (2004) | 12 |
| Number of Persons Living With AIDS (2003 Yr End) | 3,906 |
| Cumulative Number of AIDS Cases (2003 Yr End) | 7,415 |
| Child Health Indicators | |
| Percent of Children (Under 18) with Asthma (2002) | NA |
| Percent of High School Students with Overweight (2003) | 11.5% |
| Percent of Children 19-35 Months Fully Immunized (2003) | 79.0% |
| Infant Deaths Per 1,000 Live Births (2000-2002) | 7.7 |
| Number of Low Birthweight Live Births (2000-2002) | 7.54% |
| Other Public Health Indicators | |
| Number of Primary Care Health Professions Shortage Areas (As of 9/30/04) | 65 |
| Receipt of CDC Environmental Public Health Tracking Grant (Year) | None |
| Federal Funding for Indiana's Health CDC Per Capita Ranking: 50 | |
| CDC Funds for State and Local Health Departments and Other Public/Private Agencies FY 2004 (Selected Line Items) | |
| Cancer Prevention | \$3,275,718 |
| Chronic Disease Prevention/Health Promotion | \$2,623,860 |
| Diabetes Control | \$952,984 |
| Environmental Health | \$200,000 |
| HIV Prevention | \$3,914,140 |
| Immunization | \$22,134,433 |
| Infectious Diseases | \$756,401 |
| Total FY 2004 Dollars (All Categories) | \$58,459,974 |
| CDC Per Capita Total FY 2004 (Dollars) | \$9.61 |
| Bioterrorism Preparedness Spending FY 2004 | |
| CDC Bioterrorism Preparedness FY 2004 | \$23,718,971 |
| HRSA Bioterrorism Preparedness FY 2004 | \$15,875,995 |
| CDC & HRSA Bioterrorism Preparedness Total FY 2004 | \$39,594,966 |
| HRSA Non-Research Specific Public Health Spending (Selected Line Items) | |
| Ryan White CARE Act FY 2003 | \$13,692,989 |
| Maternal and Child Health Block Grant FY 2004 | \$12,746,245 |
| Health Professions Grants FY 2004 | \$2,569,087 |

Source: "Shortchanging America's Health, A State-by-State Look at How Federal Public Health Dollars are Spent", Trust for America's Health, February 2005.

3.3. Issues and Challenges by MCH Population Group

3.3.1. Infants and Women of Childbearing Age

3.3.1.1. Infants

Missouri's infant death rate increased by 15 percent in 2002 from 7.4 per 1,000 live births in 2001 to 8.5 in 2002. The 8.5 rate is the highest state infant death rate in ten years. During that time period, Missouri's infant mortality increased throughout the state, and in both neonatal (under 28 days of age) and post-neonatal (aged 1-11 months) mortality. The Missouri increase was much larger among white infants than among African-American infants. The white infant death rate increased by 22 percent from 5.8 in 2001 to 7.1 per 1,000 live births in 2002, while the African-American rate increased just 2 percent from 16.8 to 17.2. Despite these trends, the African-American infant death rate was still 2.4 times higher than the white rate in 2002. Possible reasons for the increase in infant mortality include the following:

- Greater efforts were being made to resuscitate very low birth weight (VLBW) infants at borderline viability. These efforts have led to more VLBW births and possibly eventual infant deaths
- More twins and triplets were being born, many as a result of infertility treatments (e.g., in-vitro fertilization, artificial insemination, medications). The number of multiple births increased by about 10 percent in 2002 and by 40 percent since 1992. The infant death rate for singleton births was 6 times the rate for singleton births in 2002.
- More C-Sections and induced labor were being performed at earlier gestational ages, which also have led to more VLBW births.
- More infants with congenital anomalies were born.
- There was a large increase in three potentially preventable post-neonatal causes of death: SIDS, infectious diseases, and unintentional injuries.
- Increased efforts were made during this time period to identify and report all infant deaths. Vital records staff have worked closely with the Child Death Review Project to improve reporting.
- The number of infant deaths in any given year is subject to random fluctuation.

In 2003, the infant death rate decreased from 8.5 to 7.8 per 1,000 live births, following the 15 percent infant death rate increase in 2002. Missouri rate 7.8 in 2003 exceeds the national preliminary rate of 6.9 per 1,000 live births. Missouri provisional infant death rate statistics for 2004 (7.5 per 1,000) would appear to indicate that 2002 was a statistical anomaly that the above factors do not totally explain. However, the Missouri infant death rate of 7.5 per 1,000 live births is the sixth highest infant death rate in Missouri since 1994.

3.3.1.2. Teenage Pregnancy

The teenage pregnancy rate in Missouri has declined steadily from 58 per 1,000 in 1990 to 29.5 per 1,000 in 2001 and further declined to 21.5 per 1,000 in 2003. Given the social and economic costs of unintended pregnancies in Missouri, this is one of the most positive sustaining trends since the last MCH five-year needs assessment was conducted.

3.3.1.3. Newborn Hearing Screening

Between 1998 and 2003 there has been a dramatic increase in the number of newborns who have been screened for hearing deficits before hospital discharge. In 1998, 2.3 percent of newborns in Missouri were screened for hearing deficits while that percentage had risen to 98.7 percent in 2003.

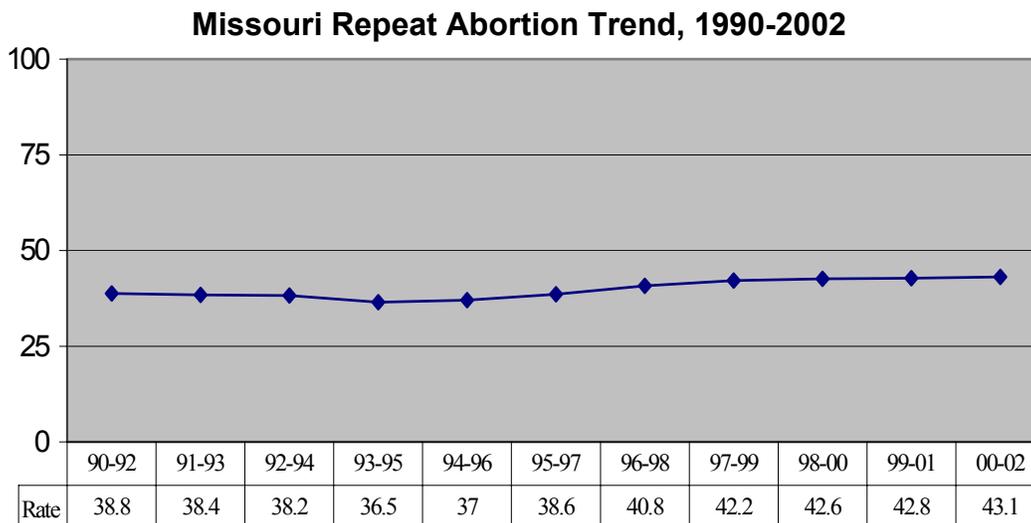
3.3.1.4. Suicide

Another positive trend among MCH performance measures is the reduction in the rate (per 100,000) of suicide deaths among youths aged 15 to 19. In 1998 youth suicide rate decreased from 13.3 in 1998 to 6.8 in 2003.

3.3.1.5. Abortion

A wide variety of women choose to have the procedure; but women experiencing an unintended pregnancy and not using contraceptives are, as a group, at very high risk of seeking an abortion accounting for 46% of all U.S. abortions. High abortion rates also occur among Missouri women aged 20-34, those who are unmarried and have a high school education. In addition, women choosing abortion have one or more children, are African-American or Hispanic, are economically disadvantaged, and/or are receiving Medicaid. Further, as shown in the following figure, of the Missouri women electing abortion almost half have had a previous abortion and this trend is increasing.

TABLE 24



3 Year Averages show a statistically significant increase.

Source: Center for Health Information Management and Evaluation. Community Health Profiles. Missouri Department of Health and Senior Services.

In Missouri, as of December 2004, the following restrictions on abortions were in effect:

- The parent of a minor must consent before an abortion is provided.
- Public funding is available for abortion only in cases of life endangerment, rape, or incest.
- Abortion is covered in private insurance policies only in cases of life endangerment, unless an optional rider is purchased at an additional cost.
- None of the Alternatives to Abortion (A to A) funds may be expended for performing, assisting or encouraging abortions; subsidizing abortion services or administrative expenses; or granted to organizations which provide or promote abortions.

Missouri has also continued to demonstrate progress in reducing the rate of abortions per every 1,000 pregnancies. In 1988, 18,379 pregnancies ended in induced abortions. By 1999, the number of abortions in Missouri declined to 12,600. The rate of abortions declined from 241.5 per 1,000 in 1988, to 167.2 per 1,000 in 1999. In 2003, the number of abortions performed in Missouri was 12,476 and the overall rate of abortions had declined to 162.1. While the rate of reported abortions performed in Missouri has declined from 205.1 per 1,000 live births in 1994 to 162.1 in 2003 the rate of decrease in abortions appears to have reached a plateau as the Missouri executive branch, legislature, and operating units of state government have become more unified in an effort to further reduce abortions performed in this state:

TABLE 25

| Year | Number of Abortions | | | | Rates per 1,000 Population | | | |
|------|---------------------|--------|--------|------|----------------------------|-------|-------|---------------|
| | 1993 | 2002 | 2003 | 2004 | 1993 | 2002 | 2003 | 2004 |
| | 15,415 | 12,250 | 12,476 | | 205.1 | 163.0 | 162.1 | Not Available |

Source: DCH Program Budget Templates: 2004

3.3.1.6. Women Receiving Prenatal Care

Other MCH National and State Performance Measures followed in Missouri, such as percent of infants born to pregnant women receiving prenatal care in the first trimester, percent of birth spacing (less than 18 months), and mothers who smoked during pregnancy, have been static since that last MCH five-year needs assessment was conducted with a few fluctuations. It is not yet clearly understood why there was significant improvement in those measures during the nineties and then, as Missouri entered the new century, a plateau of sorts was reached in terms of making further progress in improving performance against these measures. Using 1993 as a benchmark year, trends in maternal and child health indicators can be summarized as follows:

TABLE 26

| Trends in Maternal and Child Health Statistics: Missouri 1993, 2002 and Provisional 2003 | | | | | | |
|--|---------|--------|-----------------|----------|-------|-----------------|
| | Numbers | | | Percents | | |
| | 1993 | 2002 | 2003 (Prov.) | 1993 | 2002 | 2003 (Prov.) |
| Infant Deaths | 630 | 638 | 599 | 8.4* | 8.5* | 7.8* |
| White | 432 | 437 | 420 | 7.1* | 7.1* | 6.6* |
| Black | 191 | 188 | 164 | 14.7* | 17.2* | 14.9* |
| Low Birth Weight | 5,639 | 6,057 | 6,194 | 7.5 | 8.1 | 8.0 |
| White | 3,804 | 4,339 | 4,524 | 6.3 | 7.0 | 7.1 |
| Black | 1,742 | 1,530 | 1,489 | 13.4 | 13.9 | 13.5 |
| Inadequate Prenatal Care | 11,484 | 7,705 | 7,383 | 15.6 | 10.7 | 10.1 |
| White | 6,894 | 5,233 | 5,145 | 11.5 | 8.7 | 8.4 |
| Black | 4,371 | 2,113 | 1,926 | 34.4 | 21.3 | 19.8 |
| Preterm (<37 weeks) | 8,918 | 9,979 | 10,329 | 11.9 | 13.3 | 13.4 |
| Multiple Births | 1,999 | 2,618 | 2,618 | 2.7 | 3.5 | 3.4 |
| Birth Spacing <18 mos. | 5,677 | 4,568 | 4,632 | 13.2 | 10.7 | 10.8 |
| Out-of-Wedlock Births | 24,320 | 26,489 | 27,363 | 32.4 | 35.3 | 35.6 |
| Teen (10-19) Births | 10,657 | 8,964 | 8,775 | 14.2 | 11.9 | 11.4 |
| Early Teen (10-17) Births | 4,086 | 2,785 | 2,843 | 5.4 | 3.7 | 3.7 |
| Smoking During Pregnancy | 16,556 | 13,607 | 13,895 | 22.0 | 18.1 | 18.1 |
| Medicaid Births | 29,526 | 31,891 | 33,436 | 40.5 | 44.3 | 45.4 |
| WIC Births | 28,124 | 30,124 | 30,897 | 38.6 | 41.9 | 42.0 |
| Food Stamps Births | 17,773 | 14,042 | 15,708 | 24.4 | 19.5 | 21.4 |
| Live Births | 75,146 | 75,167 | 76,960 | | | |

*Infant Death rates are per 1,000 live births.

Source: Table 3 of August 2004 *Focus*, a publication of Missouri Department of Health and Senior Services, Center for Health Information Management and Evaluation

3.3.1.7. Women's Health Services

In 2002, DCH submitted a federal grant to fund planning and evaluation for "Comprehensive Women's Health Services in State MCH Programs". This application, later funded by the U.S. Department of Health and Human Services, included an assessment of women's health needs in Missouri. While this assessment acknowledged that women live an average of seven years longer than men, it also documented that women in Missouri:

- Suffer more chronic illness,
- Use health-care services more frequently,
- Represent a greater proportion of the uninsured,
- Are prescribed drugs more often,
- Are less likely to be included in clinical research trials,
- Are much more likely to be caretakers for parents and dependent children, and
- Spend more of their income on health care.

This assessment also referenced a report by The National Women’s Law Center and Oregon Health and Science University, *Making the Grade on Women’s Health: A National State by State Report Card*, 2004 edition. Several health status indicators in this report clearly set a direction for strengthening MCH delivery systems in Missouri. Compared to U.S. averages, Missouri has some significant gaps in its delivery infrastructure for women (including women of childbearing age):

TABLE 27
Women’s Health Status Indicators

| | Missouri Data | U.S. Data |
|--|---------------|-----------|
| Women’s Access to Health Care Service | | |
| • Women without Health Insurance | 14.5 | 17.7 |
| Addressing Wellness and Prevention | | |
| <i>Screening</i> | | |
| • Pap Smears (%) | 84.2 | 86.6 |
| • Mammograms (%) | 74.3 | 76.1 |
| <i>Prevention</i> | | |
| • Obese (%) | 21.7 | 21.3 |
| • Smoking (%) | 23.8 | 20.8 |
| Key Conditions | | |
| <i>Key Causes of Death for Women (per 100,000)</i> | | |
| • Coronary Heart Disease Death Rate | 169.8 | 154.8 |
| • Lung Cancer Death Rate | 45.5 | 41.0 |
| • Breast Cancer Death Rate | 27.0 | 26.5 |
| <i>Chronic Conditions</i> | | |
| • High Blood Pressure | 26.7 | 26.1 |
| Living in a Healthy Community | | |
| <i>Economic Security and Education</i> | | |
| • High School Completion | 89.1 | 84.8 |

Source: *Making the Grade on Women’s Health: A National State by State Report Card*, 2004 edition. The National Women’s Law Center and Oregon Health and Science University.

3.3.1.7.1 General Health Indicators

OSEPHI recently completed its analysis of the 2003 BRFSS County-level Study. The study was the largest special survey ever undertaken by OSEPHI with a total of 15,000 Missourians interviewed including 9,285 women. When the results from women participating in this study were compared to national data these, conclusions emerged from this study:

The percent of women in Missouri reporting fair or poor health (17.4%) was higher than the median percent of women reporting fair or poor health nationwide (15.5%). Missouri women reporting fair health (11.8%) was only slightly higher than women nationwide (11.6%). The difference between Missouri women and women nationwide reporting poor health was greater than those reporting fair health. Approximately six percent (5.6%) of Missouri women reported poor health; whereas, four percent (4.0%) of women nationwide reported poor health. More Missouri women have health coverage than their

counterparts nationwide. The percent of Missouri women reporting no health coverage was 11.5% in 2003, which was up slightly from 2002 when the rate was reported at 11.3%. This rate was less than the nationwide median rate of 12.6% reported in 2002. The 2002 nationwide rate is the most current figure reported by the National Center for Chronic Disease Prevention and Health Promotion.

3.3.1.7.2 Behavioral Risk Factors

The percent of Missouri women reporting no physical activity, other than their regular job, during the past month (24.9%) was no different than the median percent of women nationwide (24.9%). The prevalence of Missouri women who were overweight was 26.3% in 2003. This rate is down from 2002 nationwide rate of 29.5% for women. However, the percent of women who were obese increased from 21.7% in 2002 to 22.6% in 2003. Both rates are slightly higher than the 2002 nationwide median percent (21.4%). Smoking prevalence is higher among women in Missouri (24.7%) than nationwide (19.6%).

3.3.1.7.3 Disease and Conditions

The rate of women in Missouri reporting that they have been told by a health professional that they have high blood pressure was 27.0%. This rate is higher than the nationwide rate of 24.9%. Similarly, the percent of women in Missouri reporting high cholesterol (35.4%) is higher than the nationwide rate (32.1%).

Missouri women fair better with regard to asthma and diabetes than women nationwide. The lifetime asthma prevalence rate for Missouri women is 12.1% compared to 13.2% for women nationwide. The prevalence rate of diabetes among Missouri women is 6.8%, slightly better than the 7.0% diabetes prevalence rate for women nationwide.

Fewer Missouri women have activity limitations because of physical, mental, or emotional problems than women nationwide. The median percent of women nationwide with activity limitations is 19.1%, whereas only 18.5% of Missouri women reported activity limitations.

3.3.1.8. Cancer Among Women in Missouri

3.3.1.8.1. Cervical Cancer

For 2004, the American Cancer Society (ACS) estimated 240 Missouri women would develop invasive cervical cancer. Based Missouri's 2002 experience with cervical cancer, 89 Missouri women will die from cervical cancer. The incidence rate of cervical cancer in Missouri during 1996-2000 was 10.4 per 100,000. The mortality rate from cervical cancer among Missouri women from 1999-2000 was 2.8 per 100,000 women. The Pap test has been shown effective in detecting cervical cancer and pre-cancer conditions. Medical professionals remind women that no women should die from cervical cancer as long as the women utilize the recommended tests at appropriate

intervals. Based upon the 2001 census data, over 50,000 Missouri women would be eligible for the Show Me Healthy Women (SMHW) program diagnostic breast and cervical services. The Department of Health and Senior Services SMHW program data for the years 2001-2003 indicates that the number of SMHW eligible women 18-34 years of age annually requesting breast and cervical diagnostic services through SMHW was 900 women at a cost of \$277 per woman.

3.3.1.8.2. Breast Cancer

Excluding all cancers of the skin, breast cancer is the most common cancer among women in Missouri and accounts for nearly one-third of all cancers diagnosed among women in Missouri. Between 1996 and 2000, there were an average of 3,951 breast cancer cases diagnosed each year in Missouri. ACS estimates that the number of new breast cancer cases in Missouri during 2004 was 4,680 and that in the same year an estimated 870 women died of breast cancer in Missouri (not all of these deaths due to breast cancer were diagnosed and reported). The risk of breast cancer increases with age, but a significant number of women of childbearing age in Missouri also develop breast cancer. Beginning at age twenty, it is now recommended that women have clinical breast exams at least every three years along with monthly self breast exams.

3.3.1.8.3. Cancer Screening

The percent of Missouri women ages 40 to 49 in 2002 reporting never having a mammogram or a clinical breast exam (18.7%) was slightly less than women nationwide (19.6%). The following year, 2003, 48.4% of Missouri women in the same age group reported not having a mammogram or a clinical breast exam in the last year.

Missouri women ages 50 to 64 reporting never having a mammogram or a clinical breast exam exceeded the nationwide median rate for women in that age group in 2002, 12.2% and 10.8% respectively. Similarly, the 2002 rate for Missouri women ages 65 and older reporting never having a mammogram or a clinical breast exam (20.3%) was greater than the nationwide median rate for women 65 and older (18.0%). Missouri women ages 50-64 reporting not having a mammogram or a clinical breast exam in the last year had a lower rate in 2003 (35.7%) than did Missouri women ages 65 and older during the same year (47.0%).

The nationwide rate for women ages 18 to 34 reporting no pap smear within three years in 2002 (11.6%) was lower than the rate for Missouri women (12.2%). The rate for Missouri women ages 35 to 49 reporting no pap smear within three years (10.0%) was slightly better than the nationwide median rate (9.4%). Compared to the national rate, Missouri's rate was worse among women ages 50 to 64, 13.0% and 16.8% respectively. Missouri women ages 65 and older reporting no pap smear within three years in 2003 (34.7%) was the higher than the nationwide (26.3%).

3.3.1.9. Violence Against Women

Domestic Violence (Violence Against Women) against women affects women across all economic, educational, cultural, racial, and religious lines. Violence against women in Missouri can take many forms, from intimidation and control to stalking, battering, rape, and even murder. There are numerous indications of the prevalence of violence against women in Missouri:

- In 2000, 88 women were murdered, and 50 of those deaths were attributed to domestic violence.
- In 2000, there were 37,898 domestic violence cases reported to law enforcement in Missouri.
- In 2000, 9,396 women in Missouri sought emergency room treatment or inpatient care as a result of being physically assaulted or raped.
- Of women ages 18 and older surveyed in 1999, 30 percent experienced an attempted or completed rape at least once in their life. This is higher than the national estimate of 18 percent from the 1999 National Violence Against Women Survey.
- One out of six (17 percent) adult women age 18 or older who reported having experienced an attempted rape or rape were victimized by a current or ex-spouse or live-in partner. Another 18 percent of women reported a current or ex-boyfriend as the perpetrator.
- In 2001, 10 percent of female high school students in Missouri reported having been forced to have sexual intercourse and over 16 percent of twelfth graders reported forced sexual intercourse.
- In 2001, almost nine percent of female high school students in Missouri reported being hit, slapped, or physically hurt on purpose by their boyfriend during the past twelve months. Twelve percent of twelfth graders reported being hit, slapped, or physically hurt on purpose by their boyfriend during the past twelve months.

Violence against women is a form of terrorism that occurs each day in Missouri. Violence against women poses a daily threat to life and traumatizes thousands of women, girls, and families in this state each year.

3.3.2. Children

Missouri is among Title V states that are participating in the HRSA/MCHB Maternal and Child Health Early Childhood Comprehensive Systems (ECCS) initiative. The assessment, that was prepared in 2003 as part of the grant application to participate in this initiative, can be summarized as follows:

Numerous challenges are faced by 369,898 children 0-5 in Missouri, as related to the six focus areas that impact early experience and brain development and are reflected in long-term development outcomes. The ECCS needs assessment data currently

available identifies needs and issues related to early childhood development within each of the six ECCS focus areas:

Focus Area One: Access to Health Insurance and Medical Homes

Access to health insurance and medical homes is one of the key components to ensuring healthy pregnancies and healthy infants who develop into healthy children ready to learn:

- 15.3% of children under the age of 18 in Missouri live in poverty
- 98,511 children under the age of 18 in Missouri are without health insurance
- 62% of the eligible children ages 0-5 received at least one initial or periodic screen.
- 75.5% of children age 2 are immunized
- 85.7% of mothers received prenatal care in the first trimester.
- 7.6% of births are low birth weight infants.
- In most of rural Missouri, there are virtually no pediatric dentists and there are only a handful of dentists in this state who accept Medicaid assignment.

Focus Area Two: Mental Health and Social-Emotional Development

The environment in which children live impacts their mental health and social-emotional development. The mental health/social development service infrastructure has been significantly impacted in Missouri by state budget cuts. Community mental health centers are cutting back services or even closing in some instances. Many obstetricians, pediatricians, and public health nurses trained in Missouri still do not have adequate training (or support when trained) to deal with maternal depression or to help high risk children move into appropriate child development and mental health delivery systems:

- 3,369 substantiated child abuse and neglect against 0-5 year olds
- 25,491 children with severe emotional disturbances received services from the Department of Mental Health and Medicaid providers.

Focus Area Three: Early Care and Education/Child Care

Early childcare services and education are fragmented and unevenly distributed throughout Missouri. The availability, affordability, and quality of adequate day care services for working couples and their young children vary throughout the state.

- *94% of Missouri school districts provide all day kindergarten for 78% of kindergarteners.*
- *79% of children entering kindergarten were assessed to have average or above school readiness skills.*

Focus Area Four: Parent Education

In order for parents to be prime educators for their children, the parents themselves need to be equipped to nurture their children in early childhood. Availability of evidence-based parenting education and information services, links to other available community resources and evenings and weekends community-based sites to assist parents in being prime educators of their children are needed. Expectant mothers need to be educated of the complications that may result due to uneducated actions and behavior. "A woman who smokes or drinks during pregnancy may visit long-term damage on the children she bears" according to Douglas W. Nelson the president of The Annie E. Casey Foundation:

- *Examples of evidence-based parenting education and information services used in Missouri are Parents As Teachers (PAT), Head Start, and Early Head Start Project.*
- *Four nurse home visiting programs (such as the Olds program) are available in limited areas to educate expectant mothers.*
- *47% of eligible families participate in the PAT program.*
- *21,990 children are enrolled in school-based preschool programs supported by DESE.*
- *18.9 % of mothers have less than a 12th grade education.*

The rising percentage of children who are obese in Missouri can be attributed, in part, to practices and habits that begin in early childhood and that are reinforced through adolescence. Many young children in this state still do not have adequate diets or go hungry despite the efforts of the Special Supplemental Nutrition Program for Women, Infants, and Children, popularly known as WIC, and other nutritionally related programs for young higher risk children:

- *A FFY 2001 system match for the Special Health Care Needs showed 40% of enrollees, age 0-5 years, were enrolled in WIC.*
- *The Harvard Food Frequency Questionnaire (HFFQ) was used by WIC local agencies to collect dietary information in FFY 2001. In 2001, 64.6% of the children 1-5 years of age participating in WIC consumed the minimum number of servings of fruits as defined by the Food Guide Pyramid, while only 36.25% consumed the minimum number of servings of vegetables.*

*Families and caregivers still need to be properly trained in the need for and proper installation of seat restraints for children and infants. In the publication **Injuries in Missouri: A Call to Action** (December 2002), DHSS's Division of Community Health (DCH) used 1999 data to educate Missouri citizens of the need for injury prevention and provide evidence-based prevention interventions for individuals, parents, community leaders, and policy makers:*

- *Motor vehicle crashes are the leading cause of death for Missourians ages 1 through 34 years.*
- *6.0% of 1,180,876 children aged 14 years and younger die due to motor vehicle crashes.*

Focus Area Five: Family Support

The Annie E. Casey Foundation advises that "An infant born into a family that is poor faces a considerably greater risk of not reaching his or her full potential:"

- *While the number and percentage of unintended pregnancies has decreased in Missouri in recent years, children with young single parents are still at greater risk of poverty, adverse health, and not succeeding in school.*
- *24.3% of Missouri's children live in single parent homes.*
- *17.7% of Missouri's children under the age of 6 live in poverty.*

Focus Area Six: Reduction in Minority Health Disparities

Disparities can be correlated with level of income, education, and geographic location, creating unique challenges for delivery of maternal and child health services in Missouri. Pregnancies of African-American women in Missouri are more than twice as likely to end in fetal death than those of any other group. The preterm birth rate for the African-American group is double the rate for most other groups. The overall infant death rate among African-Americans exceeds that of any other group:

- *In Missouri 555 infants die each year of which 185 are African-Americans.*
- *The preterm birth rate for the African-American group (17.3%) is double the rate of most other groups. Preterm babies contribute to a low birth weight rate.*
- *In Missouri, 105 children between one and five years of age die each year of which 26 are African-Americans.*

Underlying these disparities, is the need for greater economic security and safe living environments that will foster healthy pregnancies resulting in healthy babies who are healthy young children “ready to learn” when they enter school and begin the journey to becoming productive citizens. Unfortunately some of Missouri’s large cities are home to a disproportionate share of Missouri’s low income and minority populations.

DCH, through the support of HRSA funding, is leading a coalition for the ECCS in Missouri. The work of this coalition will include the selection of key ECCS indicators that will be monitored as part of the State ECCS Plan, the development of which is being driven by the foregoing focus areas.

AMCHP, in partnership with CDC, is sponsoring the State Infant Mortality (SIM) Collaborative, of which Missouri is a member. In Missouri, the infant mortality rate is persistently higher than the national level, and increased from 7.4 in 2001 to 8.5 in 2002. The overall infant death rate in Missouri has remained stagnant for the past ten years, maintaining a large racial disparity and actually increasing for African-American infants (i.e., 17.2 in 2002), a rate more than twice that of white infants (7.1 in 2002). As part of the collaborative, a diverse group of stakeholders, including individuals from Healthy Start initiatives, MCH Coalitions, SIDS Resources, epidemiologists, and a neonatologist, is working towards identifying ways to reduce the unacceptably high infant mortality rates, especially among the African-American population.

3.3.3. Children with Special Health Care Needs (CSHCN)

Recognizing that at least thirty percent of federal MCH Block Grant funds received by Missouri must support services for CSHCN in this state, the Title V agency has been particularly attuned to the results of the first National Survey of Children with Special Health Care Needs. Currently, there are an estimated 215,818 (15%) children in Missouri that have special health care needs. Missouri participated in this survey that was conducted as a module of SLAITS. From SLAITS Summary Tables from the National Survey of Children with Special Health Care Needs, 2001, the estimates of the number of CSHCN with (without) health insurance coverage can be constructed and compared to benchmark states identified earlier as shown in the following tables:

TABLE 28
Percentage of CSHCN
Who Have Adequate Health Insurance Coverage
 (National Average: 59.6)

| | | <i>Comparison Against Benchmark Average</i> | | |
|--------------------------|-------------------------|---|---------------------|--------------------------------|
| | <i>Benchmark Scores</i> | Positive Comparison | Negative Comparison | <i>Benchmark Average 59.98</i> |
| Missouri | 66.0 | 6.02 | | |
| Indiana | 63.3 | 3.32 | | |
| Kentucky | 56.6 | | -3.38 | |
| Oklahoma | 56.4 | | -3.58 | |
| Tennessee | 57.6 | | -2.38 | |
| | | | | |
| Benchmark Average | 59.98 | | | 59.98 |

Summary Tables from the National Survey of Children with Special Health Care Needs, 2001

TABLE 29
Percentage of Children with Special Health Care Needs (0-18 years)
Whose Families Partner in Decision Making at All Levels
 (National Average: 57.5)

| | | <i>Comparison Against Benchmark Average</i> | | |
|--------------------------|-------------|---|---------------------|--------------------------------|
| | <i>Rate</i> | Positive Comparison | Negative Comparison | <i>Benchmark Average 57.16</i> |
| Missouri | 57.2 | 0.04 | | |
| Indiana | 61.1 | 3.94 | | |
| Kentucky | 60.9 | 3.74 | | |
| Oklahoma | 50.4 | | -6.76 | |
| Tennessee | 56.2 | | -0.96 | |
| | | | | |
| Benchmark Average | 57.16 | | | 57.16 |

Summary Tables from the National Survey of Children with Special Health Care Needs, 2001

TABLE 30

**Percentage of Children with Special Health Care Needs
 Who Receive Ongoing, Comprehensive Care Within a Medical Home**
 (National Average: 52.6)

| | | <i>Comparison Against Benchmark Average</i> | | |
|--------------------------|-------------|---|------------------------|------------------------------------|
| | <i>Rate</i> | Positive Comparison | Negative Comparison | <i>Benchmark Average 55.24</i> |
| Missouri | 55.7 | 0.46 | | |
| Indiana | 55.7 | 0.46 | | |
| Kentucky | 55.6 | 0.36 | | |
| Oklahoma | 53.3 | | -1.94 | |
| Tennessee | 55.9 | 0.66 | | |
| | | | | |
| Benchmark Average | 55.24 | | | 55.24 |

Summary Tables from the National Survey of Children with Special Health Care Needs, 2001

TABLE 31

**Percentage of Children with Special Health Care Needs (0-18)
 Whose Families Report Community Based Systems Are
 Organized so They Can Use Them Easily**
 (National Average: 74.3)

| | | <i>Comparison Against Benchmark Average</i> | | |
|--------------------------|-------------|---|------------------------|------------------------------------|
| | <i>Rate</i> | Positive Comparison | Negative Comparison | <i>Benchmark Average 74.64</i> |
| Missouri | 75.2 | 0.56 | | |
| Indiana | 79.5 | 4.86 | | |
| Kentucky | 74.9 | 0.26 | | |
| Oklahoma | 67.6 | | -7.04 | |
| Tennessee | 76.0 | 1.36 | | |
| | | | | |
| Benchmark Average | 74.64 | | | 74.64 |

Summary Tables from the National Survey of Children with Special Health Care Needs, 2001

TABLE 32

**Percentage of Youth with Special Health Care Needs
 Who Received the Services Necessary to
 Make Transition to All Aspects of Adult Life**

(National Average: 5.8)

| | <i>Rate</i> | <i>Comparison Against Benchmark Average</i> | | <i>Benchmark Average 5.58</i> |
|--------------------------|-------------|---|---------------------|-------------------------------|
| | | Positive Comparison | Negative Comparison | |
| Missouri | 5.5 | | -0.08 | |
| Indiana | 4.5 | | -1.08 | |
| Kentucky | 7.6 | 2.02 | | |
| Oklahoma | 2.1 | | -3.48 | |
| Tennessee | 8.2 | 2.62 | | |
| <i>Benchmark Average</i> | 5.58 | | | 5.58 |

Source: Summary Tables from the National Survey of Children with Special Health Care Needs, 2001

As the above data would suggest, Missouri is ahead of the benchmark states relative to the percentage of CSHCN who have adequate insurance (which may be the most significant CSHCN measure) and about average for other CSHCN measures when compared to benchmark states. The benchmark data derived from this survey will, over the next five years, be used by Missouri's Title V agency to gauge progress in better developing community-based systems of care for serving CSHCN in this state. Missouri's results for two important elements of this survey, (1) *Health Care Needs and Access to Care* and (2) *Service Coordination*, mirrored national results and some of the qualitative research results from Title V focus groups that is reviewed in another section of this assessment. HRSA recognizes that "children with special health care needs require a broad range of services from primary and specialty medical care to prescription medications, medical equipment, and therapies as well as respite care, family counseling, or genetic counseling." The percentage of Missouri CSHCN respondents with a greater need for specific services mirrors national SLAITS findings:

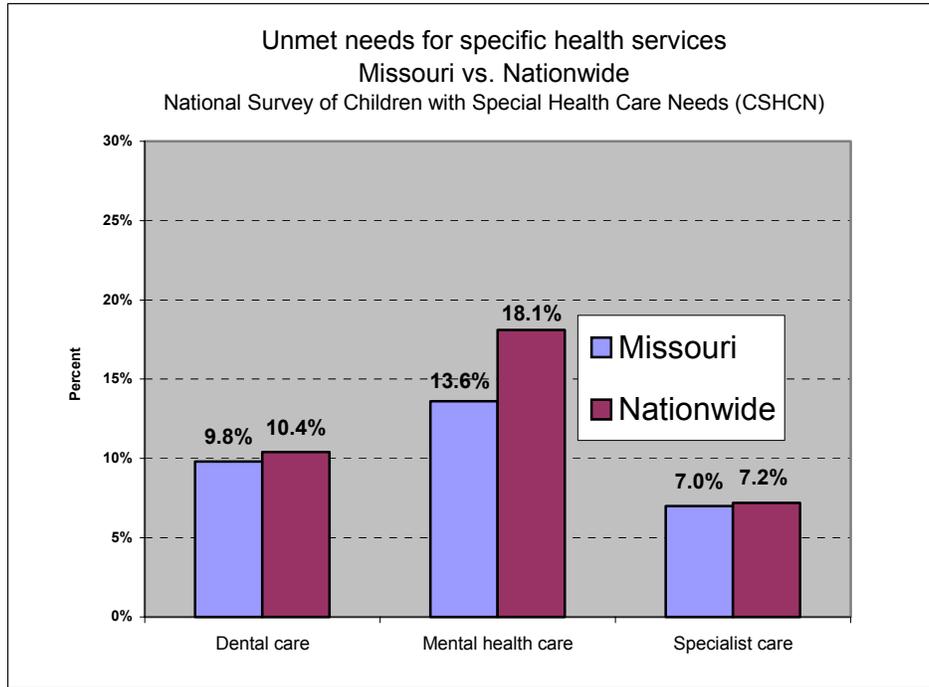
TABLE 33
Percent of CSHCN Needing Specific Health Services

| | Missouri | United States |
|------------------------|-----------------|----------------------|
| Prescription Medicine | 90.6 | 87.9 |
| Dental Care | 78.8 | 78.2 |
| Preventive Care | 72.0 | 74.4 |
| Specialist Care | 52.4 | 51.0 |
| Eyeglasses/Vision Care | 37.1 | 35.6 |
| Mental Health Care | 28.9 | 25.4 |

Source: Summary Tables from the National Survey of Children with Special Health Care Needs, 2001

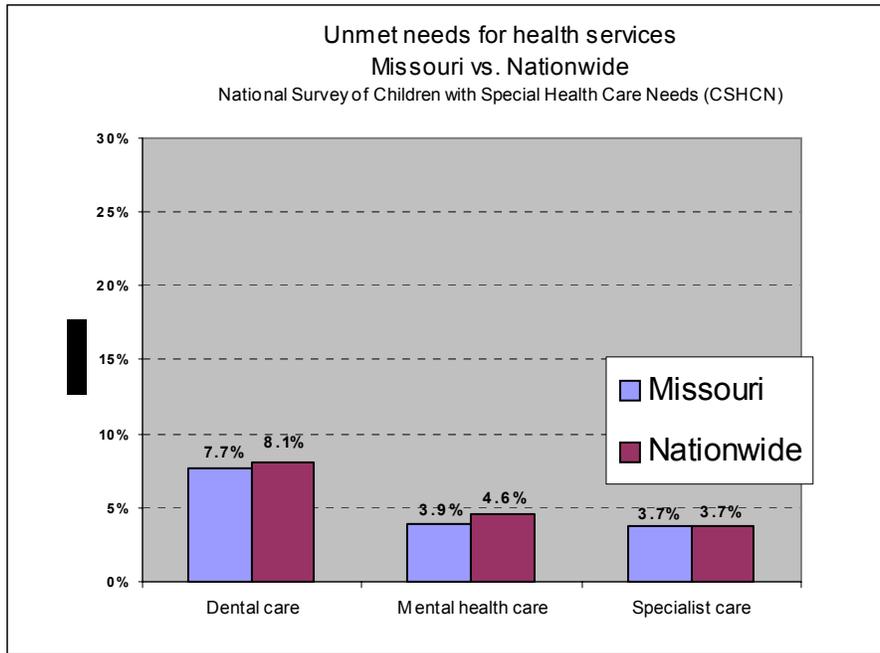
Like CSHCN services most commonly reported in other states as needed but not received, Missouri reported dental care, mental health care, and specialist care as needed but not received:

TABLE 34
Percentage of CSHCN Needing Specific Health Service
Who Did Not Receive All Care That Was Needed



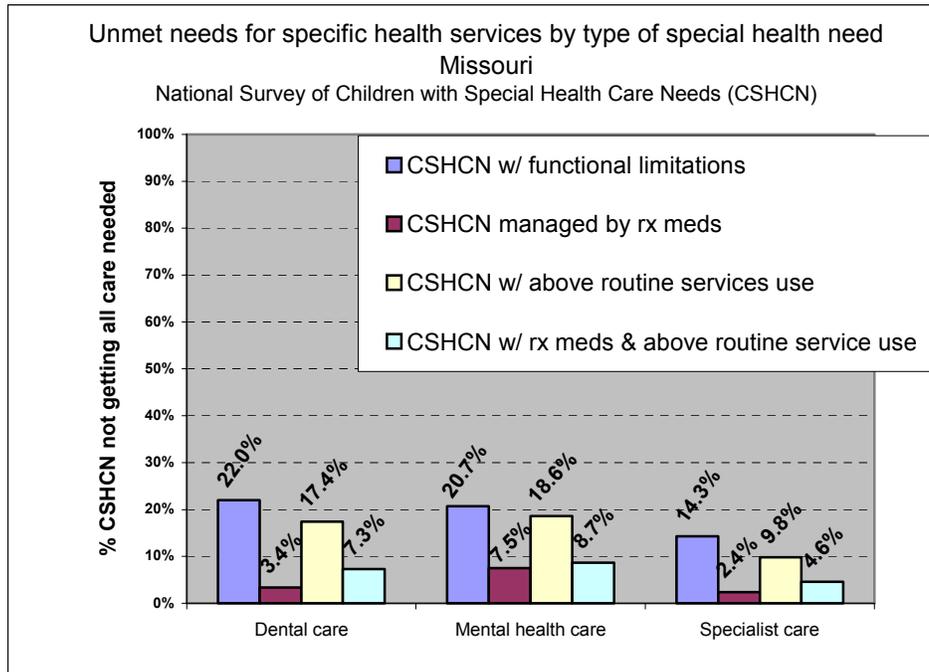
Source: CAHMI – Child and Adolescent Health Measurement Initiative, Data Resource Center on CYSHCN, December 2004

TABLE 35
Percentage CSHCN Not Receiving All Care Needed
 (includes children who did and did not report needing a specific health service)



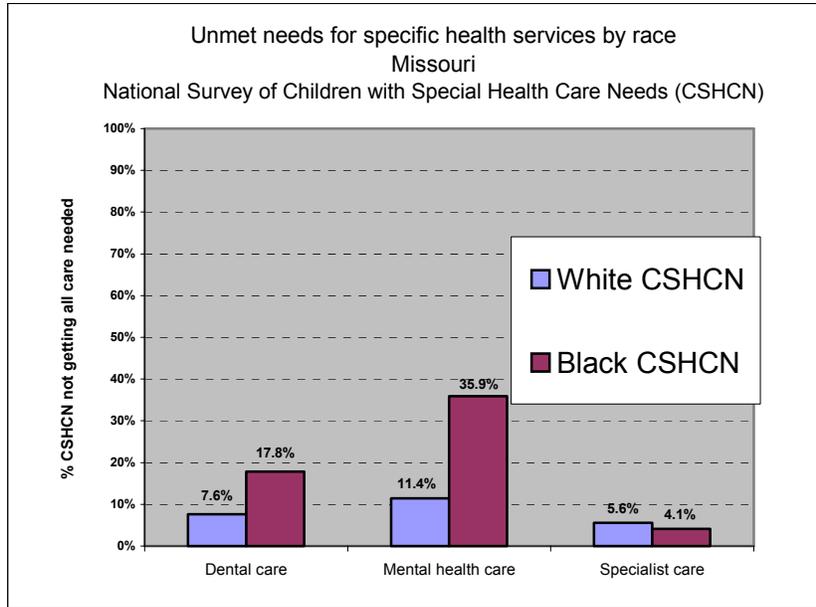
Source: CAHMI – Child and Adolescent Health Measurement Initiative, Data Resource Center on CYSHCN, December 2004

TABLE 36
Percentage of CSHCN Needing a Specific Health Service
Who Did Not Receive All Care That Was Needed



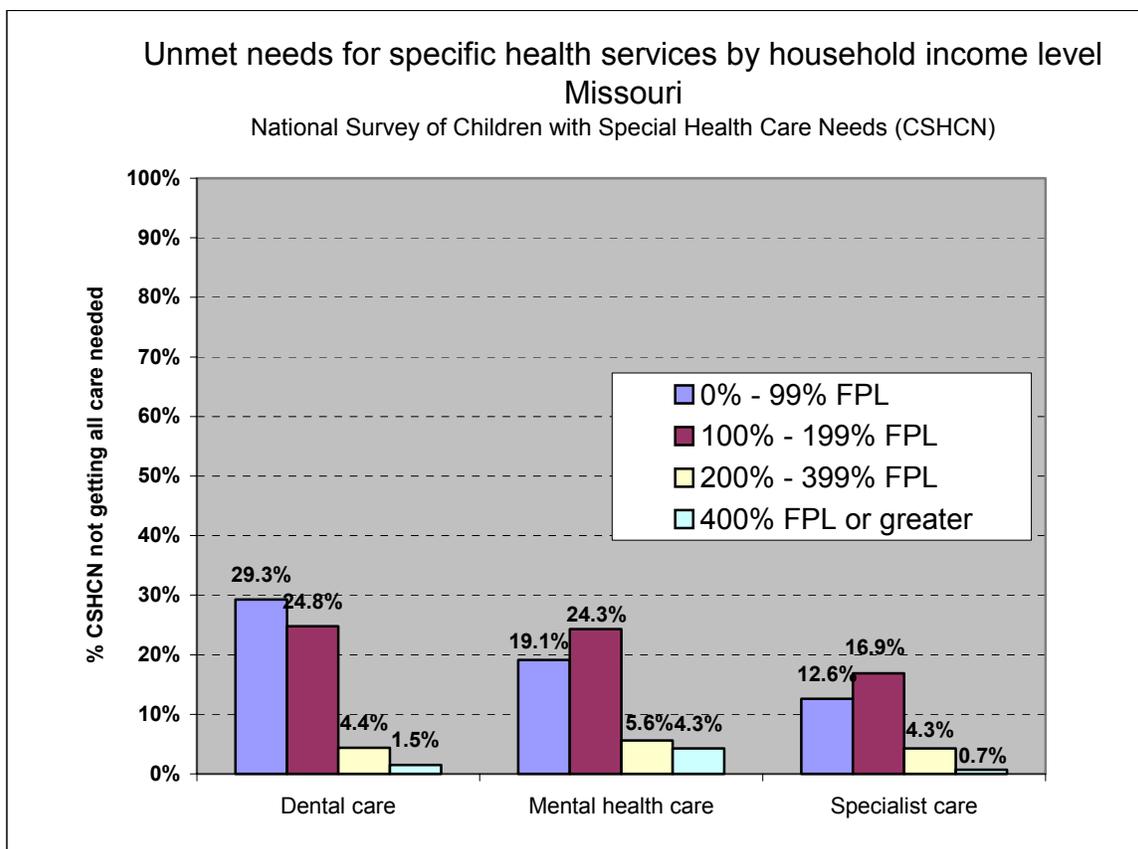
Source: CAHMI – Child and Adolescent Health Measurement Initiative, Data Resource Center on CYSHCN, December 2004

TABLE 37
Percentage of CSHCN Needing a Specific Health Service
Who Did Not Receive All Care That Was Needed



Source: CAHMI – Child and Adolescent Health Measurement Initiative, Data Resource Center on CYSHCN, December 2004

TABLE 38
Percentage of CSHCN Needing A Specific Health Service Who Did Not Receive All Care That Was Needed



Source: CAHMI – Child and Adolescent Health Measurement Initiative, Data Resource Center on CYSHCN, December 2004

Care coordination or service coordination in the SLAITS survey was defined as “a process that links children with special health care needs and their families to services and resources in a coordinated effort to maximize the potential of children and provide them with optimal health care.” SLAITS further elaborated upon the importance of care coordination in “assuring that children receive the full range of services they need, that services are not duplicated, and that providers communicate with families and with each other about their patient’s care. Care coordinators also provide critical assistance to families by providing referrals, organizing services, and representing families in care planning meetings when called upon to do so.” In Missouri, 11.8 percent of survey participants responded that they “needed care coordination” and among that group of respondents, another 2.1 percent responded that “their need for care coordination was not being met.” These responses compare closely with care coordination survey results in other states:

TABLE 39
Need for Care Coordination

| | Missouri | United States |
|----------------------------------|----------|---------------|
| Needing Care Coordination | 11.8 | 13.7 |
| Unmet Need for Care Coordination | 2.1 | 2.1 |

Source: DCH Program Budget Templates: 2004

3.3.4. Newborns

Newborn screening identifies children at an early age with special health needs. Newborn screening consists of the following components: education, screening, follow-up, diagnosis, management, and treatment. Inborn errors of metabolism can affect a child in a variety of ways. The child may develop: mental retardation; recurrent episodes of low blood sugar, which can produce coma or sudden death following fasting; severe muscle pain and cramping requiring repeated hospitalizations and possible severe kidney damage; weak muscles and developmental delay; heart enlargement to the point of heart failure and death at two to five months of age; nerve and muscle involvement interfering with walking and vision; seizures; developmental delay; or combinations of several of these conditions. Approximately 75,000 babies are born in Missouri each year. It is anticipated that, with DHSS screening for 25 metabolic/genetic conditions, the program would need to follow-up an estimated 504 infants who are confirmed/presumptive positive. The incidence rate of traits for cystic fibrosis (CF) is 1/25-30 and the disease rate is 1/2500 –3000. Therefore, CF centers will, at a minimum, provide follow-up and services to approximately 3,030 families in Missouri. Newborn screening in Missouri is a “population based public health intervention” with follow-up that applies preventive medicine in defined geographical regions of the state to reduce newborn morbidity and mortality from certain biochemical and genetic disorders. It is imperative that funding for laboratory and follow-up services be maintained and increased (even in an austere budget climate) to detect those newborn conditions that can be effectively improved when treated early. This funding will support DHSS capacity necessary to identify geographical areas (and their target MCH populations) where prevention efforts should be intensified. Missouri’s current newborn screening efforts can be summarized as follows:

TABLE 40
Newborn Screenings

| Results | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|--------|--------|--------|--------|--------|--------|
| Number of completed newborn screenings for metabolic diseases | 77,987 | 77,656 | 78,658 | 77,521 | 75,621 | 76,760 |
| Number of newborns with a hearing screening prior to hospital discharge | 2% | 2% | 11% | 20% | 96.1 | N/A |
| | 1,500 | 1,500 | 8,500 | 15,465 | 73,392 | 75,989 |
| | 75,242 | 75,366 | 76,329 | 77,326 | 76,366 | N/A |

Source: DCH Program Budget Templates: 2005, 03/02/05

3.3.5. Cross Cutting Needs Among All MCH Population Groups

3.3.5.1. Health Insurance Coverage for MCH Populations

In 2003, the DHSS through DCH submitted (and received approval for) a grant application to the U.S. Department of Health and Human Services for the purpose of developing a multi-year state plan to expand health insurance coverage for uninsured Missourians. The assessment of the “current status of health insurance coverage in Missouri” that was submitted as part of that grant application can be summarized as follows:

The most common source for health insurance coverage (HIC) for Missourians is through their employer. In 2000-2001, 72% of all non-elderly adults and 66.6% of children were covered by private insurance, faring better than the U.S. as a whole. Among the low income, private employers provided HIC for 37% of the non-elderly adults and 33.2% of the children. Medicaid is the most widespread type of health insurance among the poor. In 2000-2001, 20.7% of the children and 6.6% of the non-elderly adults were on Medicaid. Among the low-income population, 49.8% of the children, and 20.7% of the non-elderly adults had health insurance coverage through Medicaid. In the 2003 report by The Kaiser Commission on Medicaid and the Uninsured for Missouri, there were 13.4% non-elderly adults and 6.2% of the children uninsured in 2000-2001 compared to 18.2% and 12.2% nationally. Among the low income, 29% of the non-elderly adults and 12.7% of the children were uninsured, which is lower than the nation (38.0% and 21.6% respectively). Comparison data for two-year moving averages (1999-2000 and 2000-2001) show that the proportion of people in Missouri without HIC rose by 1.7%, from 8.1% to 9.9%.

Over the past 15 years and through two gubernatorial administrations, Missouri has steadily improved health insurance coverage through the following strategies:

- *Extended benefits to new groups of uninsured Missourians through Medicaid/State Child Health Insurance Program (SCHIP);*
- *Raised the income thresholds for Medicaid/SCHIP eligibility; and*
- *Assured the private insurance providers are offering appropriate benefits to their members.*

These efforts have succeeded in bringing the rate of those not covered by insurance below the national average and increased coverage rates. However, many Missourians remain uninsured and are thus at a higher risk for poor health outcomes.

Subsequent to the award of this planning grant, the DHSS/DCH through a contract with the University of Missouri, carried out the Missouri Health Care Insurance and Access Survey that was funded with this grant. The survey of 7,000 households conducted in 2004, revealed that about 8.4% of Missouri residents did not have health insurance at the time of the survey. This percentage reflected almost 463,000 Missourians not covered by health insurance. This survey also revealed that about 64,000 of those without health insurance were primarily children whose families earn 300 percent or less of the federal poverty level and parents who earn 75 percent or less of the poverty level who are eligible for insurance coverage but who for whatever reasons are not accessing that insurance coverage. This survey also revealed other results:

- *Young adults ages 19-24 are most likely to be uninsured with 20.1 percent lacking health coverage. Twelve point three percent of adults between the ages of 19 and 64 are without health insurance.*
- *Missouri children under the age of 19 have the highest level of coverage among all age groups. Only 3.4 percent of children under 19 years of age are uninsured.*
- *The rate of uninsured Missourians is highest among low-income earning less than 150 percent of the federal poverty level. Forty-four percent of the uninsured live below 150 percent of the federal poverty level.*
- *Workers at risk of being uninsured include part-time employees, temporary and seasonal employees, those who work in small firms with 10 or fewer employees, the self-employed and those in personal service and agriculture industries.*
- *Fifteen percent of the state's unemployed and unpaid workers are uninsured*
- *Nearly 40 percent of the uninsured said they needed health care but did not receive it due to cost.*
- *Survey participants without insurance were five times more likely to use the emergency room as their usual source of health care compared to respondents with private or public coverage.*
- *The regions in Missouri with highest rates of uninsured residents include: northeast (13.1%); southeast (11.9%); and southwest (10.4%).*

It is important to note that “every survey of this type produces different results and state generated estimates are likely to differ – tend to be lower than the annual estimates of non-insured based on some of the national estimates, such as the Census Bureau’s Current Population Survey (CPS).” (Reasons for variation between the estimates of non-insured include sample selection and size, survey administration, definition of the “uninsured,” and the survey design.)

Regardless of which methodology is followed to estimate the uninsured, Missouri probably has a minimum of nearly 500,000 persons who have no health insurance coverage. As this assessment is being finalized, the state budget shortfall or gap in

funding required to support state services and actual revenues collected is again beginning to widen. Most of this funding gap is a result of Medicaid benefits that cannot be supported into the future under current Medicaid eligibility thresholds. When compared to other state budgets, the Missouri state budget must allocate a much higher proportion of its total state revenues to support Medicaid than the vast majority of other states. This budget reality casts doubt on the future ability of this state to further increase the number of persons in MCH population groups with health insurance coverage.

3.3.5.2. Access to Health Services

Access to health care services in Missouri is contingent upon more than adequate health insurance coverage. The “paper benefits” of a health insurance plan or managed care plan are meaningless if an adequate supply of qualified health practitioners do not exist in all regions of Missouri and if there are geographical or cultural barriers that prevent families from accessing those benefits. Some barriers to adequate access for MCH populations persist relative to the lack of resources necessary to provide care such as community clinics, medical equipment, and practitioners and to a disparity of health resources in underserved areas:

- Outside of the I-70 corridor in Missouri, 68% of counties in Missouri are not covered by Medicaid managed care plans and many of these counties have few if any practitioners that accept Medicaid assignment.
- 93% of Missouri’s counties are designated as Health Professional Shortage Areas (HPSA) for primary medical care services and 85% are designated as Dental HPSAs.
- 60% of General Practice Dentists licensed in Missouri are over the age of 50.
- Nearly 60% of the uninsured in Missouri have earnings below 200% of the federal poverty level
- Over one-third of the uninsured work for firms with less than 50 employees
- 38.9% of the uninsured could not receive needed care because of cost
- 10.8% of the uninsured report the use of the emergency room as their usual source of care.
- While there are a significant number of uninsured persons in all of Missouri’s counties, only 33.9% of Missouri counties have federally qualified health centers in operation that can serve those persons with no insurance or those persons who live in an area with providers that will not accept Medicaid assignment.

3.3.5.3. Mental Health Delivery System for MCH Populations

Like other states, Missouri’s system for delivery of mental health services is under funded and growing more fragmented. Some basic mental health services required by MCH population groups are in jeopardy. Missouri is among those states that in response to budget problems have limited access to vital medications needed for mental disorders. The impact of this fragmentation of a system of care essential to the

health of MCH populations has now been recognized at the highest levels of Missouri state government.

In September of 2004, *The Comprehensive Children's Mental Health Services Initiative* was announced by the Governor's Office, the Missouri Legislature and the Missouri DMH. This initiative grew out of Senate Bill 1003 that will require state agencies in the future to develop a comprehensive children's mental health services system in Missouri. The press stated, "The new system will focus on prevention and early intervention services and provide help to families in their home, school and community." This initiative will focus greater public attention on state policy for (1) greater mental health parity with physical medical services, (2) managed care protections for plan members with mental disorders, and (3) greater access to needed medications to treat those disorders. A more seamless and better-funded mental health delivery system in Missouri should have a positive impact in reducing suicides among adolescents in Missouri. (MCH National Performance Measure 16 reports the rate of 6.8 [per 100,000] suicide deaths among youths aged 15 through 19.)

The Missouri Title V Agency played a leadership role in establishing a blueprint for the development of DMH's comprehensive children's mental health system to include an emphasis on primary prevention. Paula Nickelson, Division of Community Health Director, served on the Stakeholders Advisory Committee while Robin Rust, Division of Community Health Deputy Director, and Melinda Sanders, Section of Maternal, Child and Family Health Administrator served on the Comprehensive Management Team.

DMH's stated intent is to move toward a public health model. Currently, DMH's strategic plan utilizes a model for planning provided by the Missouri "Managing for Results Initiative". DMH's plan represents the balancing of DMH's two roles in responding to the mental health needs of Missouri citizens: that of a public mental health authority and that of a provider or broker of services and supports for targeted populations.

The plan has identified four important issues for department focus. Two issues reflect DMH's broad public mental health charge by identifying needed prevention efforts in the areas of substance abuse among youth and suicide. The other two issues address operational improvements specific to serving persons with severe mental illness, addiction problems, and/or developmental disabilities. Concern for children and youth is a dominant and consistent theme in DMH's planning.

TABLE 41

DEPARTMENT OF MENTAL HEALTH STRATEGIC PLAN, October 2003 – Executive Summary

| OUTCOMES | OBJECTIVES | STRATEGY SUMMARY |
|---|---|--|
| 1 Reduced Deaths & Injuries Associated with Substance Abuse Among Young Missourians | 1A Decrease Binge Drinking Among College Students | <ul style="list-style-type: none"> Implement University of MO Campus Prevention Services established through Interagency Contract Disseminate findings from Core Institute Survey to promote institutional action and change Implement with DESE School-Based Prevention & Intervention Initiative – Pilot 5 Sites in MO Target outreach to MC+ physicians that serve pregnant women |
| | 1B Increase Delay of Onset of Use of Alcohol & Other Drugs by Missouri Youth by One Year of Age by FY 2004 in Pilot Sites | |
| | 1C Increase the Number of Alcohol and Drug Abusing Pregnant Women Admitted to CSTAR Programs by 12% by 2005 | |
| 2 Reduced Rate of Suicides In Missouri | 2A Reduce Rate of Suicides Among Young Missourians by 6% of Nationwide Rate by 2006 | <ul style="list-style-type: none"> Continue implementation of MO Suicide Prevention Plan jointly with DHSS Train professional caregivers who serve high risk populations Coordinate Suicide Prevention strategies with Substance Abuse Prevention strategies in Outcome 1 |
| | 2B Reduce Rate of Suicides Among Elderly Males in Missouri by 9% of Nationwide Rate by 2006 | |
| 3 Children with Severe or Multiple Mental Health Problems Will Achieve Success Living in Their Communities | 3A Increase Percentage of Days in School for Children & Youth Served in the 5 current System of Care sites by 25% in FY 2005 | <ul style="list-style-type: none"> Implement & solidify System of Care Teams in all 5 sites Provide training and technical assistance to Local and State System of Care Teams Continue to improve statewide monitoring and outcome evaluation/measurement efforts Expand capacities <ul style="list-style-type: none"> Treatment Homes Adolescent Independent Living Respite & Family Supports Duplicate System of Care Model across State |
| | 3B Increase Percentage of Days which Children in State Custody & Served by the current 5 System of Care Sites Live in Their Own Homes or Homelike Environment by 30% in FY 2005 | |
| | 3C Increase Access to System of Care Teams for Children & Youth Served by Multiple State Departments by Establishing no less than 10 total Teams in Other Areas of the State by FY 2005 | |
| 4 Improved Quality of Life for Department of Mental Health Consumers Living in the Community | 4A Reduce Staff Turnover in Community Residential Facilities by 15% by 2006 | <ul style="list-style-type: none"> Seek new funding for direct care worker salary and benefits enhancement Disseminate information & technical assistance from DMH Work Place Improvement Team findings Implement action steps contained in DMH Employment Plan Increase focus on consumer employment goals Complete/disseminate "Best Practice Guidelines" related to recovery concepts Evaluate/Develop service enhancement plans for Comprehensive Psychosocial Rehabilitation programs |
| | 4B Increase Employment among Missourians with Disabilities Served by the Department of Mental Health through Division Specific Initiatives | |
| | 4C Increase the Percentage of Missourians with Serious Mental Illness Who Show Movement Towards Recovery by 5% by 2006 | |

Source: MO Department of Mental Health's Web site: <http://www.dmh.mo.gov/oqm/stratplans/stratplanindex.htm>

3.3.5.4. Oral Health Delivery System for MCH Populations

A shortage and mal-distribution of oral health resources for MCH populations were identified in the 2000 MCH five-year needs assessment. Oral health has again emerged as a major maternal and child health issue among Title V focus groups and in the SLAITS survey that was referenced earlier. In 2002, MPCA in collaboration with Missouri DHSS formed the Missouri Coalition for Oral Health that provided a snapshot of Missouri's Oral Health Status:

- 18% of 2-4 year olds have tooth decay.
- 80% of untreated cavities in permanent teeth are found in roughly 25% of children who are aged 5-17.

- 78% of 17 year-olds have tooth decay.
- For every adult 19 years or older without medical insurance, there are 3 without dental insurance.
- A little less than 2 out of 3 adults have visited a dentist within the last 12 months.
- In adults 35-44 years old, 69% have lost at least one tooth. 48% have gingivitis and 22% have destructive gum disease.

This coalition concluded:

- The most critical oral health problem facing Missourians is access, especially for the elderly, low income uninsured, Medicaid eligible adults and children, as well as people with special health care needs.
- Oral health access is exacerbated by a workforce shortage (in Missouri) among dental health professionals practicing in Missouri. The number of health professional shortage areas for dentists has increased dramatically over the past five years. It is projected that by the year 2008 there will be another 2% decrease in the number of dentists practicing in Missouri.
- If access to dental services in the general population is lacking, access to dental services for those people with Medicaid insurance or no insurance is critically deficient. Currently there are very few, or in some communities no, dentists that accept Medicaid or provide a sliding fee scale.
- Dental health insurance is not available to most of the Missouri work force. This reality places dental health services largely in the self-pay arena and out of reach for many of Missouri's citizens.

The data from the "Open Mouth Survey" is currently being entered for analysis. An epidemiologist with University of Missouri at Kansas City (UMKC) has been contracted to have this data analyzed which will be available at a later date.

3.3.5.5. Injury Prevention Among MCH Population Groups

In 2002, DCH completed a report card to Missouri on injuries in this state. This report, *Injuries in Missouri: A Call to Action, 2002*, provided a snapshot of injuries statewide and specific county by county injury profiles. In 1999, 3,550 Missourians died as a result of injuries, including unintentional and intentional injuries. In this state, unintentional injuries are the fifth leading cause of death, suicide the tenth leading cause, and homicide the fifteenth leading cause of death among Missourians. In Missouri, more children and young adults, ages 1-35, die from unintentional injuries than from any other cause of death. Homicide is the second leading cause of death for children and young adults, ages 5-25. During the twentieth century (1900's), trauma replaced infectious diseases as the most important threat to Missouri's children. The economic costs to Missouri resulting from injuries are high. The direct cost is only the beginning as disability from injury results in loss of productivity. In 1999, the hospital costs for emergency room and inpatient care related to injuries exceeded \$887.9 million. The greatest portion of those hospital costs was attributed to unintentional injuries at about

\$785.5 million, followed by assault at over \$41.9 million, and self-inflicted injuries at over \$20.8 million. Of these costs, over \$24.6 million were paid by Medicaid. These costs only reflect hospital related costs and do not include physician and rehabilitation costs related to injuries.

This report identified injury indicators for (1) unintentional injuries, (2) assault injuries, and (3) self-inflicted injuries. Data for sixteen injury related indicators was then used to compare and rank each county against other counties in terms of the relative overall injury risk. Most of the injury indicators selected can be linked directly to MCH populations in Missouri, although “falls” is a better indicator of injuries among elderly populations. Data from the separate county injury profiles was then aggregated to develop an overall state of Missouri injury profile and to provide a “composite rank” of where counties fall relative to their injury risk in the overall state injury profile. The state of Missouri injury profile and composite ranking of counties are on the following pages.

TABLE 42

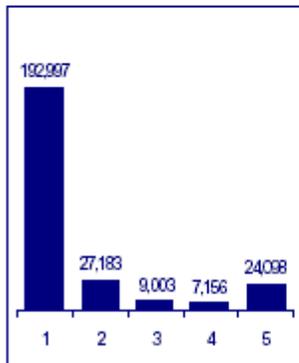
State of Missouri Injury Profile (Indicators)



Composite Rank

N/A

Analysis of Motor Vehicle Injuries by Type



1. Motor Vehicle
2. Bicyclist
3. Pedestrian
4. Motorcyclist
5. Other

| Indicator | Baseline | | Current | | State Rate | Percent Change | County Trend | County Rank |
|-------------------------|------------------|-----------------|------------------|-----------------|-----------------|----------------|--------------|-------------|
| | 1994-1996 | 1997-1999 | 1999 | 1999 | | | | |
| | Number | Rate | Number | Rate | | | | |
| Causes | | | | | | | | |
| Unintentional Injuries | 1,593,228 | 9,908.7 | 1,638,899 | 10,040.5 | 10,259.2 | 1.3% | X | N/A |
| • Falls | 435,622 | 2,683.5 | 449,873 | 2,725.0 | 2,805.9 | 1.5% | | |
| • Struck By/Against | 241,839 | 1,508.3 | 253,732 | 1,562.5 | 1,626.3 | 3.6% | | |
| • Motor Vehicle | 251,960 | 1,573.1 | 260,738 | 1,600.4 | 1,623.4 | 1.7% | | |
| • Cut/Pierce | 181,072 | 1,130.7 | 178,599 | 1,099.2 | 1,088.0 | -2.8% | | |
| • Overexertion | 138,525 | 865.5 | 151,946 | 934.9 | 1,005.4 | 8.0% | | |
| Assault Injuries | 77,518 | 481.1 | 76,636 | 471.0 | 446.5 | -2.1% | ✓ | N/A |
| • Struck By/Against | 49,177 | 305.2 | 45,010 | 276.4 | 255.2 | -9.4% | | |
| • Cut/Pierce | 5,494 | 34.0 | 5,319 | 32.7 | 29.8 | -3.8% | | |
| • Firearms | 3,202 | 19.9 | 2,100 | 12.9 | 11.3 | -35.2% | | |
| • Spouse/Partner Abuse | 193 | 1.2 | 2,826 | 17.4 | 16.9 | 1350.0% | | |
| • Sexual Abuse | 549 | 3.4 | 1,367 | 8.5 | 7.5 | 150.0% | | |
| • Physical/Other Abuse | 1,998 | 12.5 | 2,456 | 15.2 | 14.0 | 21.6% | | |
| • Rape by Non-Caretaker | 562 | 3.5 | 544 | 3.3 | 2.9 | -5.7% | | |
| Self Inflicted Injuries | 17,514 | 109.2 | 16,774 | 103.2 | 98.4 | -5.5% | ✓ | N/A |
| • Poisoning | 14,320 | 89.4 | 13,454 | 82.8 | 79.5 | -7.4% | | |
| • Cut/Pierce | 1,827 | 11.3 | 1,981 | 12.2 | 11.2 | 8.0% | | |
| • Firearms | 444 | 2.8 | 361 | 2.2 | 2.0 | -21.4% | | |
| • Suffocate/Hang | 156 | 1.0 | 172 | 1.1 | 1.2 | 10.0% | | |
| Unknown | 75,527 | 469.8 | 27,332 | 166.8 | 181.4 | -64.5% | ✓ | N/A |
| All Injuries | 1,763,787 | 10,968.8 | 1,759,641 | 10,781.5 | 10,985.5 | -1.7% | ✓ | N/A |

Injuries in Missouri: A Call to Action

Source: Injuries in Missouri: A Call to Action, 2002

TABLE 43

State of Missouri Injury Profile (Age Groups)

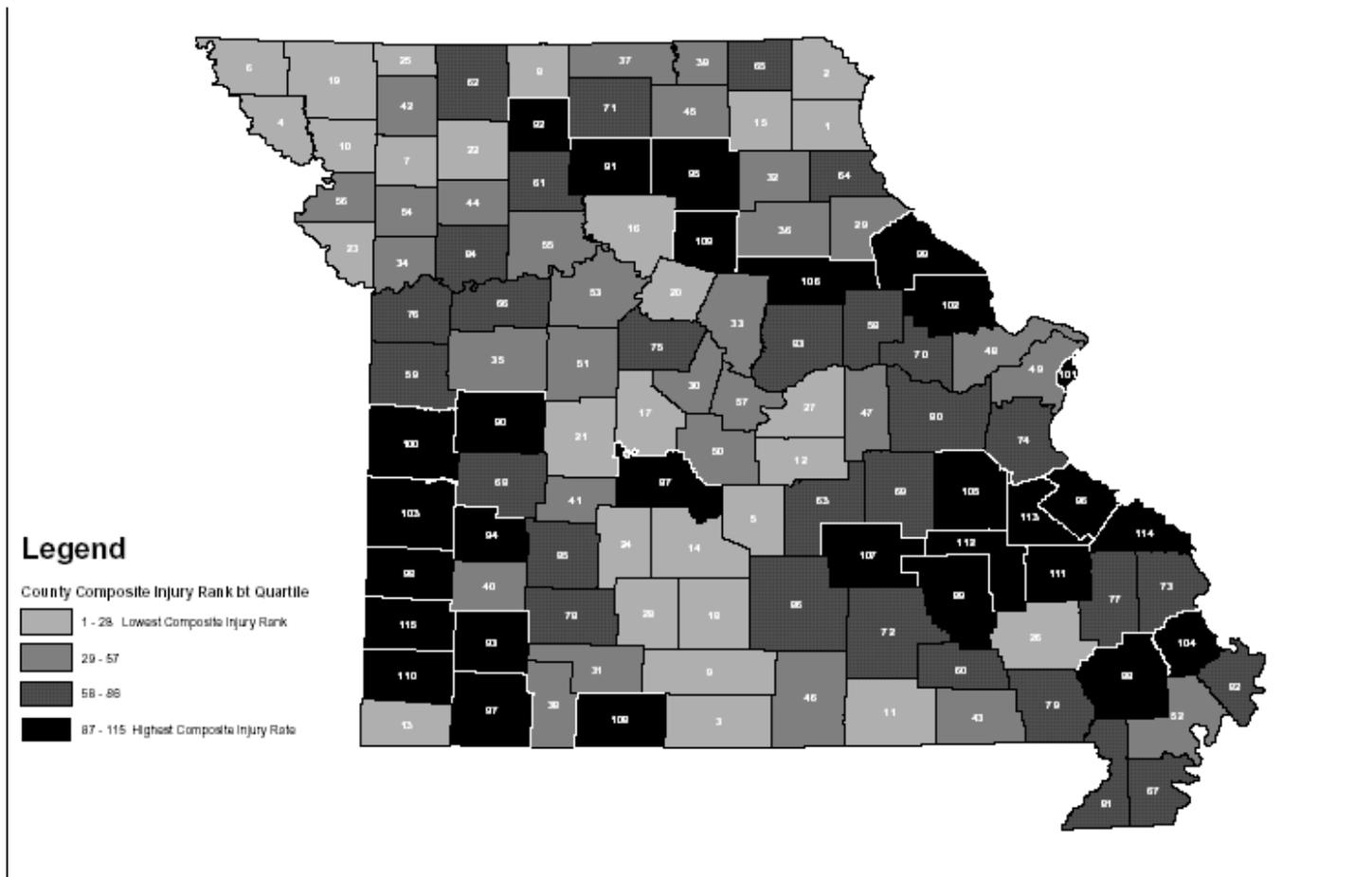
| Indicator | Under 15 | | 15-24 | | 25-44 | | 45-64 | | 65 and Over | | Total | |
|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|----------------|
| | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male |
| Unintentional Injuries | 180,257 | 255,235 | 133,871 | 193,553 | 213,727 | 270,185 | 109,912 | 103,299 | 121,250 | 57,504 | 759,054 | 879,839 |
| • Falls | 59,387 | 76,749 | 23,288 | 24,831 | 48,206 | 41,765 | 38,408 | 23,666 | 84,065 | 29,491 | 253,362 | 196,511 |
| • Struck By/Against | 31,818 | 60,684 | 17,908 | 43,761 | 24,931 | 43,795 | 9,590 | 12,771 | 4,818 | 3,648 | 89,065 | 164,666 |
| • Motor Vehicle | 8,754 | 17,056 | 2,220 | 6,138 | 3,058 | 5,844 | 1,307 | 2,122 | 563 | 655 | 15,904 | 31,819 |
| • Cut/Pierce | 14,471 | 25,492 | 11,744 | 28,312 | 21,987 | 42,220 | 9,758 | 15,498 | 3,919 | 5,179 | 61,886 | 116,712 |
| • Overexertion | 12,401 | 10,356 | 16,146 | 20,545 | 30,265 | 33,180 | 12,052 | 9,844 | 4,965 | 2,188 | 75,830 | 76,116 |
| Assault Injuries | 3,230 | 4,579 | 9,245 | 16,680 | 14,689 | 21,287 | 2,168 | 3,921 | 379 | 452 | 29,712 | 46,923 |
| • Struck By/Against | 1,011 | 2,605 | 5,339 | 11,095 | 7,923 | 13,078 | 1,117 | 2,385 | 188 | 264 | 15,578 | 29,431 |
| • Cut/Pierce | 71 | 101 | 540 | 1,359 | 646 | 2,134 | 80 | 347 | 11 | 30 | 1,348 | 3,971 |
| • Firearms | 19 | 46 | 85 | 892 | 119 | 759 | 33 | 114 | 9 | 24 | 265 | 1,835 |
| • Spouse/Partner Abuse | 0 | 0 | 693 | 14 | 1,797 | 67 | 218 | 18 | 16 | 3 | 2,724 | 102 |
| • Sexual Abuse | 929 | 230 | 166 | 9 | 29 | 0 | 2 | 0 | 2 | 0 | 1,128 | 239 |
| • Physical/Other Abuse | 713 | 900 | 254 | 125 | 291 | 60 | 55 | 25 | 21 | 11 | 1,335 | 1,121 |
| • Rape by Non-Caretaker | 50 | 3 | 195 | 8 | 240 | 9 | 26 | 3 | 9 | 1 | 520 | 24 |
| Self Inflicted Injuries | 851 | 291 | 3,120 | 2,049 | 4,579 | 3,534 | 1,144 | 845 | 198 | 163 | 9,892 | 6,882 |
| • Poisoning | 769 | 184 | 2,683 | 1,314 | 3,969 | 2,582 | 1,029 | 654 | 172 | 98 | 8,622 | 4,832 |
| • Cut/Pierce | 47 | 21 | 338 | 404 | 441 | 564 | 68 | 71 | 13 | 14 | 907 | 1,074 |
| • Firearms | 1 | 8 | 15 | 65 | 32 | 111 | 21 | 68 | 4 | 36 | 73 | 288 |
| • Suffocate/Hang | 5 | 15 | 8 | 42 | 16 | 70 | 5 | 8 | 1 | 2 | 35 | 137 |
| Unknown | 2,086 | 2,840 | 2,301 | 3,546 | 4,101 | 5,651 | 1,982 | 1,966 | 1,825 | 915 | 12,359 | 14,972 |
| All Injuries | 186,424 | 262,945 | 148,537 | 215,828 | 237,096 | 300,657 | 115,206 | 110,031 | 123,652 | 59,094 | 811,017 | 948,616 |

Additional information may be obtained by accessing the Department of Health and Senior Services website at www.dhss.state.mo.us.

Source: Injuries in Missouri: A Call to Action, 2002

FIGURE 11

Missouri Injuries: County Composite Ranking



Source: Injuries in Missouri: A Call to Action, 2002

3.3.5.6. Tobacco Use Among Children, Adolescents, and Pregnant Women

Tobacco use among Missouri adults remained steady over the past decade with 27.2 percent reporting smoking in 2003, the third highest rate among all states. During the same decade, smoking among pregnant women in Missouri declined significantly by 26.6 percent, from 24.8 percent in 1990 to 18.2 percent in 2002, as determined by self-reported information on birth certificates. However, smoking among pregnant females aged 15-19 years remained high at 27.2 percent in 2001-2002, and overall smoking during pregnancy in Missouri ranked 8th highest among all states. Prenatal drug prevalence studies conducted in 1993, 1997, and 2001 identified tobacco as the most prevalent substance used among Missouri pregnant women. Additionally, tested urine specimens revealed that smoking during pregnancy was alarmingly high among non-Hispanic white adolescents at 40.7 percent and rose dramatically among non-Hispanic

black adolescents from 5.3 percent in 1997 to 15.4 percent in 2001. Smoking during pregnancy is the single most preventable cause of illness and death among mothers and infants. Cigarette smoking contributes to an estimated 10% of infant deaths and 30% of low birth weight infants. In 1996, smoking during pregnancy resulted in an estimated \$10,000,000 in smoking-attributable neonatal expenditures in Missouri. In 2000, 26 infants died due to maternal smoking during pregnancy. Inadequate state and local community resources to intervene to reduce the risk of smoking during pregnancy will result in the following negative outcomes:

- Training in Missouri for health care providers regarding tobacco cessation in pregnancy and for women throughout the reproductive age will continue to be sporadic and inconsistent in message;
- Pregnant women will not be universally assessed, counseled, and referred for tobacco use;
- Fetuses of women who smoke will continue to be at risk for premature birth, low birth weight, and miscarriage; and
- Newborns whose mothers smoke will continue to be at risk for respiratory illness, middle ear infection, impaired lung function, asthma, pneumonia, and bronchitis.

Among Missouri high school students, cigarette smoking declined from 39.8 percent in 1995 to 24.2 percent in 2003, and overall tobacco use declined from 39.0 percent in 1999 to 29.7 percent in 2003. However, smoking among Missouri 12th grade students remained high at 30 percent in 2003. Missouri middle school students also reported less smoking and tobacco use. In 1999, 14.9 percent smoked cigarettes compared to 8.8 percent in 2003. However, overall tobacco use did not decline significantly with 14.5 percent reporting using some form of tobacco in 1999 and 13.7 percent doing so in 2003.

It is estimated that approximately 121,000 Missouri children alive today will die from tobacco use.

3.3.5.7. Obesity

An epidemic of obesity is one of the major health problems facing Missouri now. This epidemic is affecting all groups of Missourians, regardless of age, race, or gender. Obesity can result in premature death, increased risk of other chronic diseases at younger and younger ages, and decreased quality of life. CDC estimates that Missouri spent approximately \$1.6 billion in 2003 for adult obesity-attributable medical expenditures, half of which was paid by Medicare and Medicaid. The impact of the issue is worse than in 2000 because the number of Missourians affected has increased significantly with a corresponding rise in medical costs. Adult obesity (≥ 30.0 BMI) has nearly doubled in recent years. Between 1990 and 2002, the prevalence of obesity among adults in the state increased from 11.9% to 23.2%. Missouri ranks 16th in the nation based upon the prevalence of obesity. Data for children presents an even more dismal picture. The prevalence of overweight (for children, age and gender-specific BMI

that are equal to or greater than the 95th percentile of the CDC BMI charts) has risen from 8.4% in 1993 to 13.3% in 2003; in children 2 to 5 years of age participating in WIC, a 58% increase. In 2002, the overweight rate for children 2 to 5 years of age participating in WIC was 12%, which was the 18th highest overweight level in the nation. Data from the 2001-2002 Missouri School-Age Children Health Service Program (MSCHSP) for 5th graders show that 18.5% are overweight. The Prevalence of overweight in children in grades 6-8 was 15.9% in 2003, up from 9.1% in 1999, a 75% increase. In 1999, 7.8% of high school students were overweight; in 2002, the prevalence of overweight increased to 12%, a 64% increase. While overweight has increased in all races and both genders, the problem is more prevalent in selected groups:

- People of color;
- People with lower educational levels; and
- People with lower income levels.

Obesity among MCH populations has become a major health issue since the publication of the last MCH Five-Year Needs Assessment in 2000. Obesity in pregnant women specifically may lead to poor pregnancy outcomes such as infant death, maternal death, gestational diabetes, labor complications, and increased risk of babies being born with birth defects. The obesity rate among pregnant women in Missouri during the last 20 years has tripled from 7.1 percent in 1983 to 21.3 percent in 2003. During the last ten years alone, the rate has increased by 54 percent increasing from the 13.8 percent in 1993 to 21.3 percent in 2003. Large increases in obesity have taken place in all major demographics segments: age, race, education, and birth order. Highest obesity rates in 2003 occurred among mothers at least age 25, black mothers, mothers in the middle education groups, and mothers having multiple births. The lowest obesity rates occurred among teen mothers, those with college degrees, and those delivering first births. Geographically, obesity occurred most frequently in rural areas of southeast and northern Missouri as depicted in the following figure that shows quartiles of obesity rates by county for 1999-2003 births:

will grow up unhealthy and unable to adequately care for themselves and they will be much more likely to have a shorter lifespan than their parents.

3.3.5.8. Diabetes

Diabetes mellitus is a condition where the body does not produce enough insulin or cannot use the insulin it produces effectively. This causes glucose to build up in the blood, which can lead to a variety of complications. Individuals with type 1 diabetes, previously known as juvenile onset diabetes, cannot produce enough insulin to survive, making insulin injections necessary. Because the cause of this form of diabetes is unknown, it cannot be prevented and there is no cure for any type of diabetes. Type 2 diabetes, previously known as adult onset diabetes, occurs when the body cannot produce enough or cannot utilize insulin properly. Type 2 diabetes can be prevented by controlling preventable risk factors (obesity and physical inactivity). Non-preventable risk factors include race/ethnicity, family history of diabetes, and older age. A prior history of gestational diabetes, which develops during pregnancy and usually disappears when the pregnancy is over, is another risk factor for type 2 diabetes.

There are no data available on the prevalence of diabetes among children in Missouri. A primary unmet health surveillance need in this state is to design, fund, and activate an information system that will begin to capture key data on type 1 diabetes or diabetes that begins in childhood. Among Missouri adults, the prevalence of diabetes was about 6.9% in 2003. In the United States, about 206,000 people under age 20 have diabetes. Nationally, more than 13,000 children are diagnosed with type 1 diabetes each year and the number diagnosed with type 2 diabetes is on the rise. Type 2 diabetes is most often seen in American Indians, African-Americans, and Hispanic children at higher rates when compared to whites. Overall, about 5-10% of diabetes is type 1 and 90-95% is type 2. In Missouri, about 1% of women questioned through the BRFSS survey reported that they had been told by a physician that they had pregnancy-related diabetes. About 6.6% of all women had been told they had any type of diabetes in their lifetime.

Potential consequences for individuals with diabetes include blindness, lower limb amputations, kidney failure, heart disease, stroke, and even death. For children, potential consequences of diabetes are frequent Emergency Department (ED) visits, hospitalizations, school absenteeism, limited activity, and poor quality of life. Pregnancy complications may result from gestational diabetes as well. Diabetes is the seventh leading cause of death in Missouri. However, only three children died due to diabetes during the 2000-2002 period.

Indirect costs for caregivers who must miss work and other activities to take children for medical treatment or stay home to care for children with diabetes is another consideration. Employers may also bear some of this cost. In Missouri, total hospitalization charges related to diabetes equal nearly \$140 million each year. Of this amount, \$3.4 million can be attributed to children under the age of 18. Nationally, direct medical costs due to diabetes reached about \$92 billion and indirect costs (due to

disability, work loss, and premature death) reached \$40 billion, for an estimated total of \$132 billion in 2002 alone.

3.3.5.9. Nutritional Health Status of MCH Populations

WIC in Missouri provides nutritious foods to supplement the diets of pregnant women, new mothers, infants, and children up to age five based on eligibility (nutritionally related medical risk and income). In FFY 2005, WIC contracts with 118 local WIC providers statewide to serve an average of 133,062 participants per month (women – 27%, infants – 27% and children up to age 5 – 46%). While USDA estimates that the Missouri WIC program serves over 80% of the eligible population, significant problems and unmet needs remain:

- **Pregnant women, mothers, and infants**
 - Low maternal weight gain
 - Maternal weight loss during pregnancy
 - Severe anemia
 - Dental problems
 - Pregnancy at a young age
 - Limited feeding decision ability
 - Underweight infants
 - Elevated blood lead levels
 - Inappropriate use bottles
 - Breastfeeding complications

- **Children and CSHCN**
 - Underweight and overweight children
 - Anemia, moderate to mild
 - Elevated blood lead levels
 - Inadequate growth
 - Dental problems

The consequences of not continuing to reduce nutritional health risks to WIC populations would include decreased food security, increased infant mortality, increased childhood obesity, increased chronic disease, and a shorter life span.

The priority geographic targets for the WIC program are:

- St. Louis
- Kansas City
- Springfield
- Bootheel area

3.3.5.10. Asthma

Asthma prevalence data are not available for children in Missouri. The nationwide prevalence of lifetime asthma diagnosis for children (under 18 years of age) in 2001 was 12.6%. The 2003 nationwide lifetime prevalence for adults was 11.7%, which is similar to the Missouri adult prevalence rate at 11.9%. The American Academy of Allergy, Asthma and Immunology and the Asthma and Allergy Foundation of America ranked the 100 largest metropolitan areas by asthma severity based on prevalence, risk factors, and medical factors. St. Louis was ranked number three and Kansas City was ranked number eight in the nation. These areas along with the Bootheel (a nine-county region in the southeast portion of the state) also have the highest concentrations of African-Americans in Missouri. Potential consequences for individuals with poorly managed asthma include frequent ED visits, hospitalizations, school absenteeism, limited activity, and poor quality of life. A small number of children in Missouri die from asthma-related complications each year. It is important to note that all of these consequences are avoidable because asthma is a manageable disease. With asthma prevalence on the rise in Missouri, it is even more important that efforts are directed toward asthma interventions.

3.3.5.11. Hypertension Among MCH Populations

Hypertension, also referred to as high blood pressure (HBP), “increases the risk of heart attacks, strokes, kidney failure, eye damage, congestive heart failure and atherosclerosis” (Heart and Stroke Facts, American Heart Association). Heredity, race, sex, age, salt sensitivity, weight, physical lifestyle, alcohol, diabetes mellitus, gout, kidney disease, pregnancy (especially in last three months), oral contraceptives (if overweight, history of HBP during a pregnancy, family history of HBP, or mild kidney disease), or other medications (prescribed or over-the-counter) may contribute to HBP.

DHSS’s Web site for Chronic Disease Control (<http://www.dhss.mo.gov/HeartandStroke/Publications.html>) provides additional information. Overweight or obesity, lack of physical activity, consumption of too much salt or not enough potassium, excessive alcohol, and smoking are modifiable risk factors. High blood pressure is the leading risk factor for stroke and is a major risk factor for heart disease and diabetes. Heart disease is the number one killer of African-Americans in Missouri.

In a special county level survey in 2003, individuals were asked “Have you ever been told by a health professional that your blood pressure is high?” The state average was 28.5% of the population.

In the 2003 BRFSS, the same question was asked. Of all the women in the BRFSS, 0.93% had been told they had high blood pressure during a pregnancy. Of the women pregnant at the time of the survey, 3.43% had high blood pressure. In the age ranges of 30-34, 35-39, 40-44, and 45-49, white females had responded “yes” 7.6%, 13.4%,

18.9%, and 27.1%, respectively. In the same age ranges for the African-American female, the percentages were 26.4%, 13.5%, 29.7%, and 30.7%.

Hypertension is a major risk factor for heart disease that is the number one killer of African-Americans in Missouri. In 2000, heart disease cost African-Americans in Missouri about \$300 million in hospitalization expenditures.

Hypertension is also a modifiable leading risk factor for stroke. Stroke is the third leading cause of death for African-American males and females in Missouri.

Hypertension is increasingly emerging as a critical health issue in the state.

3.3.5.12. Human Immunodeficiency Virus (HIV/AIDS) in Missouri

Since 1982, 14,840 HIV-infected residents (i.e., persons with HIV Disease) have been diagnosed and reported to Missouri DHSS. Of these, 14,840 HIV disease cases, 9,902 (66.7%) are subcategorized as AIDS cases, and the remaining 4,938 (33.3%) are subcategorized as HIV cases. The annual number of HIV disease cases (i.e., diagnosed and initially reported for the first time to public health officials) has decreased each year from 1990 through 2000. However, the 580 HIV disease cases diagnosed in Missouri residents in 2002 represented a 0.3% increase from the 578 cases diagnosed in the previous year. The number of cases diagnosed in 2003 (510) decreased 12.1% from 2002.

The following information was taken from the 2003 Epidemiologic Profile
http://www.dhss.mo.gov/HIV_STD_AIDS/2003EpidemiologicProfile.pdf

Since 1982, 14,840 HIV-infected Missouri residents (i.e., persons with HIV Disease) have been diagnosed and reported to the Missouri Department of Health and Senior Services. Of these 14,840 HIV Disease cases, 9,902 (66.7%) are subcategorized as AIDS cases, and the remaining 4,938 (33.3%) are subcategorized as HIV cases.

The annual number of HIV Disease cases (i.e., diagnosed and initially reported for the first time to public health officials) had decreased each year from 1990 through 2000. However, the 578 HIV Disease cases diagnosed in Missouri residents in 2001 represented a 7.4% increase from the 538 cases diagnosed in 2000 and the 580 new HIV Disease Cases diagnosed in 2002 represented a 0.3% increase from the 578 cases diagnosed in the previous year. The number of cases diagnosed in 2003 (510) decreased 12.1% from 2002.

The 385 HIV cases diagnosed in Missouri residents in 2003 represented a slight increase (1.9%) over the 378 cases diagnosed in 2002. This increase continued an upward trend that resumed after a decrease in the number of cases diagnosed in 1999. The 125 AIDS cases diagnosed in

Missouri residents in 2003 represented a 38.1% decrease from the 202 cases diagnosed in 2002. The number of diagnosed HIV cases in Missouri increased dramatically from 1986 to 1988 and have been declining since then. The numbers of cases for HIV and AIDS were approximately the same for the first time in the history of epidemic from 1997 to 1999, with the number of HIV cases finally surpassing the number of AIDS cases in 2000. The divergent trend has continued since then. The total number of HIV Disease cases has, on the average, continued to decrease in 1989, except for a few years with minor upward moves.

Of the 14,840 diagnosed HIV Disease cases, 9,495 (64%) are living, and 5,345 (36%) have died. The majority (5,147, or 96.3%) of these deaths have been in persons subcategorized as AIDS cases. The 5,147 AIDS cases who have died made up 52% of all diagnosed cases of AIDS in the state. During 2003, 124 HIV-related deaths in Missouri residents were reported on death certificates, an increase of 0.8% from the 123 HIV-related deaths reported in 2002.

Not all HIV-infected persons have been diagnosed nor are they aware of their infection status. It is estimated that the actual number of individuals infected with HIV (i.e., persons with HIV Disease) who are presently living in Missouri is in the approximate range of 9,500 to 13,500 persons. The Centers for Disease Control and Prevention (CDC) has stated that, nationwide, approximately 30% of HIV-infected persons are not aware that they are infected (although a more recent CDC report has indicated that among young gay and bisexual men infected with HIV, the percentage who do not know their infection status may be much higher²¹). An essential component of HIV prevention is to encourage and assist persons at risk for HIV infection to be tested so that, if infected, they can optimally benefit from available treatments, and be assisted in making behavioral changes to eliminate or reduce the risk of transmission to others.

Improved antiretroviral therapies (introduced since the mid-nineties) have slowed the progress of HIV disease in many infected persons, an achievement especially reflected in the substantial decrease in diagnosed AIDS cases in Missouri from 1996 to 1997, and in HIV Disease deaths from 1995 to 1997. The annual number of HIV Disease deaths has remained almost the same over the past six years (See Figure 4, "HIV Disease Deaths by Race/Ethnicity and Year of Death, Missouri 1993-2003," in the Missouri State Summary section of this document). This likely reflects, at least in part, the limitations associated with current treatment regimens. Other factors that could potentially play a role here include delayed test seeking among certain populations, and limited access to or use of health care services.

There is an obvious need for continued emphasis on prevention of new infections, and for trying to ensure that all infected persons can access needed care services. Everyone needs to clearly understand that “despite medical advances, HIV infection remains a serious, usually fatal disease that requires complex, costly, and difficult treatment regimens that do not work for everyone. As better treatment options are developed, we must not lose sight of the fact that preventing HIV infection in the first place precludes the need for people to undergo these difficult and expensive therapies.

The ability of improved treatments to extend the life-span of AIDS patients is reflected in the consistent increase in the number of persons living with AIDS in recent years, even though the annual numbers of new AIDS cases have been decreasing. At the end of 2003, 4,755 persons who were Missouri residents at the time of diagnosis were living with AIDS; the corresponding numbers for 2002, 2001, 2000, 1999, 1998, 1997, and 1996 were 4,455, 4,262, 4,049, 3,784, 3,496, 3,235, and 3,055, respectively.

Where

Of the 4,938 diagnosed HIV cases: 1,480 (30%) were from St. Louis City, 1,223 (24.8%) were from Outstate Missouri, 1,199 (24.3%) were from Kansas City, and 683 (13.8%) were from St. Louis County.*

Of the 9,905 diagnosed AIDS cases: 2,844 (28.7%) were from St. Louis City, 2,709 (27.3%) were from Kansas City, 2,573 (26%) were from Outstate Missouri, and 1,518 (15.3%) were from St. Louis County. Cases of HIV Disease disproportionately occurred in the state’s two major metropolitan areas (St. Louis and Kansas City). The highest rates of both HIV and AIDS cases, as well as the largest numbers of cases, were found in these two areas. St. Louis City consistently has had the highest case rates, followed by Kansas City, St. Louis County, and Outstate Missouri.

Of total diagnosed HIV cases, 68.1% were from St. Louis City, St. Louis County, or Kansas City (which together comprise 32.3% of the state’s population). However, 1,223 cases of HIV have been diagnosed in the Outstate Missouri area. The number of HIV cases per 100,000 population (case rate) was the highest in St. Louis City, followed by Kansas City, and St. Louis County. Of the total diagnosed AIDS cases, 71.4% were from St. Louis City, St. Louis County, or Kansas City. Yet, 2,573 AIDS cases have been diagnosed in the Outstate Missouri area. Again, the highest case rate was in St. Louis City, followed by Kansas City and then St. Louis County.

Within St. Louis City, St. Louis County and Kansas City, both HIV Disease cases and cases of bacterial STDs generally tend to occur in the same specific areas. It is within these areas that the need for prevention and care services are the greatest.

Who

Of the 385 HIV cases diagnosed in 2003: 300 (77.9%) were in males and 85 (22.1%) were in females. The rate per 100,000 population for males (11.0) was 3.7 times higher than the case rate for females (3.0).

Of the 125 AIDS cases initially diagnosed in 2003: 103 (82.4%) were in males and 22 (17.6%) were in females. The rate per 100,000 population for males (3.8) was 4.8 times higher than the case rate for females (0.8).

Of the 162 HIV cases that seroconverted to AIDS in 2003: 132 (81.5%) were in males and 30 (18.5%) were in females. The rate per 100,000 population for males (4.9) was 4.9 times higher than the case rate for females (1.0).

Of the 385 HIV cases diagnosed in 2003: 161 (41.8%) were in Whites, 213 (55.3%) were in Blacks, three (0.8%) were in Hispanics, 1 (0.3%) was an Asian/Pacific Islander, and one (0.3%) was an American Indian. (Race/ethnicity was unknown for six cases.) The rate per 100,000 population for Blacks (33.8) was 9.9 times higher than the case rate for Whites (3.4).

Of the 125 AIDS cases initially diagnosed in 2003: 63 (50.4%) were in Whites, 59 (47.2%) were in Blacks, 2 (1.6%) were in Hispanics, and there were no new cases Asian/Pacific Islanders or American Indians. (Race/ethnicity was unknown for 1 case.) The rate per 100,000 population for Blacks (9.4) was 7.2 times higher than the case rate for Whites (1.3).

Of the 162 HIV cases that seroconverted to AIDS in 2003: 64 (39.5%) were in Whites, 92 (56.8%) were in Blacks, 4 (2.5%) were in Hispanics, 1 (0.6%) was an Asian/Pacific Islander, and 1 (0.6%) was an American Indian. The rate per 100,000 population for Blacks (14.6) was 11.2 times higher than the case rate for Whites (1.3).

In 2003, Blacks made up 55.3% of newly diagnosed HIV cases, 47.2% of newly diagnosed AIDS cases, and 56.8% of the HIV cases that seroconverted to AIDS. Given that Blacks make up only about 11.2% of the state's population, this clearly indicates their very disproportionate representation among HIV-infected persons. The case rate for HIV cases diagnosed in 2003 in Blacks (33.8) was 9.9 times higher than the cases rate in Whites (3.4). The case rate for newly diagnosed AIDS cases and

for HIV cases that seroconverted to AIDS in 2003 in Blacks (9.4 and 14.6 respectively) was 7.2 and 11.2 times higher than the case rate in Whites (1.3 in each category). Blacks were also highly disproportionately represented among reported cases of gonorrhea, chlamydia, and syphilis (see the discussion of these diseases later in the summary).

For Hispanics, the total numbers of cases diagnosed in 2003 for HIV and AIDS in Missouri was small. There are some reasons for concern that HIV Disease might be a more significant problem for Hispanics in Missouri than current numbers seem to indicate. First, it is possible that among diagnosed HIV and AIDS cases, because of incorrect information provided on the case report forms, a higher proportion may actually be of Hispanic ethnicity than is indicated by the current numbers. Second, the Hispanic population is increasing rapidly in Missouri. According to 2000 census data, Missouri's Hispanic population grew by 92.2% during the period from 1990 to 2000 (from 61,698 in 1990 to 118,592 in 2000); in contrast, Missouri's total population grew by only 9.3% during this time. Another issue regarding persons identified as Hispanic is that these individuals actually consist of a diverse mixture of ethnic groups and cultures. This indicates a need for specifically targeted prevention efforts.

In 2003, no AIDS cases and only 1 HIV case each were diagnosed in Asians and in American Indians within Missouri. Numbers of diagnosed HIV cases in Asians and American Indians have been very small; each of these two groups comprised less than 0.5% of newly diagnosed HIV cases.

It should be emphasized that race/ethnicity in itself is not a risk factor for HIV infection; however, among many racial/ethnic minority populations, social, economic and cultural factors are associated with high rates of HIV risk behavior. These factors also may be barriers to receiving HIV prevention information or accessing HIV testing, diagnosis, and treatment.

In 2003, case rates for new HIV infections in Whites were the highest among males 30 to 39 years of age, but in Blacks the case rates were highest in the 20 to 29 year old age group. Although relatively small in number, infections were also occurring in teenagers among Blacks in Missouri (see Figure 8, "HIV Incidence Rates for Selected Race/Ethnicity/Gender Groups, by Age Group, Missouri 2003," in the Missouri State Summary section of this document). CDC estimates that, nationwide, about half of all new HIV infections are in young people under 25 years of age.

In 2003, two infants born to HIV-infected mothers were also infected. The number of perinatal HIV cases dropped from four in 1996 to 2 in 2003, and the number of perinatal AIDS cases dropped from three in 1996 to zero in

2003, while the annual number of live births in Missouri remained fairly constant. This difference reflected the use, starting in mid-to late-1994, of zidovudine (AZT, ZDV) treatment to reduce the risk of perinatal HIV transmission. It remains vitally important for all pregnant women to receive adequate prenatal care, starting early in their pregnancy, and to know their HIV status so that, if infected, they can take advantage of antiretroviral treatment to significantly reduce the risk of HIV transmission to their child, and also receive optimal treatment for their own disease. Prenatal providers should encourage all pregnant women to undergo voluntary HIV testing. Such testing should be viewed as a routine part of prenatal care for all women who are pregnant.

Other Sexually Transmitted Diseases in Missouri – 2003

Sexually transmitted diseases [STDs] such as gonorrhea, chlamydia, and syphilis are important public health problems in Missouri. Each of these diseases has the potential to cause very serious long-term consequences in infected persons. In addition, the presence of any of these diseases makes HIV transmission from an HIV-infected person to his/her non-HIV-infected sexual partner two to five times more likely to occur. More specifically, biological factors make people who are infected with an STD more likely to become infected with HIV if exposed sexually; and HIV-infected people with an STD are more likely to transmit HIV to their sex partners. It follows that an essential component of HIV prevention consists of efforts to decrease the occurrence of STDs.

Gonorrhea

*Large numbers of Missourians are infected with *Neisseria gonorrhoeae* each year; 8,792 gonorrhea cases were reported in the state in 2003, and many additional persons were infected but not diagnosed and reported. Blacks continue to be very disproportionately affected. In 2000, Blacks represented 11.2% of the general population in Missouri. In 2003, 5,965 (67.8%) gonorrhea cases were reported in Blacks compared to 1,271 (14.5%) cases in Whites, and the rate of reported Black cases (947.7) was 35.4 times higher than the rate for Whites (26.8). For both Blacks and Whites, the largest numbers of cases were reported from persons in their late teens and early twenties. Among females, late teens (15-19) and early twenties (20- 24) were the age groups with the most reported cases, whereas among males, the largest numbers of cases were in the 20-24 year old age group.*

In 2003, the largest numbers of gonorrhea cases were reported from St. Louis City, followed by Kansas City, Outstate Missouri, and St. Louis County. Cases were reported from 95 (83.3%) of Missouri's 114 counties (and from St. Louis City). The annual number of reported gonorrhea cases

in Missouri decreased each year from 1989 to 1997; since that time, no sustained upward or downward trends have been seen. The 8,792 cases reported in 2003 represented a 1.8% decrease from the 8,952 cases reported the preceding year. In 2003, Missouri ranked 9th among the 50 states in rates of reported gonorrhea cases; in addition, St. Louis ranked first and Kansas City ranked seventh among U.S. cities of >200,000 population in reported rates of gonorrhea cases.*

Comment:

*Most gonococcal infections among men produce symptoms that cause them to seek curative treatment soon enough to prevent serious sequelae, but this may not be soon enough to prevent transmission to others. Among women, many infections with *N. gonorrhoeae* do not produce recognizable symptoms until complications (e.g., pelvic inflammatory disease, or PID) have occurred. If not adequately treated, 10% to 40% of women infected with gonorrhea develop PID. Among women with PID, tubal scarring will cause involuntary infertility in 20%, ectopic pregnancy in 9%, and chronic pelvic pain in 18%. Both symptomatic and asymptomatic cases of PID can result in tubal scarring that can lead to these other complications.*

In Missouri, as well as nationwide, the largest burden of infection is in Blacks, among teenagers and young adults, and in urban areas. However, gonococcal infections, although on a smaller scale, are also occurring in other groups of individuals and in non-urban areas. The rate for gonorrhea cases reported in Missouri in 2003, which was 157.1 cases per 100,000 persons, is 8.3 times higher than the Healthy People 2010 (HP2010) national objective of 19 cases per 100,000 persons.

The fact that large numbers of new infections are taking place each year in Missouri is an ongoing cause for concern, especially because of the potential sequelae (particularly in women) that can result, and because the presence of an inflammatory STD such as gonorrhea can facilitate the transmission of HIV. In addition, the occurrence of large numbers of gonococcal infections reflects the substantial prevalence of unsafe sexual practices, which can cause transmission of other STDs and HIV.

Prevention of new gonococcal infections should be an important priority, and can include efforts to provide education and promote behavior change among high-risk individuals and groups. In addition, medical providers should be encouraged and assisted to properly screen, diagnose, and treat gonorrhea in their patients.

New guidelines for managing patients with gonorrhea were published by CDC in May 2002, and are available at <http://www.cdc.gov/std/treatment/default.htm>. Because gonococcal

infections among women often are asymptomatic, an important component of gonorrhea control continues to be the screening of women at high risk for STDs.

Chlamydia

Large numbers of Missourians are infected with Chlamydia trachomatis each year; 18,570 chlamydia cases were reported in the state in 2003, and it is estimated that many additional persons were infected but not diagnosed and reported. Because of incomplete information, the race of about 25% of reported cases is not known. The rate for cases reported in 2003 in Blacks (1,313.3 cases per 100,000) was 10.6 times higher than the rate for cases in Whites (123.9). For all racial groups, the largest numbers of cases were reported from persons in their late teens and early twenties; among both White and Black females, the late teens was the age group with the most reported cases.

In 2003, the largest numbers (43.7%) of chlamydia cases were reported from Outstate Missouri, followed by Kansas City (20%), St. Louis City (18.9%), and St. Louis County (17.4%). However, the highest case rates were in St. Louis City (1,005.8 cases per 100,000), followed by Kansas City (842.7), St. Louis County (318.3), and Outstate Missouri (214.1). Only two Missouri counties did not report a chlamydia case in 2003. The annual number of reported chlamydia cases increased dramatically from 1985 through 1990, reflecting a marked increase in chlamydia testing and reporting during this period. Since 1990, the number of cases reported each year has, in general, continued to increase although at a much slower rate. The 16,181 cases reported in 2002 represented a 16% increase from the 13,949 cases reported the preceding year. The 18,570 cases reported in 2003 represented another increase—14.8%, over 2002.

In 2003, Missouri ranked 14th among the 50 states in rates of reported chlamydia cases. St. Louis City ranked fourth and Kansas City ranked eighth among U.S. cities of >200,000 population in reported rates of chlamydia cases.

Comment:

Because chlamydial infection frequently occurs without symptoms, the disease is often not diagnosed, or in some instances, not diagnosed until complications develop. Consequently, screening of persons at increased risk for C. trachomatis infection, such as young, sexually active women, is very important in finding infected persons so that they can be treated, and also so that the extent of the infection can be limited. The numbers of chlamydia cases reported, and their distribution, significantly depend on where and in what populations screening is taking place. In this regard, the Missouri Infertility Prevention Project (MIPP) has been important in

making chlamydia screening available to large numbers of young women throughout the state. This results in many additional infected individuals being detected, thus providing a more representative picture of chlamydia in Missouri. However, many women who are at risk for this infection are still not being tested, reflecting the lack of awareness among some health care providers and the limited resources available to support screening. Chlamydia screening and reporting are likely to expand further in response to the Health Plan Employer Data and Information Set (HEDIS) measure for chlamydia screening of sexually active women 15 through 25 years of age who are provided medical care through managed care organizations.

In 2002, the CDC reported that, in parts of the United States where large-scale chlamydia screening programs have been instituted, prevalence of the disease has declined substantially. There is also evidence that screening and treatment of chlamydial cervical infection can reduce the likelihood of PID. The 2000 STD treatment guidelines from CDC state that “sexually active adolescent women should be screened for chlamydial infection at least annually, even if symptoms are not present. An appropriate sexual risk assessment should always be conducted and may indicate more frequent screening for some women.”

Prevention of new chlamydial infections should be an important priority and, besides screening of high risk women, can include efforts to provide education and promote behavior change among high-risk and potentially high-risk groups. In addition, medical providers should be encouraged and assisted to properly screen, diagnose, and treat chlamydia in their patients. The new guidelines for managing patients with chlamydia, published by CDC in May 2002, are available at <http://www.cdc.gov/std/treatment/default.htm>.

Syphilis

Primary and Secondary Syphilis

The annual number of reported cases of primary and secondary (P&S) syphilis in Missouri has been decreasing since 1993. However, the 61 cases of P&S syphilis reported in 2003 represented a 79.4% increase from the 34 cases reported the preceding year. An additional 46 cases of early latent syphilis (duration of less than one year) were reported during 2003, a 9.8% decrease from the 51 cases reported in 2002.

Blacks comprise 11.2% of the population in Missouri. However, the case rate (4.6 cases per 100,000) for Blacks was 9.2 times higher than the case rate for Whites (0.5). The average age at the time of diagnosis was higher for reported cases of P&S syphilis as compared to reported cases of chlamydia or gonorrhea, and a noticeable proportion of cases were seen

in persons greater than 40 years of age. In 2003, both St. Louis City and St. Louis County reported 18 (29.5%) of the 61 reported P&S syphilis cases. Kansas City reported 17 (27.9%) of the cases and the Outstate area reported 8 (13.1%). The highest rates of reported P&S syphilis cases were in St. Louis City (5.2 cases per 100,000) with lower rates in Kansas City (3.9), St. Louis County (1.8), and the Outstate area (0.2). Seven of the state's 114 counties, St. Louis City, and Kansas City reported P&S syphilis cases in 2003.

In 2003, Missouri ranked 28th among the 50 states in rates of reported P&S syphilis cases. St. Louis City ranked 21st and Kansas City 26th among U.S. cities of >200,000 population in reported rates of P&S cases.*

Congenital Syphilis

In 2003, 4 cases of congenital syphilis were reported in Missouri. One case was reported from each of the following areas: St. Louis City, St. Louis County, Kansas City, and Clay County. In 2002, one case was reported in Missouri.

Comment:

The clear majority of syphilis cases continued to occur in the St. Louis area (especially St. Louis City). The largest burden of infection was clearly in Blacks. In contrast to chlamydia and gonorrhea, cases of P&S syphilis are more likely to be seen in persons in their later 30's and older. The numbers of reported cases of P&S syphilis in Missouri were much smaller in comparison to other STDs such as gonorrhea and chlamydia. However, severe disease can result from an untreated syphilis infection and the presence of an ulcerative STD such as syphilis can facilitate the transmission of HIV. Also, significant resources must be devoted to the investigation and follow-up of even a single syphilis case. Therefore, the control and eventual elimination of this infection remains an important priority.

3.3.6. Qualitative Research: Results of Title V Focus Groups

As indicated earlier, multiple methods were applied by DCH to support this Title V five-year needs assessment of MCH population groups in Missouri. Recognizing the critical need for community input into this assessment, a large investment in time and resources was made to support "focus group" discussions that were designed to (1) draw a representative sample of consumer MCH population groups into this process and (2) to facilitate that input into this process from across Missouri. Of all the methods employed to generate information for this needs assessment, this qualitative research may be the most revealing. A summary of the methodology and results of this focus group process follows.

3.3.6.1. Methodology

Between July and September of 2004, twelve focus groups were conducted across Missouri to generate qualitative research input for this five-year MCH assessment. The University of Missouri-Kansas City, Institute for Human Development, directed the focus groups. Targeted populations were women of childbearing age, adolescents, parents/caregivers, and families of children with or without disabilities. The focus groups were conducted in both rural and urban areas. A survey was also conducted that looked at personal health care utilization and community resources.

Locations for the focus groups were determined by availability of facilities and familiarity of participants to the sites, such as, libraries, community centers, and hospital conference centers.

Recruitment depended upon the city/town, available locations, and type of focus group. Brochures and fliers were sent to local organizations and service providers, clients, and consumers. For each site, 1,000 brochures were printed and distributed. To reach underprivileged families, women, adolescents, and parent(s) of children with disabilities, St. Louis YWCA's, area WIC offices, University Outreach and Extension Offices, Regional Centers, Parent Policy Partners, and MO-Can centers were among the offices and agencies contacted. Local 4-Hs were contacted to assist with the recruitment of adolescents and their families as well as health departments, Healthy Start and Head Start Programs, school nurses and officials, Head Injury Coordinators, and other disabilities organizations. Efforts were made to identify and contact individuals in the chosen communities who could reach a number of individuals and facilitate their participation in the focus groups. Emails were sent out through distribution lists. Information was sent out through a Sunday morning radio program for Latinos in Sedalia. A \$20.00 Wal-Mart gift certificate was given to each participant except for the provider focus groups.

The following tables were taken from the "Findings from the Conduct of a Maternal and Child Health Needs Assessment for the Missouri Department of Health and Senior Services", by University of Missouri-Kansas City, Institute for Human Development, submitted September 30, 2004.

As the following table indicates, ten of the groups consisted of health consumers and two groups consisted of providers. Two of the consumer focus groups were conducted among Latino consumers to better represent Hispanic populations emerging in Missouri:

TABLE 44

**Town/City Locations and
 Dates of Focus Groups**

| Town/City | Type of Group | Focus Group Date |
|------------------|----------------------|-------------------------|
| Kansas City | Provider | June 30 |
| St. Louis | Consumer | July 20 |
| Sikeston | Provider | July 21 |
| Kennett | Consumer | July 21 |
| Columbia | Consumer | July 28 |
| Rolla | Consumer | July 29 |
| Joplin | Consumer | August 4 |
| Springfield | Consumer | August 5 |
| Chillicothe | Consumer | August 17 |
| Macon | Consumer | September 13 |
| Kansas City | Latino Consumer | September 2 |
| Sedalia | Latino Consumer | September 15 |

Source: Table I-1 of UMKC Focus Groups Findings

These focus groups were organized and facilitated by the Institute for Human Development of the University of Missouri-Kansas City. The numbers of participants who attended focus groups by geographic site and an overall demographic profile of total participants are summarized in the following tables from their September 30, 2004, findings:

TABLE 45

Focus Groups' Attendees

| Sites | Number of Participants | Number of Surveys |
|----------------------|-------------------------------|--------------------------|
| Columbia | 6 | 6 |
| Joplin | 16 | 16 |
| Kennett | 68 | 62 |
| Macon | 8 | 8 |
| Rolla | 8 | 8 |
| Sedalia - Latino | 26 | 26 |
| Springfield | 1 | 1 |
| St. Louis | 16 | 16 |
| Chillicothe | 9 | 9 |
| Kansas City - Latino | 20 | 20 |
| Total | 178 | 172 |

Source: Table II-1 of UMKC Focus Groups Findings

TABLE 46

Focus Groups' Demographics

| | | |
|---------------|----------------------------------|----------------|
| Gender | Male | 25 (16.8%) |
| | Female | 124 (83.2%) |
| Age | Less than 21 | 36 (24.0%) |
| | 21-40 | 61 (40.7%) |
| | 41-60 | 47 (31.3%) |
| | 61 and older | 6 (4.0%) |
| | | |
| Race | African-American | 35 (33.0%) |
| | White | 64 (60.4%) |
| | Asian | -0- |
| | American Indian or Alaska Native | 7 (6.6%) |
| | Other, please specify | -0- |

Source: Table II-2 of UMKC Focus Groups Findings

3.3.6.2. Pre-Focus Group Survey Results

At the beginning of each focus group, each participant was asked to complete a survey related to health care issues. The number of focus group participants that completed the written survey was summarized in Table 46. The information gathered through this pre-focus group survey yielded important results. One portion of the survey looked at the type of health or community services that a family needed or had used recently. Almost two-thirds had used general medical care for colds, fevers, coughs, injuries, allergies, etc. A significant percent (61%) reported seeing a dentist. Only 40% reported preventive health care like breast cancer screening. Half the respondents noted vision care, eyeglasses, or hearing services for children. A significant percent of this population (28.8%) had utilized food stamps recently or needed food stamps. The following table lists these findings:

TABLE 47

**Which Health or Community Services Your Family Either
 Needs Now, or Has Used Recently?**

| Content | No | Yes |
|--|----------------|---------------|
| Prenatal or pregnancy care | 97 (66.4%) | 49 (33.6%) |
| Delivering or having a baby | 111 (76.0%) | 35 (24.0%) |
| General medical care for colds, flu, fevers, coughs, injuries, allergies, etc. | 53 (36.3%) | 93 (63.7%) |
| Childhood immunizations | 91 (62.3%) | 55 (37.7%) |
| Preventive health care like breast cancer screening | 89 (61.0%) | 57 (39.0%) |
| Vision care, eyeglasses or hearing for children | 73 (50.0%) | 73 (50.0%) |
| Dental care | 56 (38.4%) | 90 (61.6%) |
| Nutritional services, Women, Infants and Children (WIC) | 110 (75.3%) | 36 (24.7%) |
| Food Stamps | 104 (71.2%) | 42 (28.8%) |
| Temporary Assistance to Needy Families (TANF) | 122 (83.6%) | 24 (16.4%) |
| Family planning, birth control | 116 (79.5%) | 30 (20.5%) |
| *Specialized Healthcare needs (such as speech therapy) | 116 (79.5%) | 30 (20.5%) |
| Cancer care | 117 (80.1%) | 29 (19.9%) |
| HIV/AIDS care | 135 (92.5%) | 11 (7.5%) |
| Testing and care for sexually transmitted diseases | 131 (89.7%) | 15 (10.3%) |
| Other | 123 (84.2%) | 23 (15.8%) |

Scale: 1=No... 2=Yes

Source: Table II-4 of UMKC Focus Groups Findings

The participants in the focus groups were surveyed concerning how they felt about different aspects of health care, including public health. The ratings for these items were on a five-point scale: (1=strongly agree to; 5= strongly disagree). In general, the people who answered the survey were aware of community medical services (mean of 2.23). School nurses were also available for this population (approximately 57%). One MCH-related issue emerged through agreement with respondents with the statement “There are many services and supplies that insurance or Medicaid does not pay for and requires me to pay out-of-pocket.” Here 36.9% strongly agreed with the statement and an additional 23% agreed with this statement. Funding/Reimbursement of health care expenses was an issue for many individuals. To the statement “I often cannot get the health services I need either because I cannot pay for them or I cannot find places in

the community that will provide them for free”, 27.6% strongly agreed and 19.4% agreed. A similar statement “My family can get the healthcare we need and are able to pay either with our own or community resources” was answered in the affirmative by almost half of the respondents. Finding Medicaid providers was cited as a problem by 45.9%. Transportation also posed a challenge for at least a third of the population. A significant percent of respondents reported that they used the local health department for some of their healthcare needs. Almost two thirds reported either strongly agreeing or agreeing with the statement describing health department utilization. Less than 20% use the DHSS Web site. There were, however, almost 40% who reported using community education resources such as prenatal and parenting classes. Respondents’ feelings about community health issues are summarized in the following table:

TABLE 48
Indicate Feel About the Community Health Issues

| Content | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | Mean (a) |
|--|-----------------------|---------------|----------------|-----------------|--------------------------|-----------------|
| I am aware of community medical services I need. | 44 (31.7%) | 49 (35.3%) | 22 (15.8%) | 15 (10.8%) | 9 (6.5%) | 2.25 |
| The community medical services I have used were satisfactory. | 31 (27.4%) | 46 (40.7%) | 17 (15.0%) | 17 (15.0%) | 2 (1.8%) | 2.23 |
| School nurses are available for my child's healthcare needs at school. | 20 (23.0%) | 30 (34.5%) | 23 (26.4%) | 10 (11.5%) | 4 (4.6%) | 2.40 |
| My family can get the healthcare we need and are able to pay either with our own or community resources. | 21 (16.5%) | 40 (31.5%) | 23 (18.1%) | 26 (20.5%) | 17 (13.4%) | 2.83 |
| I often cannot get the health services I need either because I cannot pay for them or I cannot find places in the community that will provide them for free. | 37 (27.6%) | 26 (19.4%) | 27 (20.1%) | 27 (20.1%) | 17 (12.7%) | 2.71 |
| I could not find health services (such as dentist or doctor) because my insurance was Medicaid. | 40 (32.8%) | 16 (13.1%) | 26 (21.3%) | 19 (15.6%) | 21 (17.2%) | 2.71 |
| There are many services and supplies that insurance or Medicaid does not pay for and requires me to pay out-of-pocket. | 48 (36.9%) | 31 (23.8%) | 25 (19.2%) | 14 (10.8%) | 12 (9.2%) | 2.32 |
| I have problems with transportation to health care services. | 28 (20.9%) | 18 (13.4%) | 28 (20.9%) | 33 (24.6%) | 27 (20.1%) | 3.10 |
| I use the local health department for some of my healthcare needs. | 18 (14.0%) | 40 (31.0%) | 26 (20.2%) | 22 (17.1%) | 23 (17.8%) | 2.94 |
| I use community education resources such as prenatal and parenting classes to help my family. | 23 (19.3%) | 24 (20.2%) | 30 (25.2%) | 19 (16.0%) | 23 (19.3%) | 2.96 |
| My family or I have used the Department of Health and Senior Services internet website for information. | 8 (6.5%) | 15 (12.1%) | 33 (26.6%) | 29 (23.4%) | 39 (31.5%) | 3.61 |
| My family or I have obtained the Department of Health and Senior Services Consumer/Buyer's Guides for managed care plans in Missouri. | 9 (7.2%) | 14 (11.2%) | 34 (27.2%) | 31 (24.8%) | 37 (29.6%) | 3.58 |

(a) 1=Strongly agree...5=Strongly disagree
 Source: Table II-6 of UMKC Focus Groups Findings

The focus group participants were also surveyed concerning a variety of services rated as to *being available, not available, or don't know if they are available*. Almost all of the participants know about childhood immunization availability (86.2%). Participants were also cognizant about general medical care (78.0%), childbirth facilities (78.1%), and family planning (72.6%). Only half saw Temporary Assistance to Needy Families (TANF) (50.5%) as being available. Specialized healthcare services were perceived available by 45.7%. There were several services that at least 25% of respondents did not know were available. These included services for specialized health needs (38.6%); temporary financial assistance (37.6%), and preventive health care like breast cancer screening (25%). These findings are summarized in the following table:

TABLE 49

Availability of Health Services

| Content | Are available | Are not available | Don't know if they are available |
|--|----------------------|--------------------------|---|
| Prenatal and pregnancy care | 91 (76.5%) | 4 (3.4%) | 24 (20.2%) |
| Childbirth facilities, Delivery of Babies | 89 (78.1%) | 3 (2.6%) | 22 (19.3%) |
| General Medical Care for colds, flu, fevers, coughs, injuries, allergies, etc. | 99 (78.0%) | 17 (13.4%) | 11 (8.7%) |
| Childhood Immunizations | 106 (86.2%) | 3 (2.4%) | 14 (11.4%) |
| Preventive health care like breast cancer screening | 78 (65.0%) | 12 (10.0%) | 30 (25.0%) |
| Vision Care, eyeglasses or Hearing for children | 69 (58.0%) | 23 (19.3%) | 27 (22.7%) |
| Dental Care | 68 (55.3%) | 37 (30.1%) | 18 (14.6%) |
| Women Infants Children (WIC) | 87 (74.4%) | 12 (10.3%) | 18 (15.4%) |
| Food Stamps | 73 (62.9%) | 17 (14.7%) | 26 (22.4%) |
| Temporary Financial Assistance (TANF) | 55 (50.5%) | 13 (11.9%) | 41 (37.6%) |
| Family Planning, birth control | 82 (72.6%) | 11 (9.7%) | 20 (17.7%) |
| Testing and care for sexually transmitted diseases | 73 (63.5%) | 10 (8.7%) | 32 (27.8%) |
| Specialized Healthcare needs | 58 (45.7%) | 20 (15.7%) | 49 (38.6%) |

Source: Table II-7 of UMKC Focus Groups Findings

The participants noted how they paid for health services. There were approximately 40% who paid for prenatal and pregnancy care and childbirth facilities and delivery of babies through insurance and 40% through Medicare/Medicaid. A larger percent could not afford general medical care for colds, flu, fevers, coughs, injuries, allergies, etc. (26.3%). Approximately a third of the focus group attendees could not afford preventive health care such as breast cancer screening, vision care, and eyeglasses; or hearing for children (25.3%); dental care (36.8%); or specialized health care needs (34.75%). The following table presents these findings:

TABLE 50

Payment for Health Services

| Content | I pay for with insurance | I pay for with Medicare/Medicaid | I cannot afford to pay |
|--|---------------------------------|---|-------------------------------|
| Prenatal and pregnancy care | 36 (40.9%) | 37 (42.0%) | 15 (17.0%) |
| Childbirth facilities, Delivery of Babies | 36 (40.9%) | 36 (40.9%) | 16 (18.2%) |
| General Medical Care for colds, flu, fevers, coughs, injuries, allergies, etc. | 44 (37.3%) | 43 (36.4%) | 31 (26.3%) |
| Childhood Immunizations | 32 (34.0%) | 50 (53.2%) | 12 (12.8%) |
| Preventive health care like breast cancer screening | 38 (40.0%) | 23 (24.2%) | 34 (35.8%) |
| Vision Care, eyeglasses or Hearing for children | 35 (35.4%) | 39 (39.4%) | 25 (25.3%) |
| Dental Care | 38 (32.5%) | 36 (30.8%) | 43 (36.8%) |
| Specialized Healthcare needs | 36 (35.6%) | 30 (29.7%) | 35 (34.7%) |

Source: Table II-8 of UMKC Focus Groups Findings

Another question asked in this pre-focus group survey was where the participant had received their health service(s). The options were: (1) from a private physician, (2) from a community clinic, (3) from a public health department, or (4) unsure. The following table provides a summary of responses to this question:

TABLE 51

Where Received Health Services

| Content | I get from a private physician | I get from a community clinic | Health Department | Don't know unsure |
|--|---------------------------------------|--------------------------------------|--------------------------|--------------------------|
| Prenatal and pregnancy care | 49 (49.5%) | 24 (24.2%) | 6 (6.1%) | 20 (20.2%) |
| Childbirth facilities, Delivery of Babies | 45 (48.4%) | 26 (28.0%) | 4 (4.3%) | 18 (19.4%) |
| General Medical Care for colds, flu, fevers, coughs, injuries, allergies, etc. | 66 (55.5%) | 28 (23.5%) | 10 (8.4%) | 15 (12.6%) |
| Childhood Immunizations | 36 (33.6%) | 26 (24.3%) | 37 (34.6%) | 8 (7.5%) |
| Preventive health care like breast cancer screening | 49 (44.5%) | 19 (17.3%) | 16 (14.5%) | 26 (23.6%) |
| Vision Care, eyeglasses or Hearing for children | 59 (52.2%) | 17 (15.0%) | 9 (8.0%) | 28 (24.8%) |
| Dental Care | 58 (48.7%) | 24 (20.2%) | 8 (6.7%) | 29 (24.4%) |
| Specialized Healthcare needs | 46 (41.8%) | 22 (20.0%) | 17 (15.5%) | 25 (22.7%) |

Source: Table II-9 of UMKC Focus Groups Findings

The major issues and findings that surfaced as part of the pre-focus group(s) survey, can be summarized as follows:

- Almost two thirds had used general medical care for colds, fevers, coughs, injuries, allergies, etc., in the past year.
- Approximately 60% agreed that there were many services and supplies that Medicaid or insurance did not pay for and they had to pay out-of-pocket.
- Funding for medical services was an issue for many participants. Approximately a quarter strongly believed they could not pay for them or find free care in their community and an additional 19.4% agreed.
- Many agreed with the statement that they used the health department for some of their health care. Almost 40% reported attending some community education. However, fewer used the DHSS website (<20%).
- Only 55% of women over 40 years of age reported using preventive screening. The percent for all respondents was 40%.
- A significant percent of population (28.8%) had taken advantage of food stamps recently or needed them.
- Almost all participants know where to get childhood immunizations (86.2%), general medical care (78.0%), childbirth facilities (78.1%) and family planning (72.6%). There were few who saw temporary financial assistance (50.5%) or specialized health care needs (45.7%) as being available.

- Over a quarter described that they could not pay for general medical care and another third could not afford preventive health care. Similar statistics were present for vision and hearing care (25.3%), dental care (36%), or specialized health care needs (34.8%).
- A private physician provided general medical care for 55.5% of the sample. Approximately a quarter of the time, the community clinic was used for most services.
- Spanish-speaking respondents and those who listed themselves as Latino utilized fewer services and had more challenges (e.g., transportation) than their English-speaking counterparts.
- Males were less cognizant about services (availability, cost, payment sources, etc.) than females.
- Whites were more likely to utilize private physicians while African-Americans were more likely to not be able to afford medical services.

The following text tables (taken from the University of Missouri-Kansas City, Institute for Human Development, September 30, 2004, report) provide summaries of the focus groups' responses to the questions asked at the meetings held for the focus groups, provider focus groups, and Latino focus groups.

3.3.6.3. Consumer Focus Group Participant Results

3.3.6.3.1. English-Speaking Focus Group Participant Results

These responses are from the English-speaking focus groups that were held throughout the state. The locations were Chillicothe, Columbia, Joplin, Kennett, Macon, Rolla, St. Louis, and Springfield.

TABLE 52

Summary of Question #1a

To the question regarding what kind of health problems the participants had and where they received their health care (preventive and treatment), the following was given:

- *Private Physicians:* Many received their care at private physicians.
- *Specialists:* While participants used specialists, challenges were noted, especially with mental health care.
- *Urgent Care:* There were some who went to emergency services for their care.
- *Health Departments:* The Health Department was cited particularly for immunizations, maternal/child care and prevention screening.
- *Clinics:* There were many different types of clinics from home maintenance organizations, tertiary care centers, to walk-in clinics and hospital-related clinics. Even community agencies, Planned Parenthood, schools, and churches were mentioned.
- *Regional Center:* Some care was provided at the regional centers.
- *Out-of-Town Professionals:* Some people went out-of-town to access specialists.
- *Miscellaneous:* Some miscellaneous comments included Ronald McDonald House, grant sources, home health and hospice.

Source: UMKC Focus Groups Findings, 2004

TABLE 53

Summary of Question #1b:

The second part of the question looked at the type of problems these focus group participants had had trying to get health care, whether it was no insurance, doctors who would not take their health insurance, transportation, etc. The major categories of response were:

- *No Insurance/Stuck in the Middle:* A number of people did not have insurance because they could not afford it, but made too much for Medicaid.
- *High Cost of Insurance:* The increase in cost of insurance has caused many to eliminate this from their budget and hope that they or their family do not experience a medical crisis.
- *Insurance Companies: High Co-pays or Won't Cover Costs:* There can be such a high co-pay that many people cannot afford insurance. In addition, insurance does not cover all the costs of medical care.
- *Quality Assurance:* There is a need to assure that there is a quality assurance mechanism to be a gatekeeper of insurance and Medicaid.
- *Lack of Information about Availability of Resources:* It is difficult to know about all the resources, even when you are educated. This was especially true for people with children with disabilities and those with mental illness.
- *Access to Mental Health Care:* Access to mental health care was seen as a challenge.
- *Medications:* Issues with medication often include high co-pays and problems deciding whether to pay for medications or living expenses.
- *Holistic Treatment of the Person:* Specialists were seen as focusing on a narrow aspect of the person, missing many others that could assist in ameliorating health problems.
- *When Clinics Open:* Many clinics, especially in rural areas, were only open on a 9-5 basis.
- *Emergency Services:* There is a need for a better emergency service, especially in rural areas.
- *Lack of Physicians and Other Health Care Professionals:* It is often challenging to find a physician or a specialist. The same is true of dentists.
- *Vision Care:* Vision care, especially in rural areas, was difficult to find.
- *Transportation:* Transportation has been a major issue in many aspects of medical and service care.
- *Discrimination:* People with Medicaid believed that they were discriminated against compared to those not on Medicaid.

Source: UMKC Focus Groups Findings, 2004

TABLE 54

Summary of Question #2a

The second question related to the use of a health place such as a community health center, health department or school health nurse. This section summarizes these findings:

- *Planned Parenthood:* Many places discussed the use of Planned Parenthood, especially for family planning.
- *Community Clinics:* Community clinics provided many different types of care
- *Health Departments:* The health departments were sites for STD, HIV/AIDS testing as well as immunizations.
- *Health Fairs:* Some people went to health fairs.
- *Schools:* School settings conducted testing and screening procedures.

Source: UMKC Focus Groups Findings, 2004

TABLE 55

Summary of Question #2b

To the question “Has anyone here had or heard about anyone else having problems getting service if they had Medicaid?”, many answers were provided.

- *Benefits:* The benefits of Medicaid related to having medical bills paid for.
- *Need for Co-Pay:* There is sometimes a need for co-pay with Medicaid.
- *Providers and Medicaid:* Some providers do not take Medicaid. This includes dentists, physicians as well as vision people.
- *Paperwork:* The paperwork involved with Medicaid can be daunting.
- *Adult Care:* While Medicaid often covers children, it does not cover adults.
- *Medicaid Benefits and Working:* Some people with disabilities are worried that if they work, they will lose their Medicaid benefits.

Source: UMKC Focus Groups Findings, 2004

TABLE 56

Summary of Question #3

The third question looked at where people learned about keeping healthy. The responses are summarized herein:

- *Schools:* School classes provide education classes, especially for children and adolescents.
- *Health Department:* Some health departments have education about diseases and other issues.
- *Hospitals:* Hospitals often offer classes (e.g., CPR).
- *Classes:* There was seen a lack of education.
- *Health Fairs:* Health fairs can provide the public with information about these issues.
- *Physicians:* Physicians provide some education to their patients.
- *Support Groups:* People with similar conditions can help each other.
- *Parent Advocate:* There are parent advocates who help others.
- *Lack of Availability:* There is a lack of availability for many of these services.
- *Internet:* Many people learn about illnesses over the Internet.
- *Health Fairs and Conferences:* Health fairs and conferences are sites for learning about how to take care of oneself.
- *Pharmacists:* Some pharmacists teach those who obtain their medications about these drugs.

Source: UMKC Focus Groups Findings, 2004

TABLE 57

Summary of Question 4a

To the question “What types of help do you and your children need to have adequate health care (insurance, money)?”, the following responses were given:

- *Dentist Care:* Many challenges were experienced in accessing dental care (e.g., funding, finding providers).
- *Additional Physicians/Specialists:* The focus group respondents highlighted a need for additional physicians, especially specialists.
- *Insurance:* Many people can’t afford medical insurance.
- *Additional Providers who Accept Medicaid:* There is a lack of providers who accept Medicaid.
- *Additional Clinics/Groups of Doctors:* A lack of access was seen in many places.
- *Mental Health Services:* The focus group respondents believed mental health care is essential.
- *Medications:* Medications can be quite expensive.
- *Affordable Care/Insurance Needs:* Focus group respondents reported difficulty in obtaining affordable insurance. Finding providers who accept Medicaid was also reported as a difficulty.
- *Better Training for Care Providers:* Respondents residing in some small towns felt the staff of hospitals or clinics did not have sufficient training.

Source: UMKC Focus Groups Findings, 2004

TABLE 58

Summary of Question #4b

To the question “What type of medical things (such as band-aids, diapers) do you pay out of your own pocket?”, the following responses were given:

- *Medication:* Many focus group respondents reported having to pay for medications out-of-pocket.
- *Services not covered by Medicaid or Insurance:* There are many services that are not covered by Medicaid or insurance (e.g., lead screening, chiropractic care, vision care, specialist services related to such disabilities as autism and epilepsy).
- *Supplies:* Out-of-pocket expenses listed by focus group respondents included diapers for persons 21 years of age and older and equipment such as crutches, walkers, and wheelchairs.

Source: UMKC Focus Groups Findings, 2004

TABLE 59

Summary of Question #5a

To the question “What is the biggest unmet health care need in your community?”, the following responses were given:

- *Availability of Providers:* A critical need listed throughout the rural areas of Missouri related to the lack of availability of providers (e.g., physicians for children and specialists).
- *Accessible Health Care:* Focus group respondents cited a need for evening and weekend clinics and longer hours to see a doctor after work. Respondents also felt there was a need for an urban care clinic.
- *Health Problems:* Many health problems were cited as unmet needs (e.g., diabetes, hypertension, obesity, and lack of healthy after-school activities, exercise, and healthy lifestyles).
- *Mental Health Issues:* Two mental health issues were cited: (1) Psychiatric care and (2) Mental health care.
- *Affordable Care/Funding:* More funding should be allocated for health care needs. Many sites discussed some aspect of affordable funding. Problems cited included: co-pays were too high; lack of insurance meant could not afford medical care; medication costs are too high; and the high cost of malpractice insurance.
- *Dentists:* Focus group respondents from rural towns expressed a need for more dentists. Dentists who would take Medicaid was also listed, as was the need for dental specialists.
- *More Knowledgeable Providers:* A number of focus group participants wanted more knowledgeable providers.
- *Medicaid Issues:* Several issues related to Medicaid (e.g., discrimination of Medicaid people, faster reimbursement of doctors/dentists).
- *Medications:* Medications were seen by some respondents as the biggest unmet health care need, including no 24-hour pharmacies.
- *Caregiver Issues:* There is a need for respite care to prevent burnout of caregivers.
- *Miscellaneous:* Miscellaneous issues included access to technology, child care, and transportation.

Source: UMKC Focus Groups Findings, 2004

TABLE 60

Summary of Question #5b

To the question “What are other health care needs in your community that are not met?”, the following responses were given:

- *Need for Information/Education:* There is a need for information on referral sources and how to locate health care professionals. There is also a need for health education.
- *Lack of Health Care Providers:* There is a lack of health care providers throughout the state, especially because of recent dramatic increases in malpractice insurance.
- *Medicaid Problems:* Medicaid was seen as the only system that covered many of the medical needs of the indigent. One respondent requested an increase in the membership into the Medicaid system. Billing problems were noted with Medicaid.
- *Targeted Case Management:* One respondent believes that targeted case management adds to the cost of services and does not believe it is serving any useful purpose.
- *Cost of Insurance/Medications:* The high cost of insurance and medications was seen as a problem, particularly for persons living on low Social Security incomes.
- *Prevention:* Some focus group participants wanted more focus on health screenings.
- *Miscellaneous:* Prevention of injuries was cited as a needed service.

Source: UMKC Focus Groups Findings, 2004

TABLE 61

Summary of Question #6

To the question “How has the health care system changed over the past five years?”, the following responses were given:

- *Positive Changes:* Positive changes cited included: Technology, public awareness, Medicaid accepts more prescription drugs, SEMO is a little better, slow increase in percentage of physicians and other healthcare professionals who speak Spanish, more clinics.
- *Falling Between the Cracks:* Some persons don’t make enough money to pay for insurance and too much money to qualify for Medicaid. Self-employed persons who have assets cannot qualify for Medicaid. If they sell off their assets, they’ve lost their livelihood.
- *Less Quality Care:* Hospitals were seen as getting worse. Business focus of hospitals was seen as a reason for less quality of care, as was cuts in benefits and lack of access.
- *More Limited Services:* Services were seen as being more limited at this time.
- *Insurance Issues:* Insurance co-pays are increasing.
- *Need for More Regulations:* There was a perceived need for more regulations, both in the insurance industry and for pharmaceuticals.
- *Providers: Higher Malpractice Insurance/Can’t Afford Medicaid:* The high price of malpractice insurance has been a recent change in Missouri. Also, some physicians “*don’t have time to fight with Medicaid.*”

Source: UMKC Focus Groups Findings, 2004

TABLE 62

Summary of Question #7

To the question “If you could make the “perfect” health care system in your community, what would it look like?”, the following responses were given:

- *More Doctors:* Some doctors are full and don’t take new patients.
- *More Accessible Clinics:* There is a lack of clinics and emergency rooms are used for routine medical care.
- *Support Groups/Education:* There is a need to educate parents, family members and care providers. One participant cited a need for support groups.
- *Nursing Care:* Nursing care can be a critical component in any health care system. Two suggestions were: (1) an “Ask the Nurse” hotline and (2) the use of a nurse practitioner, especially in a small town.
- *Universal Care:* Many individuals who do not have health insurance lack access to medical care. Universal coverage where everybody has equal access to what is necessary was suggested as a component of a “perfect” health care system.
- *More Dentists:* There is a need for more dentists.
- *Better Services for People with Disabilities:* It was felt that adults and children with disabilities get lost in the enormous DFS office. It was suggested that an office for people with disabilities be carved out. Another issue was price of medication for people with disabilities.
- *Public Awareness of Resources:* A cited need was to find a way to let people know of what is available.
- *Insurance Issues:* There is a need for regulations throughout the insurance companies in order for *services to be done to serve the people, not serve the dollar*. Income levels need to change for qualifying for Medicaid or a sliding scale to help with affordability for Medicaid and private insurance.
- *Transportation:* Two rural sites wanted better transportation.

Source: UMKC Focus Groups Findings, 2004

TABLE 63

Summary of Question #8

To the question “How can the Department of Health and Senior Services help your community have this “perfect” health care system?”, the following responses were given:

- *More Preventative Health:* An increased preventative service was suggested, including health care screening and health fairs.
- *Universal Care:* There was seen to be a need for access to health care for all citizens.
- *More Education and Information:* Several suggestions were made regarding educating the public, such as knowledge about programs and more information about the First Steps program.
- *First Steps Issues:* Issues related to First Steps program included the difficulty of accessing the program, the need for more therapists, and a lack of coordination between state agencies that participate in the program.
- *Organize Themselves:* Recent changes in state agency structure caused some issues for one participant.
- *Personal Care Assistants:* Those who have a stable personal care assistant are typically very satisfied with the arrangements. For others, there is a constant turnover in staff and they are often unreliable.
- *Assuring Quality Assurance:* There have been serious problems with services, which would be ameliorated if there were quality assurance in place.
- *Follow-Up Medical Care:* In one area children are screened for hearing and vision, but there are no services.
- *More Family Advocacy:* In order to achieve optimum outcomes, parents must be incorporated into many aspects of any program.
- *Medical Ethics:* The manner in which health professionals interact with families is a concern.
- *Service Organization:* At the current time, the medical service delivery system, for some, seems very fragmented and not coordinated.
- *Transportation:* “Working toward a resolution regarding transportation,” was cited as an issue by one participant.

3.3.6.3.2. Provider Focus Group Participant Results

These following responses are from the two focus groups held with providers. One was held in Kansas City (an urban setting) and one in Sikeston (a rural setting). There were 28 providers at the Kansas City focus group and 18 providers at the Sikeston focus group.

| TABLE 64 | SUMMARY |
|---|---------|
| <p>To the question “What type of health problems are present in your community and where do people go to get their prevention and treatment care?”, the provider respondents had many answers. These included the following:</p> <ul style="list-style-type: none">• <i>Sites Where Community Residents Go:</i> Both sites named a range of sites from <i>everything to private doctors and emergency rooms.</i>• <i>Preventive Services:</i> Providers saw preventive services as a luxury. Concern was raised because funding for preventive programs was being funneled to other areas. | |

Source: UMKC Focus Groups Findings, 2004

TABLE 65

SUMMARY

Provider response to the question “What types of challenges have you heard about individuals encountering in trying to get health care?” was numerous. These included the following:

- *Lack of Funding:* Providers saw lack of funding as a barrier for both consumers and health care providers.
- *Shortage of personnel:* Providers saw the *medical shortage of personnel* as a particular problem in the Bootheel of Missouri.
- *Physicians not taking Medicaid:* Affording insurance or being qualified for the Medicaid program was viewed as a health care barrier by providers in Kansas City and Sikeston.
- *Physicians Taking Medicaid Overwhelmed:* Physicians that accept Medicaid are very few. Providers said that physicians that do accept Medicaid are *so overwhelmed that they're (patients) walking out because there aren't enough providers that will accept Medicaid patients.*
- *Lack of Dental Care:* Many providers stated that dental care was *the most crying need.*
- *Language Barriers:* Providers agreed that communicating with the growing number of non-English speaking immigrants was service barrier.
- *Education:* Providers said education for consumers on how the health care system operates was a problem.
- *Working Families:* Families that work have less time to pay attention to health, and it is a problem.
- *Lack of Trust:* Providers feel that health care consumers do not trust their health providers, because they are afraid *he's going to give me something I don't need.*
- *Lack of Transportation:* Providers viewed Medicaid transportation services as problematic because *they don't show up. They show up late.*
- *Mental Health:* Providers in Sikeston saw mental health issues as a barrier. There are many consumers that have *depression.*
- *Use of Grant Funds:* Providers in Sikeston cited the misuse of statistics to acquire grant funding as a barrier. *I've found that a lot of our data and information that is bad or negative is used to get grants. We don't see the aid.*
- *Lack of Service Coordinator:* Kansas City providers listed the lack of service coordinators that can help patients and clients decide what services to seek and how to seek them. Another gave the example that *a primary care center takes care of all of these things rather than one center doing this and another center doing that...One stop shopping is a wonderful idea.*

Source: UMKC Focus Groups Findings, 2004

TABLE 66

SUMMARY

To the questions "Is there public health care in your region? Are there school nurses? How have these been viewed by the individuals and professionals?", the providers had several responses. These include the following:

- *Family Planning:* Family planning education is provided in the Sikeston area, we do lots of family planning. But we lost all of our family planning from the State, so we've got a shortage.
- *School Health:* School nurses were viewed as providing many health services for residents in both Kansas City and Sikeston.
- *Other Public Health:* Providers noted that there are a lack of health services for women, maternal, and child health. Providers in Sikeston were unaware of lack of funding in Kansas City. One provider stated, *in Kansas City, they've got lots of money to do that.*

Source: UMKC Focus Groups Findings, 2004

TABLE 67

SUMMARY

To the question "Has anyone here experienced or heard about anyone experiencing problems getting services if they had Medicaid?", participants had many responses.

These included:

- *Lack of Specialists:* Providers reported specialists do not accept Medicaid. *They don't want to do it, because people don't show up for appointments, they have compliance issues, so it doesn't really matter what we pay them.*
- *Mental Health:* Mental health professionals were also listed as a service that is hard to access.
- *Immigrant Care:* Immigrants have special difficulty obtaining Medicaid because it is not available for a lot of folks unless they have papers or are pregnant.

Source: UMKC Focus Groups Findings, 2004

TABLE 68

SUMMARY

To the question “What are educational resources in your community and are they adequate?”, providers had many answers. These included the following responses:

- *Health Education:* Sikeston has a Healthy Start program in a five county area; it gives a series of healthy baby classes... from prenatal care all the way to teen pregnancy. HIV, AIDS, domestic violence.
- *Prenatal Care:* Providers said that more free prenatal classes needed to be offered more often and in many more places that are easily accessible.
- *Health Department:* Providers cited the health department as an educational resource for children from kindergarten through high school.
- *Sex Education:* Providers said that sex education was lacking in many places. Kids aren't getting good information.
- *Parenting:* The Parents as Teachers programs were viewed by providers as a good resource for parenting classes.

Source: UMKC Focus Groups Findings, 2004

TABLE 69

SUMMARY

Participants had many comments about the gaps in the “Type(s) of financial services available for low-income individuals for adequate health care”. These comments included:

- *Selling Medication:* Providers said some individuals sell their medications on the street *so that they can have electricity or hot water, or you know they’re doing it a lot for their needs.*
- *Few Programs Available:* Providers in Kansas City said there are not many programs other than the CHIP+ program that provides financial services for low-income individuals. They went on to say that, *if the CHIPS program gets cut, there’s even less.*

Source: UMKC Focus Groups Findings, 2004

TABLE 70

SUMMARY

To the question “How has the health care system changed in the past five years?”, providers had many responses. These responses included the following:

- *Reimbursement Levels:* Providers said that the reimbursement levels for Medicaid is lower. Better reimbursement levels would mean an adequate level of health care professionals.
- *Attitude of Patients:* Providers said patients had changed over five years. There are many more patients visiting the emergency rooms for care too often.
- *People Desperate for Care:* Providers said people call in for help with bills because *they don't have any money* due to less funding.
- *Problems with Licensure:* Many providers had to go back to school to become re-qualified for their positions in the State of Missouri. It is a barrier.
- *Clients with More Complex Challenges:* There is an increase of patients with many problems, *five or six years ago, they may have had only one problem, but because that has gone unnoticed until later, now they have five or six.*
- *More Non-Speaking English Patients:* Providers see more clients that do not speak English. In Kansas City, there are not enough interpreters.
- *Cost:* Providers said the cost of medication has gone up. This is a challenge for low-income people.
- *Elimination of Services:* Providers are experiencing cuts in services, which is a change from five years ago.

Source: UMKC Focus Groups Findings, 2004

TABLE 71

SUMMARY

To the question “What would a perfect system of health care in the community be like?”, they had many thoughts and suggestions. The responses included:

- *Access to Care:* Providers thought that a system that everyone in the community would be able to access would be a good idea. One provider gave the example of a Russian client who said, *In our country we're not as good as the United States but everything is taken care of...If I go to Russia, I do get their insurance... You do as a matter of fact.*
- *One-Stop-Shop:* Providers also suggested a one-stop-shop, where individuals could access all services as a means to a perfect system.
- *Attention to Fathers:* A Kansas City provider suggested providing more care for fathers.
- *Treated with Courtesy:* Providers saw a need to treat people with more care and respect. Providers reported patients as saying they *feel like they don't have any respect for me when I come in.*
- *Preventive Care:* Providers in Sikeston emphasized that more preventive care was important in a perfect system.
- *Miscellaneous System Changes:* Some suggestions were for the system in general, such as reimbursement for services that they provide and education for health care providers on how to access the system.

Source: UMKC Focus Groups Findings, 2004

TABLE 72

SUMMARY

Providers had many suggestions about “How the Department of Health and Senior Services could support the Health Care System”. These responses included:

- *Expansion of Sex Education Monies:* Providers want sex education in schools that provides information on more than just abstinence. One provider in Kansas City stated that, *if I was invited in to at least tell them where they could go to get birth control that would be vital.*
- *Policy Round Table:* Providers believe that *a health care policy kind of round table* where providers could discuss issues would be a good support.
- *Support Systems:* Systems for individuals with chronic or fatal illnesses would be beneficial.
- *Adequate Funding:* Providers need funding. One provider stated that they needed *funds for many of the things that we have talked about today.*
- *Miscellaneous Topics:* Miscellaneous supports included assistance for grandparents raising their grandchildren, and advocacy for women in clinics.

Source: UMKC Focus Groups Findings, 2004

3.3.6.3.3. Latino Focus Group Participant Results

These following responses are from the two focus groups held in Kansas City and Sedalia with Spanish-speaking individuals.

| TABLE 73 | SUMMARY |
|--|---------|
| <p>To the question “What kind of health problems do you have and where do you get prevention and intervention?”, the participants described the following:</p> <ul style="list-style-type: none">• <i>Chronic Health Issues:</i> Chronic health issues were described such as high blood pressure and diabetes.• <i>Financial Issues:</i> Many Latinos find themselves charged for medical care when they believe that it would be free. Without funding, there may be no medical service and no medication.• <i>Discrimination:</i> Discrimination was reported by focus group participants by other Latinos and “Chicanos.”• <i>Medications:</i> There was little funding for medication.• <i>Lack of Service Because of Non-Citizenship:</i> Without citizenship, there is likely to be no medical service.• <i>Long Waiting Time:</i> Often there are long waiting times for appointments.• <i>Interpreters:</i> A lack of interpreters impacts on the services that the Spanish-speaking population received. | |

Source: UMKC Focus Groups Findings, 2004

TABLE 74

SUMMARY

The second question asked the participants what health places they utilized. An additional question was what type of problems they had with Medicaid. The responses included these categories:

- *Physician:* Many used physicians and family doctors.
- *Hospitals:* Hospitals were also sites of medical care.
- *Regional Center:* Some individuals used regional centers.

Source: UMKC Focus Groups Findings, 2004

TABLE 75

SUMMARY

To the question how the participants learned about keeping healthy and where they went for classes were the following responses:

- *Lack of Knowledge:* Many participants stated that they did not know where to go for classes.
- *Cultural Differences:* These participants believed that there were cultural differences and that many Mexicans were afraid to go to health care providers.
- *Lack of Ability to Access Service:* Not being a citizen meant that some people believed they could not access such classes and services.
- *Prenatal Care and Nutrition Classes:* In Kansas City many attended a community agency that provided these classes.

Source: UMKC Focus Groups Findings, 2004

TABLE 76

SUMMARY

The respondents were asked what type of help they and their children needed. Another question focused on the type of medical things that the person had to pay out-of-pocket. The responses included the following:

- *Insurance:* Many people wanted to have insurance to pay for medical services.
- *Information:* As stated in other parts of the focus group, many wanted information about resources.
- *Out-of-Pocket:* Many paid for diapers. One said that it was not enough WIC. One person stated they paid for almost a majority of things out of pocket.

Source: UMKC Focus Groups Findings, 2004

TABLE 77

SUMMARY

The biggest health care need in these communities that was cited as:

- *Chronic Disease:* There was a need for attention to chronic diseases (e.g., high blood pressure, diabetes).
- *Dental Care:* Many people had trouble paying for dental care.
- *More Specialists:* In Sedalia, a smaller town, there was a lack of specialists.
- *More Clinics:* In lieu of having to go to hospitals for medical care, some people wanted more clinics (rural area).
- *Shorter Waiting Lists:* There was a long waiting list for appointments to see health care professionals.

Source: UMKC Focus Groups Findings, 2004

TABLE 78

SUMMARY

To the question how has the health system changed over the past five years, there were diverse responses.

- *Improvements:* Some people saw good changes (better prenatal care for immigrants).
- *Lack of Specialists:* There is now a lack of specialists in rural areas especially.
- *Time with Health Care Professionals:* Health care professionals spend less time with the people they serve.

Source: UMKC Focus Groups Findings, 2004

TABLE 79

SUMMARY

There were some ideas about what the perfect health care system would look like.

These include:

- *All Undocumented Children Taken Care of:* Children born in this country have more medical benefits than those not, even if they are in the same family.
- *Better Funding for Undocumented Citizens:* Many people who are undocumented have no monies for medical services.
- *Less Waiting Time:* Participants wanted to have to wait less for medical services.

Source: UMKC Focus Groups Findings, 2004

TABLE 80

SUMMARY

When asked how the Department of Health and Senior Services could help communities have the “perfect community” one person led the responses.

- These immigrants wanted services in the United States similar to the Mexican Social Services system - easier appointments.
- The participants wanted the department to take their opinions into account.
- Individuals wanted more information and a payment plan they could afford for medical services.

Source: UMKC Focus Groups Findings, 2004

3.3.7. MCH Health Status Indicators and Performance Measures

As a part of this assessment, an analysis was performed that (1) linked MCH national and state performance measures with MCH contract measures and MCH Title V state priorities that were identified in the last MCH five-year needs assessment (2000). This analysis also identified performance measure trends based upon a comparison of 2003 performance measure data with the baseline year 1999. As Table 81 suggests, the trends are positive for the vast majority of national, state, and health capacity measures. These overall favorable trends are occurring despite less overall funding for maternal and child health initiatives in Missouri (when compared to benchmark states) and significantly less CDC per capita spending for Missouri than the majority of other states in the nation (see Table 18). Among the negative performance/health capacity measure trends, these particular trends would appear to be statistically significant:

State Performance Measure 6: Percent of child care facilities receiving health and safety consultation.

The decrease in the percentage of child care facilities in Missouri receiving health and safety consultation appears to be related to the reduction of staff resources available to support inspection and provide consultation to child care facilities. Those staff reductions were part of statewide budget cuts.

Health Systems Capacity Indicator 1: The rate of children hospitalized for asthma (10,000 children less than five years of age).

The increase of the rate of children hospitalized for asthma that has occurred since 1999 is due to a variety of factors. Those factors include a growing shortage of medical

pediatric specialists practicing in Missouri and environmental contaminants in larger metropolitan areas that may increase the frequency of asthmatic attacks.

Health Systems Capacity Indicator 6: The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs for infants (0-1), children, and pregnant women.

Eligibility requirements for children and pregnant women may undergo restrictions to cutback Medicaid spending in Missouri. Restricted eligibility to Medicaid services is part of a national trend or reaction to spiraling Medicaid cuts that have pushed state budgets out of balance.

Health Systems Capacity Indicator 8: The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State Children and Special Health Care Needs (CSHCN) Program.

The large decrease in the percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from SCHIP is due to multiple factors. Chief among those factors are (1) the shifting operational emphasis of the DHSS/DCH CSHCN Program, (2) the majority of the SSI referrals are for children with mental health diagnoses for which CSHCN does not provide services; and (3) reporting anomalies associated with this particular measure. Over the past five years, the CSHCN program has undergone a significant transition with a large portion of direct CSHCN services it once provided being shifted (integrated within) the SCHIP program. Many of the CSHCN enabling services such as care coordination have been decentralized through contracts with local public health agencies (LPHAs). Missouri has historically reported this measure based upon a narrow interpretation of MCHB reporting requirements. The reported numerator is the total number of clients with SSI that have an active, inactive, or pending status in the state's CSHCN program. This methodology can be contrasted with the Massachusetts' CSHCN Program that has historically reported 100% compliance with this measure although it does not provide services to SSI children. The Massachusetts' CSHCN program reports the number of SSI children receiving Medicaid for both the numerator and denominator. Discussions are occurring within Missouri's Title V Agency to determine if Missouri should revise its reporting of this measure to adjust for SSI children enrolled in Medicaid. As assessment is also occurring regarding how the CSHCN program can better determine if SSI beneficiaries are receiving rehabilitative services from other resources, Bureau for the Blind, Missouri School for the Deaf, and private and religious foundations.

The following Table 81 summarizes this analysis.

TABLE 81
Comparison of Missouri Department of Health and Senior Services
MCH Title V Performance Measures (National and State), Health Systems Capacity Indicators, and State Priorities

| | MCH Title V Performance Measures (National and State) and Health Systems Capacity Indicators : | MCH Contract Performance Measures: | 2000 MCH Title V State Priorities: | Rank | Performance Data | | |
|---|---|--|--|------|------------------|------|-----------|
| | | | | | 1999 | 2003 | +/- Trend |
| | National Performance Measures | | | | | | |
| 1 | The percent of infants who are screened for conditions mandated by their State-sponsored newborn screening programs (e.g. phenylketonuria and hemoglobinopathies) and receive appropriate follow up and referral as defined by their State. | ---- | 1. Health Care Access | 2 | 100 | 100 | + |
| 2 | The percent of children with special health care needs age 0 to 18 whose families partner in decision-making at all levels and are satisfied with the services they receive. (CSHCN Survey) | ---- | 1. Health Care Access | 3 | New in 2003 | 57.2 | ---- |
| 3 | The percent of children with special health care needs age 0 to 18 who receive coordinated, ongoing, comprehensive care within a medical home. (CSHCN Survey) | #9 Increase percent of Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen (EPSDT). #10 Decrease the percent of children without health insurance. | 1. Health Care Access | 2 | New in 2003 | 55.7 | ---- |
| 4 | The percent of children with special health care needs age 0 to 18 whose families have adequate private and/or public insurance to pay for the services they need. (CSHCN Survey) | #10 Decrease the percent of children without health insurance | 1. Health Care Access | 2 | New in 2003 | 66 | ---- |
| 5 | The percent of children with special health care needs age 0 to 18 whose families report the community-based service system is organized so they can use it easily. (CSHCN Survey) | ---- | 1. Health Care Access | 3 | New in 2003 | 75.2 | ---- |
| 6 | The percentage of youth with special health care needs who received the services necessary to make transitions to all aspects of adult life. (CSHCN Survey) | ---- | 1. Health Care Access | 3 | New in 2003 | 5.8 | ---- |
| 7 | Percent of 19 to 35 month olds who have received full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B. | #11 Increase percent of children age 2 who have completed immunizations for measles, mumps, rubella, polio, diphtheria, tetanus, pertussis, Hib, hepatitis B | 1. Health Care Access | 1 | 68.9 | 76.4 | + |
| 8 | The rate of birth (per 1,000) for teenagers aged 15 through 17 years. | #5 Decrease rate of births to teenagers aged 15-17. #6 Decrease percent of live births to females with less than 12 years of education. | 3. Reduction of Unintended Pregnancies | 1 | 26.9 | 21.5 | + |
| 9 | Percent of third grade children who have received protective sealants on at least one permanent molar tooth. | #12 Increase percent of third grade children who have received protective sealant on at least one permanent molar tooth. | 1. Health Care Access | 1 | 11.8 | 14 | + |

Rank:
 1=Highly related
 2=Medially related
 3=Minimally related

TABLE 81 continued

| | MCH Title V Performance Measures (National and State) and Health Systems Capacity Indicators : | MCH Contract Performance Measures: | 2000 MCH Title V State Priorities: | Rank | Performance Data | | |
|---|--|---|--|------|------------------|------|-----------|
| | | | | | 1999 | 2003 | +/- Trend |
| 10 | The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children. | #17 Decrease rate of deaths to children aged #16 Decrease death rate per 100,000 due to unintentional injuries among children aged 1 through 14 years. #15 Decrease rate of probable cause cases of child abuse and neglect per 1000 population for children under age of 18. | 4. Reduction of Child and Adolescent Injuries 5. Reduction of Child Abuse and Neglect | 1 | 5 | 4.9 | + |
| 11 | Percentage of mothers who breastfeed their infants at hospital discharge. | ---- | 4. Reduction of Child and Adolescent Injuries | 3 | 55.6 | 64.7 | + |
| 12 | Percentage of newborns who have been screened for hearing before hospital discharge. | ---- | 1. Health Care Access | 2 | 8.2 | 98.7 | + |
| 13 | Percent of children without health insurance. | #10 Decrease the percent of children without health insurance. | 1. Health Care Access | 1 | 11.5 | 5.9 | + |
| 14 | Percent of potentially Medicaid eligible children who have received a service paid by the Medicaid Program. | #9 Increase percent of Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen (EPSDT). | 1. Health Care Access | 1 | 78.7 | 80.3 | + |
| 15 | The percent of very low birth weight infants among all live births. | #7 Decrease percent of births weighing less than 2500 grams. #8 Decrease infant mortality rate per 1000. #4 Decrease percent of mothers with live births which occurred within 18 months of a previous live birth. | 3. Reduction of Unintended Pregnancies | 3 | 1.5 | 1.6 | - |
| 16 | The rate (per 100,000) of suicide deaths among youths 15-19. | #18 Decrease rate of suicide deaths among youths aged 15-19. | 4. Reduction of Child and Adolescent Injuries 5. Reduction of Child Abuse and Neglect | 3 | 12.6 | 6.8 | + |
| 17 | Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates. | #8 Decrease infant mortality rate per 1000. | 1. Health Care Access | 3 | 78.5 | 78.3 | - |
| 18 | Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester. | #2 Decrease percent of pregnant women receiving inadequate prenatal care. | 3. Reduction of Unintended Pregnancies | 3 | 85.6 | 86.6 | + |
| State Performance Measures - Current | | | | | | | |
| 1 | The infant mortality rate per 1,000 live births. | #7 Decrease percent of births weighing less than 2500 grams. #8 Decrease infant mortality rate per 1000. | 3. Reduction of Unintended Pregnancies | 3 | 10.8 | 10.8 | + |

TABLE 81 continued

| | MCH Title V Performance Measures (National and State) and Health Systems Capacity Indicators: | MCH Contract Performance Measures: | 2000 MCH Title V State Priorities: | Rank | Performance Data | | |
|--|--|--|--|------|------------------|------|-----------|
| | | | | | 1999 | 2003 | +/- Trend |
| 2 | Percent of low income children who consume nutritionally adequate diets. | #14 Decrease percent of children who are obese. | 4. Reduction of Child and Adolescent Injuries | 3 | 23 | 26.1 | + |
| 3 | Percent of citizens drinking fluoridated water. | ---- | 1. Health Care Access | 3 | 74.4 | 81.5 | + |
| 4 | Percent of women who have reported smoking during pregnancy. | #3 Decrease percent of women who have reported smoking during pregnancy. | 2. Prevention of Smoking Among Children and Adolescents | 3 | 18.3 | 18.1 | + |
| 5 | Percent of MC+ Managed Care Organizations (MCOs) utilizing MCH data. | ---- | 7. Expanded MCH Info Systems | 1 | 100 | 100 | + |
| 6 | Percent of child care facilities receiving health and safety consultation. | ---- | 4. Reduction of Child and Adolescent Injuries 5. Reduction of Child Abuse and Neglect | 1 | 37.5 | 27.6 | - |
| 7 | Percent of tobacco use among children (14 to 18 years of age). | ---- | 2. Prevention of Smoking Among Children and Adolescents | 1 | 32.8 | 24.8 | + |
| State Performance Measures - Proposed | | | | | | | |
| P1 | Percent of Medicaid enrolled children who have had recommended number of well child visits for their age. | | | | | | |
| P2 | Percent of children aged 3 through 9 who have received a dental exam within previous 12 months. | | | | | | |
| P3 | Percent of children under 5 years who are either less than 5 percent or greater than 95 percent of standard height, weight and head circumferences according to standards of National Center for Health Statistics - Centers for Disease Control and Prevention growth reference for one or more of the following four growth indices: height, weight, weight for height and head circumference. | | | | | | |
| P4 | Percent of women aged 14-44 diagnosed with hypertension. | | | | | | |
| P5 | Number and rate per 100,000 youth (by age group) of reportable sexually transmitted diseases, by cause, including: HIV, gonorrhea, Chlamydia, Hepatitis B, syphilis. | | | | | | |
| P6 | Violence against women in Missouri categorized as: physical violence, sexual violence, threats of sexual or physical violence and psychological emotional abuse. | | | | | | |
| P7 | Percent of youth reporting any use of tobacco by type, in the previous month, six months, ever, by age: cigars, cigarettes, smokeless tobacco. | | | | | | |
| P8 | Percent of pregnant women delivering live born infants reporting any cigarette smoking during pregnancy. | | | | | | |
| P9 | Percent of eligible pregnant, postpartum and breastfeeding women receiving WIC services | | | | | | |
| P10 | Mental health services for children | | | | | | |

TABLE 81 continued

| MCH Title V Performance Measures (National and State) and Health Systems Capacity Indicators : | | MCH Contract Performance Measures: | 2000 MCH Title V State Priorities: | Rank | Performance Data | | |
|--|---|--|--|------|---|---|-----------|
| | | | | | 1999 | 2003 | +/- Trend |
| Health Systems Capacity Indicators | | | | | | | |
| 1 | The rate of children hospitalized for asthma (10,000 children less than five years of age). | #19 Decrease rate of ER visits among children aged 5-14. | 4. Reduction of Child and Adolescent Injuries | 2 | 78.8 | 92.7 | - |
| 2 | The percent of Medicaid enrollees whose age is less than one year who received at least one initial periodic screen. | #9 Increase percent of Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen (EPSDT). | 1. Health Care Access | 1 | 71.6 | 90.3 | + |
| 3 | The percent of State Children's Health Insurance Program (SCHIP) enrollees whose age is less than one year who received at least one periodic screen. | #9 Increase percent of Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen (EPSDT). | 1. Health Care Access | 1 | 71.6 | 90.3 | + |
| 4 | The percent of women (15 through 44) with a live birth during the reporting year whose observed to expected prenatal visits are greater than or equal to 80 percent on the Kotelchuck Index. | #1 Increase percent of infants born to pregnant women receiving prenatal care beginning in first trimester. | 1. Health Care Access | 2 | 78.6 | 77.7 | - |
| 5 | Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State. NOTE: Goal is to eliminate disparities in pregnancy health outcomes in Medicaid, non-Medicaid, and all populations in the State. | ---- | 6. Minority Health Disparities 7. Expanded MCH Info Systems | 1 | a) % LBW: Medicaid: 9.8 Non-Mdcd: 6.3 All: 7.8 b) Infant deaths per 1000 live births: Medicaid: 9.2 Non-Mdcd: 5.9 All: 7.7 c) % Infants born to pregnant women receiving prenatal care beginning in first trimester: Medicaid: 76 Non-Mdcd: 92.1 All: 85.6 d) % Pregnant women with adequate prenatal care...: Medicaid: 67.2 Non-Mdcd: 82.5 All: 76.3 | a) % LBW: Medicaid: 9.6 Non-Mdcd: 6.7 All: 8 b) Infant deaths per 1000 live births: Medicaid: 9.9 Non-Mdcd: 6.1 All: 7.9 c) % Infants born to pregnant women receiving prenatal care beginning in first trimester: Medicaid: 79.1 Non-Mdcd: 92.8 All: 86.6 d) % Pregnant women with adequate prenatal care...: Medicaid: 69 Non-Mdcd: 84.3 All: 77.7 | |

TABLE 81 continued

| | MCH Title V Performance Measures (National and State) and Health Systems Capacity Indicators : | MCH Contract Performance Measures: | 2000 MCH Title V State Priorities: | Rank | Performance Data | | +/- Trend |
|-----|---|--|---|------|--|--|-----------|
| | | | | | 1999 | 2003 | |
| 6 | The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs for infants (0 to 1), children, and pregnant women. | #8 Decrease percent of children without health insurance | 1. Health Care Access | 1 | Medicaid:Infants: 300C. 1-18 yrs: 300Pg W: 185 CHIP:Infants: 300C. 1-18 yrs: 300Pg W: 185 | Medicaid:a) Infants: 185b) C. 1-5 yrs: 133C. 6-18 yrs: 100c) Pg W: 185 SCHIP:a) Infants: 300b) C. 1-18: 300 | - |
| 7 | The percent of EPSDT eligible children aged 6 through 9 years who have received any dental services during the year. | #12 Increase percent of third grade children who have received protective sealant on at least one permanent molar tooth. | 1. Health Care Access | 1 | 33 | 31.3 | - |
| 8 | The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State Children with Special Health Care Needs Program. | ---- | 1. Health Care Access | 2 | 16 | 0.6 | - |
| 9a* | The ability of States to assure that the Maternal and Child Health program and Title V agency have access to policy and program relevant information and data. | ---- | 7. Expanded MCH Info Systems | 1 | * | * | + |
| 9b* | The ability of States to determine the percent of adolescents in grades 9 through 12 who report using tobacco products in the past month. | ---- | 7. Expanded MCH Info Systems 2. Prevention of Smoking Among Children and Adolescents | 1 | * | * | + |
| 9c* | The ability of States to determine the percent of children who are obese or overweight. | #14 Decrease percent of children who are obese. | 7. Expanded MCH Info Systems | 2 | * | * | + |
| | *Information in 1999 regarding data capacity was on Form C3. Number of questions and breakdown are slightly different than Form 19. It appears that linkage has improved and expanded to include PedNSS and WIC Program Data. | | | | | | |
| | | | | | | | |
| | | MCH Contract Performance Measures Not Related to National or State PMs: | | | | | |
| | | #13 Increase percent of children aged 1-6 years tested for lead poisoning. | | | | | |

4. Examine MCH Program Capacity by Pyramid Levels

In Missouri as in other states, there are networks of community health services that represent a significant portion of the MCH capacity in this state. While focus group data and other input from communities into this process suggest Missouri is facing growing challenges regarding a lack of access to some MCH services because of less than adequate health insurance coverage, shortages of needed health care professionals, and lack of health care delivery infrastructure in rural areas, there are significant community health care delivery networks that continue to shore up gaps in the delivery of MCH services. This section summarizes where those networks are in place geographically and how MCH populations are served by those networks.

4.1 Direct/Enabling Services

4.1.1. Medical Service Networks (Medicaid)

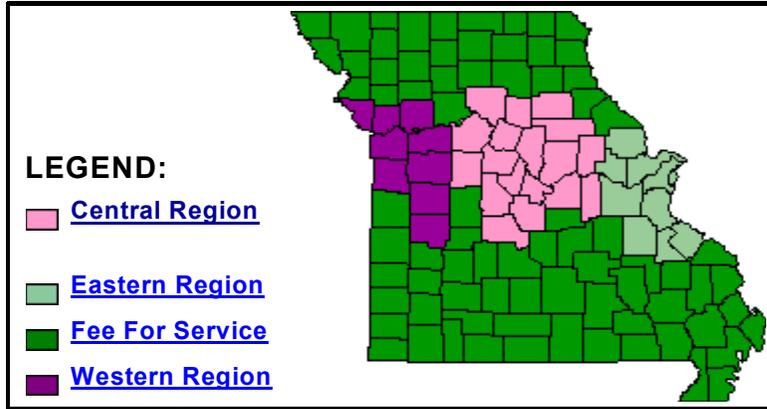
The 2000 MCH Five-Year Needs Assessment document identified several trends with regard to the delivery of personal medical services in Missouri:

- The personal (direct) services once delivered through local public health agencies were increasingly being delivered in managed care settings.
- The evolution of managed care networks in Missouri had done little if anything to ameliorate the shortage of key MCH providers in some regions of Missouri.
- Between 1990 and 2000 there was a growing concentration of MC+ Managed Care Plans along the I-70 highway corridor, a concentration of medical resources that may have compounded the shortage of pediatricians, obstetricians, and family physicians in the rural sectors of the state.
- In 2000, there were no longer any managed care plans in the Northwestern region serving MC+ clients and efforts to identify managed care plans in the Southwestern region collapsed in 1998.

While these trends persist and many of the managed care plans (companies) supporting Medicaid services in Missouri have changed since 2000, there has been no expansion of the geographical areas covered by MC+ plans and the following map is virtually the same as a similar map presented in the 2000 MCH need assessment:

FIGURE 13

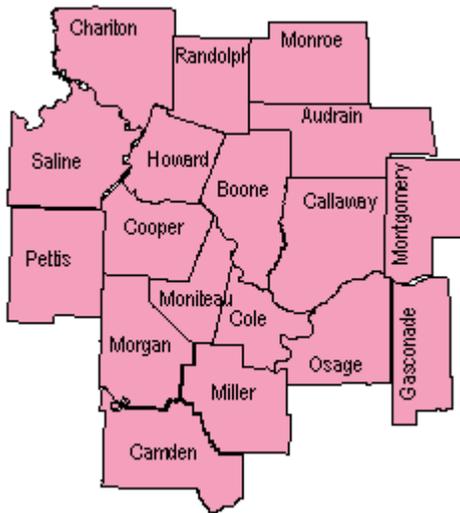
Missouri MC+ Managed Care Health Plan Providers



Source: MO Department of Social Services' Web site: <http://www.dss.mo.gov/mcplus/hregions.htm>

FIGURE 14

Central Region Health Plan Providers



The CENTRAL Region includes the counties of: Audrain, Boone, Callaway, Camden, Chariton, Cole, Cooper, Gasconade, Howard, Miller, Moniteau, Monroe, Montgomery, Morgan, Osage, Pettis, Randolph, and Saline.

| | |
|---|--|
| <p>HealthCare USA 800-566-6444</p> | <p>Missouri Care 800-322-6027</p> |
|---|--|

Source: MO Department of Social Services, <http://www.dss.mo.gov/mcplus/hregions.htm>

FIGURE 15
Eastern Region Health Plan Providers

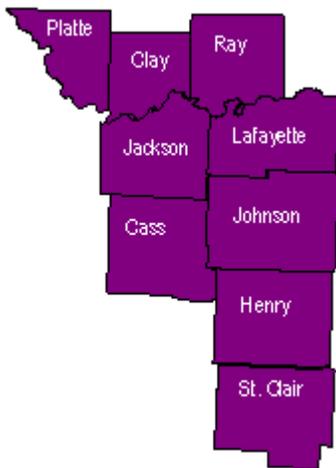


The EASTERN Region includes the counties of: Lincoln, Warren, Franklin, Washington, St. Francois, Ste. Genevieve, Jefferson, St. Charles, St. Louis, and the City of St. Louis.

| | |
|--|--|
| Community Care Plus 800-875-0679 314-454-1100 | |
| HealthCare USA 800-566-6444 314-241-5300 | Mercy 800-796-0056 314-214-8020 |

Source: MO Department of Social Services, <http://www.dss.mo.gov/mcplus/hregions.htm>

FIGURE 16
Western Region Health Plan Providers



The WESTERN Region includes the counties of: Cass, Clay, Henry, Jackson, Johnson, Lafayette, Platte, Ray and St. Clair.

| | |
|--|---|
| Blue Advantage + Plus 888-279-8186 816-395-2119 | Family Health Partners 800-347-9363 816-855-1888 |
| First Guard 888-828-5698 816-922-7200 | Health Care USA 800-566-6444 |

Source: MO Department of Social Services, <http://www.dss.mo.gov/mcplus/hregions.htm>

While there was significant growth in the numbers of adults and children enrolled in and receiving services from Medicaid between 2000 and 2005, the geographic areas with the greatest need for Medicaid services remain much the same as they were in 2000.

A large percentage of Medicaid-eligible children live in St. Louis City or County and in Jackson County (Kansas City). The introduction of SCHIP in the late nineties has dramatically increased the number of children in Missouri with health insurance coverage. In September 2000, there were 66,628 children enrolled in SCHIP. That number has increased to 91,911 in September 2004. In his "State of the State" address on January 26, 2005, Governor Blunt provided these assurances to the women and children of Missouri:

The Medicaid Program provides vital services to pregnant women and children. The State Children's Health Insurance program has been a success and is a prudent investment for the state. SCHIP's annual expenditures per child are just over \$1,000 per year. This is a responsible use of taxpayers' money. Since its inception in 1998, this program has extended health care coverage to more than 87,000 children. In addition, the Medicaid Program includes several distinctive programs that cover low-income pregnant women. This Administration is committed to ensuring that pregnant women and children have access to vital health services. Accordingly, the Governor's Fiscal Year 2006 budget recommendations include continued core funding for SCHIP and Medicaid programs for pregnant women.

The Medicaid programs for low income pregnant women in Missouri will include continuing state support for family planning services. Family planning services for low income (Medicaid eligible) women in Missouri include:

- Comprehensive physical examinations;
- Client health history;
- Comprehensive laboratory studies, including pap smear, pregnancy testing (clients who have a negative pregnancy test are encouraged to enroll in comprehensive family planning services), and blood studies;
- Pre- and post-exam group and individual educational programs;
- Consultation, referral, and follow-up;
- Immunizations, STD testing, and other remedial care; and
- Provision of medications and FDA approved birth control method of choice, including Depo Provera

While DSS's Division of Medical Services (DMS) is now the only state agency in Missouri supporting family planning services for low-income women (DHSS discontinued its family planning services in 2002), there was a significant increase in the number of low income Medicaid women that utilized family planning services between 2000 and 2004. There was a total number of 9,803 Medicaid clients that used family planning services in 2000 compared to a total number of 12,341 Medicaid clients that used family planning services in 2004. The following tables prepared by DSS/DMS present statistical snapshots of Medicaid clients by county that used family planning services in December of 2000 vs. December of 2004:

Missouri Department of Health and Senior Services
 FFY04 Annual Report and FFY06 Title V Grant Application
 Submitted July 15, 2005

TABLE 82

| December 2000 Medicaid Information | | | | | | | | | | |
|---|--|--------------------------------------|--------------------|-------------------------|-----------------------------------|-----------|----------------------|-----------|-------------------------|-----------|
| Recipients of Family Planning Services - Recipients During December 2000 Women of Child-Bearing Age and Children On Medicaid - Eligibles on 12/31/00 | | | | | | | | | | |
| | Recipients of Family Planning Services | Women of Child-Bearing Age Age 15-44 | INFANT Under Age 1 | EARLY CHILDHOOD Age 1-4 | Children on Medicaid by Age Group | | | | TOTAL CHILDREN Age 0-21 | |
| | | | | | MIDDLE CHILDHOOD Age 5-10 | Age 11-14 | ADOLESCENT Age 15-17 | Age 18-19 | | Age 20-21 |
| STATEWIDE | 9,893 | 195,895 | 31,707 | 113,455 | 159,524 | 86,100 | 53,492 | 25,344 | 19,452 | 489,074 |
| ADAIR | 88 | 710 | 127 | 426 | 449 | 262 | 172 | 89 | 69 | 1,594 |
| ANDREW | 20 | 297 | 71 | 199 | 236 | 151 | 80 | 40 | 42 | 819 |
| ATCHISON | 14 | 175 | 22 | 71 | 141 | 68 | 59 | 19 | 12 | 392 |
| AUDRAIN | 10 | 799 | 151 | 465 | 664 | 367 | 244 | 108 | 86 | 2,085 |
| BARRY | 122 | 1,362 | 282 | 900 | 1,139 | 611 | 414 | 172 | 123 | 3,641 |
| BARTON | 49 | 455 | 100 | 325 | 363 | 191 | 115 | 62 | 62 | 1,218 |
| BATES | 56 | 602 | 120 | 315 | 479 | 319 | 194 | 73 | 57 | 1,567 |
| BENTON | 89 | 775 | 99 | 407 | 546 | 346 | 235 | 106 | 75 | 1,814 |
| BOLLINGER | 65 | 470 | 76 | 242 | 379 | 233 | 161 | 65 | 30 | 1,186 |
| BOONE | 76 | 4,265 | 644 | 2,538 | 3,422 | 1,690 | 997 | 524 | 415 | 10,230 |
| BUCHANAN | 303 | 3,172 | 571 | 1,812 | 2,419 | 1,331 | 852 | 381 | 387 | 7,753 |
| BUTLER | 277 | 2,175 | 368 | 1,133 | 1,452 | 827 | 606 | 249 | 228 | 4,863 |
| CALDWELL | 22 | 375 | 77 | 214 | 335 | 204 | 127 | 54 | 37 | 1,048 |
| CALLAWAY | 22 | 1,297 | 199 | 769 | 1,133 | 626 | 350 | 180 | 133 | 3,390 |
| CAMDEN | 9 | 1,214 | 232 | 690 | 938 | 545 | 367 | 184 | 159 | 3,044 |
| CAPE GIRARDEAU | 223 | 2,200 | 364 | 1,360 | 1,816 | 1,050 | 769 | 300 | 239 | 5,898 |
| CARROLL | 35 | 395 | 61 | 246 | 340 | 202 | 105 | 54 | 48 | 1,056 |
| CARTER | 31 | 376 | 52 | 201 | 314 | 210 | 132 | 44 | 33 | 986 |
| CASS | 28 | 1,604 | 317 | 1,080 | 1,358 | 757 | 385 | 197 | 153 | 4,247 |
| CEDAR | 80 | 618 | 119 | 353 | 494 | 313 | 199 | 81 | 70 | 1,629 |
| CHARITON | 2 | 184 | 38 | 106 | 160 | 105 | 57 | 24 | 19 | 509 |
| CHRISTIAN | 171 | 1,533 | 324 | 1,025 | 1,333 | 667 | 382 | 194 | 176 | 4,081 |
| CLARK | 18 | 268 | 37 | 146 | 223 | 124 | 79 | 58 | 24 | 690 |
| CLAY | 54 | 2,976 | 673 | 1,978 | 2,294 | 1,185 | 697 | 360 | 360 | 7,547 |
| CLINTON | 62 | 466 | 94 | 268 | 341 | 205 | 135 | 62 | 60 | 1,165 |
| COLE | 30 | 1,479 | 259 | 996 | 1,169 | 541 | 313 | 194 | 193 | 3,665 |
| COOPER | 5 | 395 | 76 | 233 | 320 | 184 | 106 | 56 | 44 | 1,019 |
| CRAWFORD | 104 | 1,006 | 181 | 559 | 768 | 408 | 262 | 133 | 86 | 2,397 |
| DADE | 26 | 675 | 56 | 177 | 277 | 167 | 31 | 21 | 17 | 768 |
| DALLAS | 57 | 651 | 110 | 349 | 591 | 362 | 226 | 79 | 50 | 1,378 |
| DAVISS | 31 | 301 | 62 | 178 | 238 | 152 | 103 | 38 | 29 | 800 |
| DE KALB | 23 | 253 | 44 | 165 | 211 | 108 | 81 | 44 | 26 | 679 |
| DENT | 81 | 806 | 138 | 430 | 614 | 383 | 245 | 88 | 85 | 1,983 |
| DOUGLAS | 66 | 591 | 72 | 348 | 505 | 308 | 218 | 75 | 46 | 1,572 |
| DUNKLIN | 248 | 2,554 | 358 | 1,411 | 1,889 | 1,078 | 706 | 332 | 259 | 6,033 |
| FRANKLIN | 48 | 2,338 | 438 | 1,270 | 1,779 | 991 | 615 | 337 | 252 | 5,682 |
| GASCONADE | 8 | 1,336 | 63 | 194 | 264 | 152 | 96 | 39 | 37 | 639 |
| GENTRY | 17 | 157 | 39 | 110 | 142 | 81 | 38 | 25 | 20 | 453 |
| GREENE | 752 | 8,124 | 1,461 | 4,675 | 5,723 | 2,817 | 1,763 | 887 | 869 | 18,195 |
| GRUNDY | 28 | 413 | 54 | 260 | 319 | 183 | 128 | 61 | 45 | 1,050 |
| HARRISON | 29 | 299 | 70 | 219 | 256 | 149 | 87 | 38 | 32 | 851 |
| HENRY | 18 | 937 | 170 | 539 | 672 | 380 | 254 | 111 | 119 | 2,245 |
| HICKORY | 39 | 423 | 55 | 207 | 354 | 251 | 138 | 67 | 33 | 1,105 |
| HOLT | 13 | 915 | 20 | 725 | 1,25 | 693 | 394 | 24 | 11 | 4,031 |
| HOWARD | 47 | 315 | 57 | 184 | 246 | 157 | 85 | 40 | 39 | 807 |
| HOWELL | 167 | 1,833 | 290 | 1,099 | 1,443 | 857 | 522 | 244 | 195 | 4,650 |
| IRON | 81 | 589 | 78 | 265 | 427 | 274 | 177 | 68 | 61 | 1,350 |
| JACKSON | 316 | 25,834 | 4,499 | 16,305 | 22,716 | 12,006 | 7,228 | 3,378 | 2,577 | 68,709 |
| JASPER | 332 | 4,587 | 910 | 2,977 | 3,630 | 1,806 | 1,062 | 585 | 556 | 11,526 |
| JEFFERSON | 128 | 5,291 | 877 | 2,988 | 3,886 | 2,060 | 1,276 | 656 | 565 | 12,308 |
| JOHNSON | 21 | 1,299 | 257 | 759 | 984 | 546 | 338 | 170 | 169 | 3,223 |
| KNOX | 24 | 1,366 | 61 | 421 | 621 | 354 | 211 | 84 | 23 | 3,011 |
| LACLEDE | 146 | 1,521 | 276 | 870 | 1,184 | 576 | 368 | 223 | 172 | 3,669 |
| LAFAYETTE | 37 | 942 | 137 | 525 | 771 | 421 | 269 | 123 | 102 | 2,348 |
| LAWRENCE | 118 | 1,310 | 238 | 857 | 1,151 | 578 | 359 | 180 | 132 | 3,495 |
| LEWIS | 36 | 294 | 55 | 157 | 259 | 148 | 86 | 45 | 30 | 780 |
| LINCOLN | 118 | 1,345 | 208 | 775 | 1,098 | 607 | 326 | 167 | 141 | 3,322 |
| LINN | 44 | 467 | 95 | 287 | 384 | 228 | 150 | 89 | 62 | 1,275 |
| LIVINGSTON | 36 | 448 | 36 | 148 | 207 | 186 | 103 | 67 | 48 | 1,145 |
| MCDONALD | 88 | 1,179 | 216 | 716 | 1,029 | 572 | 368 | 176 | 104 | 3,237 |
| MACON | 46 | 471 | 103 | 290 | 403 | 213 | 133 | 67 | 43 | 1,242 |
| MADISON | 60 | 529 | 72 | 266 | 355 | 238 | 155 | 70 | 54 | 1,210 |
| MARIES | 26 | 283 | 38 | 167 | 272 | 148 | 88 | 43 | 19 | 775 |
| MARION | 153 | 1,261 | 220 | 743 | 919 | 503 | 290 | 182 | 134 | 2,991 |
| MERCER | 7 | 120 | 17 | 58 | 85 | 67 | 40 | 16 | 13 | 296 |
| MILLER | 14 | 1,042 | 185 | 703 | 869 | 502 | 304 | 143 | 95 | 2,801 |
| MISSISSIPPI | 147 | 1,089 | 182 | 565 | 705 | 441 | 342 | 155 | 103 | 2,470 |
| MONITEAU | 6 | 316 | 77 | 181 | 254 | 125 | 87 | 43 | 39 | 806 |
| MONROE | 8 | 253 | 40 | 179 | 230 | 107 | 75 | 26 | 26 | 683 |
| MONTGOMERY | 8 | 409 | 84 | 229 | 330 | 191 | 134 | 58 | 38 | 1,064 |
| MORGAN | 18 | 696 | 103 | 420 | 635 | 387 | 248 | 100 | 63 | 1,956 |
| NEW MADRID | 103 | 1,236 | 174 | 632 | 961 | 543 | 381 | 171 | 103 | 2,965 |
| NEWTON | 128 | 1,675 | 356 | 1,096 | 1,420 | 669 | 404 | 194 | 173 | 4,312 |
| NEEDHAM | 31 | 1,310 | 73 | 192 | 287 | 127 | 87 | 45 | 39 | 3,201 |
| OREGON | 53 | 540 | 97 | 279 | 466 | 286 | 160 | 60 | 45 | 1,393 |
| OSAGE | 3 | 252 | 38 | 165 | 220 | 119 | 63 | 41 | 24 | 670 |
| OZARK | 49 | 509 | 72 | 247 | 370 | 228 | 180 | 67 | 42 | 1,206 |
| PEMISCOT | 136 | 1,717 | 247 | 1,061 | 1,454 | 837 | 564 | 229 | 167 | 4,569 |
| PERRY | 64 | 493 | 106 | 299 | 419 | 206 | 144 | 61 | 63 | 1,298 |
| PETTIS | 22 | 1,421 | 336 | 974 | 1,111 | 588 | 370 | 177 | 136 | 3,692 |
| PHIELPS | 158 | 1,608 | 240 | 898 | 1,183 | 672 | 417 | 227 | 189 | 3,796 |
| PIKE | 88 | 658 | 103 | 369 | 519 | 326 | 224 | 110 | 67 | 1,718 |
| PLATTE | 17 | 880 | 191 | 608 | 644 | 338 | 181 | 102 | 91 | 2,155 |
| POLK | 85 | 1,043 | 208 | 563 | 884 | 522 | 319 | 131 | 109 | 2,736 |
| PULASKI | 116 | 1,327 | 207 | 783 | 977 | 592 | 365 | 165 | 127 | 3,216 |
| PUTNAM | 17 | 216 | 41 | 128 | 163 | 113 | 74 | 30 | 25 | 574 |
| RALLS | 25 | 246 | 45 | 126 | 186 | 120 | 82 | 25 | 34 | 618 |
| RANDOLPH | 14 | 991 | 189 | 667 | 797 | 384 | 220 | 138 | 96 | 2,491 |
| RAY | 5 | 513 | 98 | 305 | 430 | 191 | 127 | 53 | 74 | 1,263 |
| REYNOLDS | 58 | 388 | 44 | 172 | 282 | 172 | 125 | 57 | 28 | 880 |
| RIPLEY | 108 | 903 | 114 | 447 | 703 | 422 | 280 | 135 | 92 | 2,193 |
| ST CHARLES | 93 | 4,163 | 677 | 2,593 | 3,164 | 1,587 | 926 | 500 | 461 | 9,908 |
| ST CLAIR | 6 | 396 | 67 | 205 | 308 | 185 | 125 | 52 | 39 | 981 |
| ST FRANCOIS | 338 | 2,554 | 387 | 1,228 | 1,744 | 1,020 | 653 | 315 | 271 | 5,618 |
| STE GENEVIEVE | 51 | 501 | 69 | 254 | 379 | 220 | 153 | 66 | 43 | 1,184 |
| ST LOUIS COUNTY | 351 | 23,840 | 3,287 | 13,860 | 20,308 | 10,284 | 6,194 | 2,922 | 2,200 | 58,835 |
| SALINE | 27 | 776 | 151 | 446 | 626 | 350 | 202 | 102 | 91 | 1,968 |
| SCHUYLER | 12 | 143 | 30 | 86 | 129 | 75 | 45 | 17 | 13 | 395 |
| SCOTLAND | 19 | 162 | 22 | 105 | 129 | 68 | 63 | 31 | 10 | 429 |
| SCOTT | 247 | 2,206 | 354 | 1,265 | 1,684 | 876 | 564 | 261 | 237 | 5,241 |
| SHANNON | 57 | 540 | 82 | 261 | 412 | 295 | 188 | 61 | 45 | 1,344 |
| SHELBY | 14 | 221 | 53 | 146 | 184 | 112 | 75 | 25 | 23 | 618 |
| STODDARD | 165 | 1,258 | 233 | 613 | 917 | 536 | 335 | 153 | 151 | 2,938 |
| STONE | 89 | 1,188 | 206 | 691 | 976 | 480 | 324 | 157 | 104 | 2,938 |
| SULLIVAN | 28 | 259 | 71 | 190 | 223 | 107 | 63 | 35 | 22 | 711 |
| TANEY | 141 | 1,598 | 322 | 991 | 1,308 | 680 | 455 | 187 | 158 | 4,101 |
| TEXAS | 129 | 1,142 | 180 | 593 | 909 | 571 | 410 | 169 | 105 | 2,937 |
| VERNON | 103 | 939 | 182 | 535 | 666 | 434 | 346 | 168 | 88 | 2,419 |
| WARREN | 40 | 618 | 108 | 362 | 462 | 289 | 161 | 100 | 72 | 1,554 |
| WASHINGTON | 199 | 1,444 | 195 | 734 | 973 | 633 | 440 | 184 | 155 | 3,314 |
| WAYNE | 91 | 896 | 108 | 386 | 567 | 406 | 276 | 117 | 83 | 1,925 |
| WEBSTER | 89 | 1,081 | 236 | 668 | 974 | 488 | 305 | 144 | 124 | 2,929 |
| WORTH | 4 | 74 | 15 | 57 | 61 | 42 | 27 | 9 | 10 | 221 |
| WRIGHT | 104 | 1,014 | 176 | 582 | 785 | 460 | 299 | 153 | 117 | 2,572 |
| ST LOUIS CITY | 362 | 27,880 | 3,206 | 14,138 | 24,502 | 13,079 | 8,097 | 3,713 | 2,245 | 68,980 |

Missouri Department of Health and Senior Services
 FFY04 Annual Report and FFY06 Title V Grant Application
 Submitted July 15, 2005

TABLE 83

| December 2004 Medicaid Information | | | | | | | | | | |
|---|--|--------------------------------------|--------------------|-----------------------------------|---------------------------|----------------|----------------------|---------------|---------------|-------------------------|
| Recipients of Family Planning Services - Recipients During December 2004 Women of Child-Bearing Age and Children On Medicaid - Eligibles on 12/31/04 | | | | | | | | | | |
| | Recipients of Family Planning Services | Women of Child-Bearing Age Age 15-44 | INFANT Under Age 1 | Children on Medicaid by Age Group | | | | | | TOTAL CHILDREN Age 0-21 |
| | | | | EARLY CHILDHOOD Age 1-4 | MIDDLE CHILDHOOD Age 5-10 | Age 11-14 | ADOLESCENT Age 15-17 | Age 18-19 | Age 20-21 | |
| STATEWIDE | 12,341 | 228,306 | 37,388 | 133,506 | 170,404 | 107,225 | 68,918 | 30,053 | 20,321 | 567,515 |
| ADAIR | 138 | 883 | 152 | 502 | 584 | 299 | 225 | 100 | 82 | 1,844 |
| ANDREW | 35 | 347 | 78 | 233 | 312 | 192 | 107 | 44 | 41 | 1,007 |
| ATCHISON | 34 | 216 | 35 | 117 | 171 | 106 | 64 | 32 | 19 | 544 |
| AUDRAIN | 27 | 995 | 185 | 631 | 740 | 517 | 324 | 139 | 99 | 2,635 |
| BARRY | 172 | 1,604 | 351 | 1,083 | 1,285 | 810 | 541 | 208 | 146 | 4,424 |
| BARTON | 69 | 629 | 102 | 394 | 515 | 247 | 171 | 81 | 60 | 1,570 |
| BATES | 71 | 679 | 116 | 442 | 537 | 318 | 230 | 90 | 68 | 1,801 |
| BENTON | 113 | 990 | 117 | 427 | 650 | 485 | 345 | 135 | 69 | 2,228 |
| BOLLINGER | 93 | 640 | 85 | 348 | 457 | 307 | 211 | 100 | 53 | 1,561 |
| BOONE | 123 | 4,880 | 822 | 2,819 | 3,320 | 1,931 | 1,179 | 614 | 391 | 11,076 |
| BUCHANAN | 362 | 3,972 | 667 | 2,154 | 2,610 | 1,571 | 1,120 | 558 | 413 | 9,093 |
| BUTLER | 344 | 2,653 | 397 | 1,460 | 1,763 | 1,036 | 765 | 311 | 260 | 5,992 |
| CALDWELL | 33 | 366 | 53 | 214 | 300 | 200 | 129 | 51 | 28 | 975 |
| CALLAWAY | 36 | 1,581 | 243 | 876 | 1,142 | 753 | 487 | 236 | 140 | 3,877 |
| CAMDEN | 22 | 1,518 | 263 | 924 | 1,120 | 743 | 560 | 211 | 146 | 3,967 |
| CAPE GIRARDEAU | 364 | 2,658 | 454 | 1,537 | 1,703 | 1,045 | 679 | 341 | 253 | 6,019 |
| CARROLL | 37 | 509 | 64 | 255 | 403 | 267 | 186 | 75 | 40 | 1,290 |
| CARTER | 67 | 453 | 79 | 198 | 325 | 246 | 156 | 66 | 29 | 1,099 |
| CASS | 49 | 2,392 | 448 | 1,689 | 2,105 | 1,182 | 715 | 306 | 207 | 6,652 |
| CEDAR | 98 | 745 | 122 | 398 | 560 | 352 | 229 | 89 | 63 | 1,813 |
| CHARITON | 6 | 259 | 52 | 171 | 203 | 124 | 87 | 40 | 20 | 697 |
| CHRISTIAN | 250 | 2,131 | 437 | 1,338 | 1,779 | 992 | 584 | 245 | 224 | 5,599 |
| CLARK | 36 | 321 | 52 | 162 | 262 | 169 | 117 | 43 | 27 | 823 |
| CLAY | 77 | 4,380 | 942 | 3,086 | 3,492 | 1,882 | 1,242 | 624 | 431 | 11,699 |
| CLINTON | 50 | 467 | 95 | 333 | 391 | 236 | 152 | 64 | 47 | 1,318 |
| COLE | 47 | 2,224 | 369 | 1,319 | 1,606 | 872 | 517 | 278 | 241 | 5,202 |
| COOPER | 18 | 554 | 82 | 376 | 447 | 271 | 177 | 71 | 40 | 1,464 |
| CRAWFORD | 121 | 1,258 | 211 | 671 | 892 | 583 | 383 | 142 | 134 | 3,016 |
| DADE | 22 | 750 | 63 | 195 | 286 | 205 | 145 | 48 | 18 | 970 |
| DALLAS | 76 | 780 | 145 | 451 | 606 | 425 | 279 | 142 | 64 | 2,056 |
| DAVISS | 33 | 333 | 59 | 190 | 280 | 169 | 120 | 50 | 28 | 896 |
| DE KALB | 29 | 301 | 57 | 210 | 279 | 151 | 87 | 53 | 27 | 864 |
| DENT | 84 | 852 | 126 | 470 | 628 | 410 | 279 | 110 | 79 | 2,102 |
| DOUGLAS | 81 | 778 | 122 | 378 | 597 | 416 | 284 | 126 | 59 | 1,982 |
| DUNKLIN | 304 | 2,859 | 369 | 1,489 | 1,972 | 1,233 | 848 | 382 | 208 | 6,481 |
| FRANKLIN | 62 | 2,957 | 511 | 1,738 | 2,087 | 1,292 | 906 | 377 | 285 | 7,197 |
| GASCONADE | 11 | 480 | 97 | 275 | 326 | 222 | 134 | 70 | 42 | 1,168 |
| GENTRY | 25 | 208 | 46 | 118 | 170 | 99 | 76 | 27 | 18 | 564 |
| GREENE | 1,172 | 10,075 | 1,749 | 5,883 | 6,995 | 3,945 | 2,551 | 1,211 | 976 | 23,310 |
| GRUNDY | 38 | 437 | 71 | 255 | 342 | 192 | 123 | 55 | 49 | 1,087 |
| HARRISON | 34 | 377 | 65 | 236 | 286 | 163 | 112 | 55 | 42 | 959 |
| HENRY | 20 | 1,037 | 185 | 618 | 715 | 467 | 311 | 126 | 94 | 2,516 |
| HICKORY | 40 | 485 | 52 | 204 | 344 | 239 | 174 | 66 | 35 | 1,114 |
| HOLT | 19 | 186 | 32 | 94 | 138 | 104 | 79 | 38 | 17 | 482 |
| HOWARD | 3 | 376 | 59 | 219 | 303 | 183 | 133 | 41 | 34 | 972 |
| HOWELL | 275 | 2,461 | 378 | 1,338 | 1,856 | 1,075 | 740 | 362 | 241 | 5,990 |
| IRON | 80 | 706 | 94 | 341 | 446 | 298 | 246 | 93 | 52 | 1,570 |
| JACKSON | 338 | 28,477 | 5,375 | 19,326 | 22,978 | 14,071 | 8,874 | 3,755 | 2,470 | 76,849 |
| JASPER | 666 | 5,710 | 1,098 | 3,827 | 4,252 | 2,418 | 1,463 | 721 | 616 | 14,995 |
| JEFFERSON | 111 | 5,957 | 977 | 3,290 | 4,053 | 2,524 | 1,607 | 687 | 562 | 13,700 |
| JOHNSON | 35 | 1,445 | 267 | 899 | 984 | 590 | 373 | 178 | 166 | 3,447 |
| KNOX | 41 | 183 | 28 | 89 | 150 | 95 | 59 | 37 | 13 | 471 |
| LACLEDE | 188 | 1,937 | 336 | 1,172 | 1,462 | 951 | 559 | 253 | 200 | 4,933 |
| LAFAYETTE | 39 | 1,193 | 214 | 701 | 889 | 526 | 341 | 192 | 126 | 2,989 |
| LAWRENCE | 182 | 1,605 | 295 | 1,012 | 1,281 | 756 | 511 | 186 | 149 | 4,190 |
| LEWIS | 39 | 328 | 50 | 203 | 271 | 147 | 98 | 45 | 37 | 951 |
| LINCOLN | 29 | 1,698 | 293 | 947 | 1,319 | 799 | 512 | 190 | 143 | 4,213 |
| LINN | 44 | 547 | 94 | 342 | 456 | 254 | 170 | 81 | 48 | 1,445 |
| LIVINGSTON | 48 | 578 | 110 | 362 | 447 | 279 | 156 | 83 | 72 | 1,509 |
| MCDONALD | 151 | 1,320 | 279 | 1,034 | 1,207 | 657 | 414 | 188 | 112 | 3,891 |
| MACON | 60 | 550 | 107 | 367 | 442 | 311 | 187 | 73 | 52 | 1,539 |
| MADISON | 63 | 624 | 106 | 323 | 423 | 265 | 228 | 87 | 43 | 1,475 |
| MARIES | 53 | 356 | 58 | 182 | 262 | 170 | 125 | 52 | 30 | 879 |
| MARION | 208 | 1,430 | 244 | 864 | 992 | 552 | 331 | 192 | 141 | 3,366 |
| MERCER | 12 | 125 | 21 | 70 | 99 | 70 | 40 | 17 | 14 | 331 |
| MILLER | 24 | 1,269 | 215 | 726 | 1,045 | 605 | 422 | 168 | 122 | 3,303 |
| MISSISSIPPI | 148 | 1,101 | 182 | 599 | 780 | 413 | 322 | 156 | 113 | 2,565 |
| MONITEAU | 13 | 485 | 105 | 329 | 416 | 229 | 133 | 71 | 55 | 1,338 |
| MONROE | 8 | 269 | 45 | 180 | 272 | 158 | 93 | 33 | 18 | 799 |
| MONTGOMERY | 20 | 512 | 94 | 293 | 378 | 264 | 165 | 72 | 41 | 1,307 |
| MORGAN | 14 | 877 | 152 | 538 | 674 | 414 | 271 | 111 | 65 | 2,446 |
| NEW MADRID | 103 | 1,363 | 185 | 605 | 985 | 650 | 421 | 176 | 122 | 3,199 |
| NEWTON | 222 | 1,955 | 427 | 1,378 | 1,752 | 973 | 646 | 244 | 183 | 5,603 |
| NODAWAY | 43 | 414 | 108 | 233 | 269 | 198 | 106 | 58 | 66 | 1,038 |
| OREGON | 87 | 642 | 76 | 315 | 456 | 369 | 254 | 90 | 41 | 1,601 |
| OSAGE | 13 | 345 | 52 | 200 | 265 | 159 | 93 | 45 | 43 | 857 |
| OZARK | 62 | 585 | 72 | 267 | 387 | 286 | 189 | 74 | 44 | 1,319 |
| PULASKI | 152 | 1,805 | 260 | 1,029 | 1,429 | 921 | 651 | 243 | 165 | 4,681 |
| PERRY | 88 | 605 | 115 | 354 | 460 | 299 | 218 | 102 | 58 | 1,442 |
| PETTIS | 34 | 1,790 | 359 | 1,265 | 1,422 | 727 | 509 | 226 | 173 | 4,681 |
| PHELPS | 228 | 1,970 | 301 | 1,100 | 1,320 | 769 | 516 | 234 | 189 | 4,429 |
| PIKE | 114 | 767 | 105 | 442 | 556 | 384 | 254 | 108 | 63 | 1,912 |
| PLATTE | 26 | 1,299 | 310 | 904 | 981 | 532 | 347 | 152 | 132 | 3,358 |
| POLK | 159 | 1,425 | 235 | 809 | 1,085 | 695 | 470 | 185 | 116 | 3,595 |
| PULASKI | 157 | 1,411 | 248 | 794 | 1,068 | 693 | 372 | 191 | 137 | 3,403 |
| PUTNAM | 22 | 214 | 45 | 122 | 163 | 112 | 74 | 35 | 24 | 575 |
| RALLS | 52 | 319 | 48 | 168 | 252 | 154 | 89 | 42 | 30 | 783 |
| RANDOLPH | 22 | 1,329 | 210 | 780 | 965 | 551 | 351 | 173 | 131 | 3,181 |
| RAY | 13 | 730 | 120 | 442 | 581 | 369 | 226 | 89 | 73 | 1,900 |
| REYNOLDS | 63 | 461 | 48 | 224 | 316 | 204 | 174 | 50 | 37 | 1,053 |
| RIPLEY | 116 | 1,105 | 143 | 557 | 751 | 503 | 371 | 152 | 92 | 2,589 |
| ST CHARLES | 92 | 5,481 | 973 | 3,371 | 4,262 | 2,385 | 1,457 | 626 | 497 | 13,551 |
| ST CLAIR | 6 | 451 | 62 | 205 | 286 | 189 | 152 | 60 | 27 | 1,050 |
| ST FRANCOIS | 73 | 3,005 | 440 | 1,544 | 1,952 | 1,248 | 826 | 412 | 296 | 6,718 |
| STE GENEVIEVE | 13 | 533 | 75 | 290 | 386 | 256 | 145 | 67 | 46 | 1,265 |
| ST LOUIS COUNTY | 424 | 27,472 | 3,924 | 15,433 | 21,028 | 14,062 | 8,512 | 3,684 | 2,104 | 68,747 |
| SALINE | 28 | 1,035 | 194 | 614 | 676 | 435 | 288 | 119 | 87 | 2,413 |
| SCHUYLER | 26 | 196 | 28 | 115 | 150 | 92 | 78 | 34 | 14 | 511 |
| SCOTLAND | 21 | 152 | 22 | 74 | 111 | 74 | 54 | 20 | 10 | 432 |
| SCOTT | 274 | 2,471 | 379 | 1,291 | 1,733 | 1,121 | 707 | 339 | 235 | 5,805 |
| SHANNON | 97 | 643 | 84 | 299 | 418 | 330 | 257 | 89 | 53 | 1,530 |
| SHELBY | 38 | 276 | 58 | 168 | 211 | 142 | 98 | 35 | 24 | 736 |
| STODDARD | 227 | 1,563 | 246 | 828 | 1,028 | 701 | 480 | 213 | 146 | 3,642 |
| STONE | 150 | 1,366 | 196 | 782 | 1,059 | 682 | 432 | 169 | 100 | 3,420 |
| SULLIVAN | 47 | 315 | 80 | 206 | 251 | 164 | 108 | 47 | 29 | 885 |
| TANEY | 159 | 1,832 | 248 | 1,145 | 1,539 | 871 | 626 | 239 | 165 | 5,233 |
| TEXAS | 140 | 1,258 | 195 | 705 | 912 | 619 | 432 | 168 | 112 | 3,147 |
| VERNON | 147 | 1,075 | 190 | 656 | 793 | 502 | 344 | 164 | 117 | 2,766 |
| WARREN | 11 | 898 | 157 | 548 | 636 | 390 | 300 | 99 | 84 | 2,214 |
| WASHINGTON | 30 | 1,671</ | | | | | | | | |

4.1.2. Medical Care Networks (Malpractice Reform)

In his January 26, 2005 “State of the State” address, Governor Matt Blunt placed emphasis on the need to legislatively reform the medical liability system in Missouri. He characterized a crisis created by “skyrocketing medical malpractice payments and frivolous lawsuits” that resulted in:

- Hundreds of Missouri physicians closing their practices in recent years
- Other Missouri physicians moving their practices to another state
- Physicians cutting back on state-of-the-art equipment
- Some physician offices laying off medical and support staff to compensate for skyrocketing malpractice insurance premiums
- Physicians are increasingly practicing “defensive medicine”. Some physicians in Missouri are now limiting lifesaving procedures, such as surgery and child delivery to reduce the risk of lawsuits

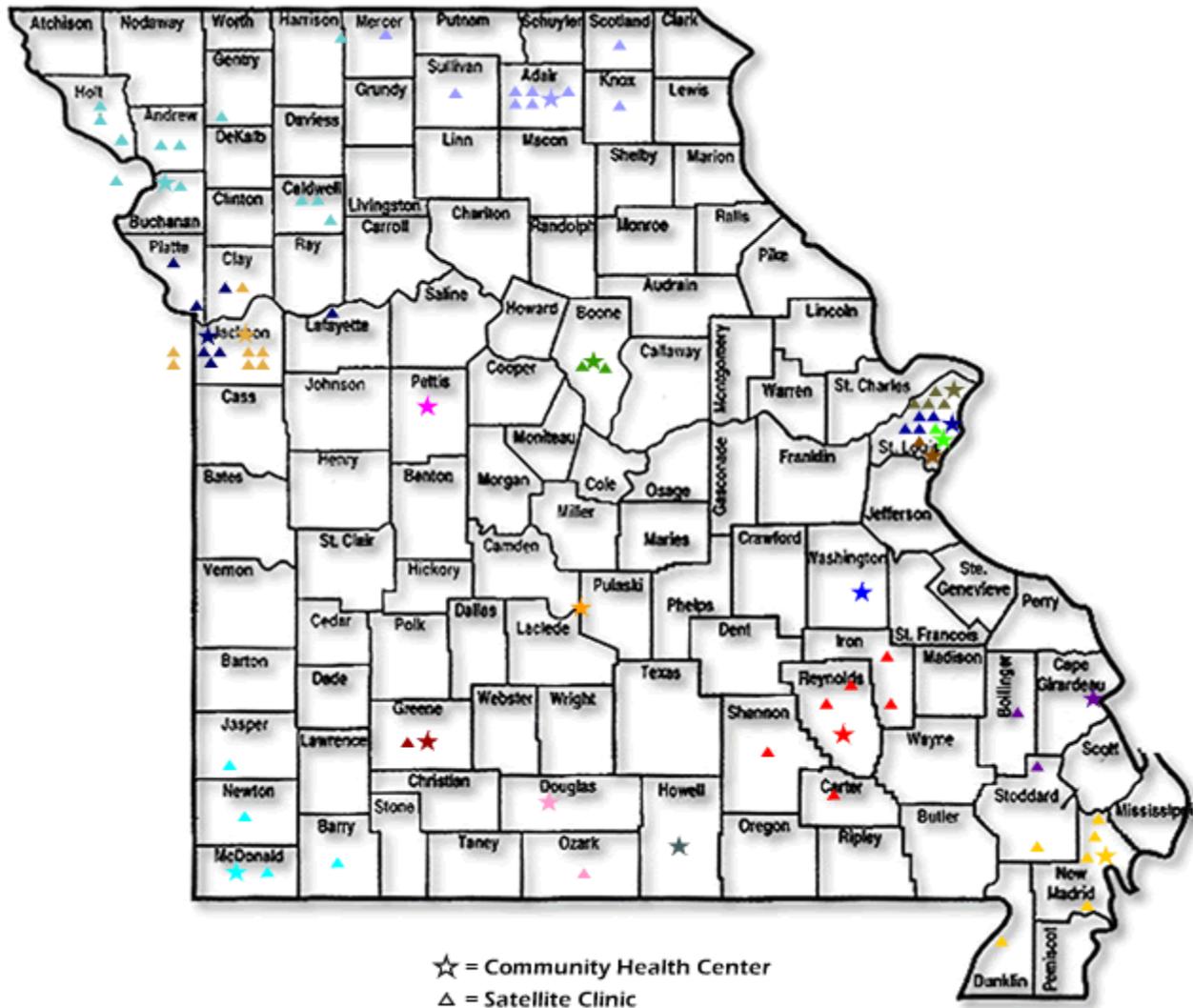
Certain medical providers specializing in services for MCH populations such as obstetricians have been more directly impacted by this crisis and can be found in each of the above categories. If the medical malpractice liability reforms proposed by Governor Blunt are legislated, it is anticipated that the erosion of obstetricians, surgeons, pediatricians, internal medicine physicians, and other specialties caused by skyrocketing malpractice premiums can be curtailed and MCH access to medical specialties improved.

4.1.3. Primary Care Networks

Public primary health care delivery infrastructure in Missouri now supports a series of federally qualified health centers (FQHCs) throughout this state. Collectively, those FQHCs are referred to as “Community Health Centers” by the Missouri Primary Care Association. The following map depicts the locations of community health centers in Missouri (★); and satellite clinics (△) operated by these “hub” community centers are also depicted on the following map:

FIGURE 17

**MISSOURI PRIMARY CARE ASSOCIATION
 (MPCA)**



Source: MCPA's Web site <http://www.mo-pca.org/healthcenters.htm>

These nineteen primary care (community health centers) listed on this map serve low income working persons, low income rural areas in general, and an increasing number of migrant workers (documented and undocumented). These community health centers can be identified accordingly:

- **Big Springs Medical Association, Inc** **Reynolds County**
P.O. Box 157, Hwy 106 & 2nd Street
Ellington, MO 63638
P- (573) 663-2313
F- (573) 663-2441

- **Central Ozarks Medical Center** **Pulaski County**
PO Box 777, 304 West Washington Street
Richland, MO 65556
P- (573) 765-5131
F- (573) 765-3122

- **Cross Trails Medical Center** **Cape Girardeau County**
PO Box 777, 304 West Washington Street
Richland, MO 65556
P- (573) 765-5131
F- (573) 765-3122

- **Douglas County Community Health Care Clinic** **Douglas County**
P.O. Box 1359
FedEX or UPS Only: 504 NW 10th Avenue
Ava, MO 65608
P- (417) 683-4831
F- (417) 683-6183

- **Family Care Health Centers** **St. Louis County**
401 Holly Hills Avenue
St. Louis, MO 63111
P- (314) 481-1615
F- (314) 353-1310

- **Family Health Center** **Boone County**
1001 W. Worley
Columbia, MO 65203
P- (573) 214-2314
F- (573) 814-2783

- **Grace Hill Neighborhood Health Centers, Inc.** **St. Louis County**
2600 Hadley Street
St. Louis, MO 63106
P- (314) 241-2200
F- (314) 241-8938

- **Great Mines Health Center, Inc.** Washington County
600 Purcell, Suite B
Potosi, MO 63664
P- (573) 438-9355
F- (573) 438-7892

- **Jordan Valley Community Health Center** Greene County
618 North Benton Avenue, P.O. Box 5681
Springfield, MO 65801-5681
P- (417) 831-0150
F- (417) 831-0155

- **Myrtel H. Davis Comprehensive Health Center** St. Louis County
5471 Dr. Martin Luther King Drive
St. Louis, MO 63112
P-(314) 367-5820
F-(314) 367-7010

- **Northeast Missouri Health Council** Adair County
902 East LaHarpe Street, Suite 101
Kirksville, MO 63501
P- (660) 627-5757 Ext. 27
F- (660) 627-5802

- **Northwest Health Services, Inc.** Buchanan County
PO Box 8612, 2303 Village Drive
St. Joseph, MO 64508
P- (816) 387-6608
F- (816) 232-8421

- **Ozark Tri-County Health Care Consortium** McDonald County
111 East Main, PO Box 687
Anderson, MO 64831
P- (417) 845-8300
F- (417) 845-8316

- **People's Health Centers, Inc.** St. Louis, County
5701 Delmar Blvd.
St. Louis, MO 63112
P- (314) 367-7848
F- (314) 367-5637

- **Regional Health Care Clinic** **Pettis County**
Regional Health Care Clinic
1700 East Broadway
Sedalia, MO 65301
P- (660) 826-4774
F- (660) 826-2661
- **Samuel Rogers Community Health Center** **Jackson County**
825 Euclid
Kansas City, MO 64124
P- (816) 889-4600
F- (816) 889-6475
- **Southeast Missouri Health Network** **New Madrid County**
Southeast Missouri Health Network
208 Main Street, PO Box 400
New Madrid, MO 63869
P- (573) 748-2404
F- (573) 748-2554
- **Southern Missouri Community Health Center** **Howell County**
1115 Independence Drive
West Plains, MO 65775
P- (417) 255-8464
F- (417) 255-9732
- **Swope Health Services** **Jackson County**
3801 Blue Parkway
Kansas City, MO 64130
P- (816) 922-7614
F- (816) 922-7616

These community health centers and their satellite clinics represent an important part of the health “safety net” for Missourians in general and for MCH population in particular. This safety net is comprised of doctors, dentists, nurses, and others who work in public hospitals, non-profit community hospitals, community-based and school-based health centers, public health clinics, and private practices.

Missouri’s Primary Care Unit coordinates a range of initiatives to expand primary care capacity in Missouri. Through private/public partnerships, these programs work to ensure access to and availability of primary care services for all Missouri populations. Efforts to increase access include evaluating availability and accessibility of medical, psychiatric, and dental health professionals; state and federal partners in the recruitment and retention of health care professionals in health professional shortage

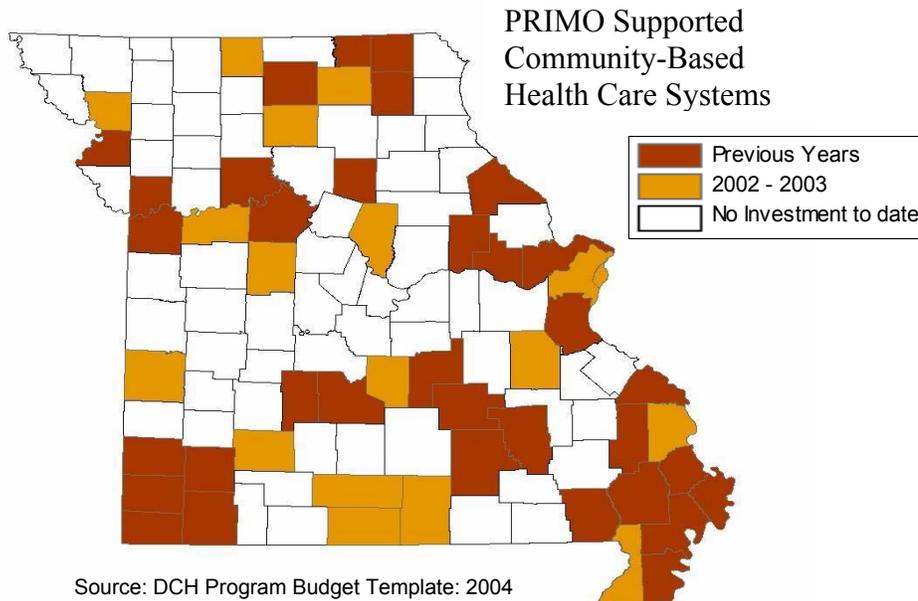
areas; and assessing the extent, impact, and characteristics of the lack of insurance on the health care delivery system, communities, and individuals in Missouri.

In a climate of diminishing resources, the Primary Care Resources Initiative for Missouri (PRIMO) has taken on added significance. PRIMO is a program operated through the Missouri DHSS that assists in the recruitment of individuals from rural, inner city, and other underserved areas for medical and dental training with an obligation to return and practice in those areas for a specified period of time. A formula for PRIMO loan forgiveness is applied to loans received by medical and dental students. In recent years, the PRIMO program has placed increasing emphasis upon attracting potential dentists to this program who are required to:

- Work in a *geographic or low income health professional shortage area (HPSA)* to earn forgiveness of their loans
- Accept Medicaid and MC+ patients in their practice
- Consider employment in a Community Health Center (CHC) or a Public Health Department

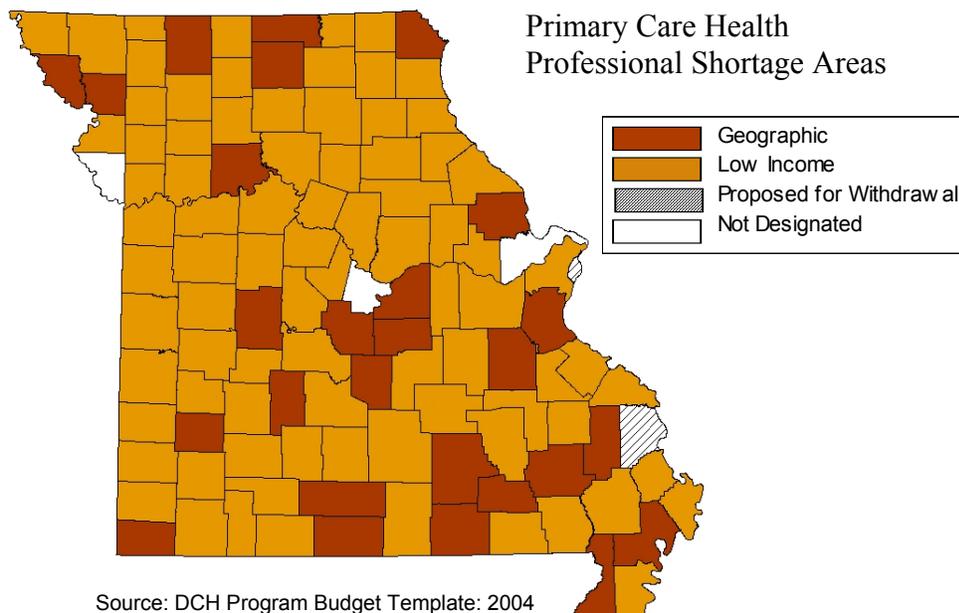
The following map depicts those counties in Missouri where a PRIMO project has assisted communities in those counties in recruiting and developing primary care resources:

FIGURE 18



Areas of need for placement of physicians and dentists are determined by applying federal criteria to identify primary care *Health Professional Shortage Areas (HPSAs)* in Missouri. As the following map indicates, virtually all areas of Missouri have been designated as HPSAs when these criteria are applied:

FIGURE 19



4.1.4. Primary Care Physician Capacity

In the recently completed "Report on the Health Care Safety Net in Missouri" prepared by Missouri Department of Health and Senior Services with support from the Missouri Foundation for Health in conjunction with CHIME, an overview of primary care physician capacity was provided. Table 84 and the following maps summarize this capacity.

TABLE 84

| Physician Supply in Missouri Counties (By County They Work In) 2002 | | | | | | |
|--|---------------------------|---------------|--------------------------|-----------------------------|----------------------------|---------------|
| WORK COUNTY | Primary Pediatrics | OB/GYN | General Internist | General Primary Care | Pediatric Specialty | TOTALS |
| Missouri | 1,026 | 648 | 2,338 | 1,873 | 80 | 5,965 |
| 1-Kansas City Metro | 258 | 123 | 377 | 370 | 30 | 1,158 |
| Cass | 3 | 0 | 5 | 22 | 0 | 30 |
| Clay | 18 | 19 | 47 | 65 | 1 | 150 |
| Clinton | 0 | 0 | 3 | 9 | 0 | 12 |
| Jackson | 230 | 99 | 312 | 226 | 29 | 896 |
| Lafayette | 0 | 0 | 2 | 15 | 0 | 17 |
| Platte | 7 | 5 | 7 | 22 | 0 | 41 |
| Ray | 0 | 0 | 1 | 11 | 0 | 12 |
| 2-St. Louis Metro | 545 | 327 | 1,330 | 412 | 40 | 2,654 |
| Franklin | 6 | 7 | 15 | 30 | 0 | 58 |
| Jefferson | 11 | 9 | 21 | 34 | 0 | 75 |
| Lincoln | 0 | 0 | 3 | 6 | 0 | 9 |
| St. Charles | 47 | 21 | 72 | 54 | 0 | 194 |
| St. Louis | 248 | 223 | 720 | 206 | 6 | 1,403 |
| Warren | 1 | 0 | 2 | 5 | 0 | 8 |
| St. Louis City | 232 | 67 | 497 | 77 | 34 | 907 |
| 3-Central Region | 87 | 65 | 212 | 312 | 5 | 681 |
| Audrain | 4 | 3 | 10 | 12 | 0 | 29 |
| Boone | 51 | 29 | 117 | 93 | 5 | 295 |
| Callaway | 0 | 0 | 3 | 19 | 0 | 22 |
| Camden | 3 | 4 | 7 | 18 | 0 | 32 |
| Cole | 14 | 15 | 25 | 46 | 0 | 100 |
| Cooper | 1 | 0 | 3 | 6 | 0 | 10 |
| Crawford | 1 | 0 | 3 | 5 | 0 | 9 |
| Dent | 0 | 0 | 3 | 6 | 0 | 9 |
| Gasconade | 0 | 0 | 1 | 7 | 0 | 8 |
| Howard | 0 | 1 | 0 | 3 | 0 | 4 |
| Laclede | 6 | 1 | 6 | 11 | 0 | 24 |
| Maries | 0 | 0 | 0 | 1 | 0 | 1 |
| Miller | 0 | 0 | 3 | 10 | 0 | 13 |
| Moniteau | 0 | 0 | 0 | 6 | 0 | 6 |
| Montgomery | 0 | 0 | 2 | 4 | 0 | 6 |
| Morgan | 0 | 0 | 0 | 10 | 0 | 10 |
| Osage | 0 | 0 | 0 | 4 | 0 | 4 |
| Pettis | 2 | 4 | 7 | 11 | 0 | 24 |
| Phelps | 4 | 5 | 14 | 23 | 0 | 46 |
| Pulaski | 0 | 3 | 4 | 15 | 0 | 22 |
| Washington | 1 | 0 | 4 | 2 | 0 | 7 |
| 4-Southwestern Region | 65 | 70 | 195 | 367 | 5 | 702 |
| Barry | 0 | 0 | 4 | 17 | 0 | 21 |
| Barton | 0 | 0 | 2 | 6 | 0 | 8 |
| Bates | 0 | 0 | 2 | 4 | 0 | 6 |
| Benton | 0 | 0 | 2 | 10 | 0 | 12 |
| Cedar | 0 | 0 | 2 | 7 | 0 | 9 |
| Christian | 0 | 1 | 1 | 13 | 0 | 15 |
| Dade | 0 | 0 | 0 | 1 | 0 | 1 |

TABLE 84 continued

| Physician Supply in Missouri Counties (By County They Work In) 2002 | | | | | | |
|--|---------------------------|---------------|--------------------------|-----------------------------|----------------------------|---------------|
| WORK COUNTY | Primary Pediatrics | OB/GYN | General Internist | General Primary Care | Pediatric Specialty | TOTALS |
| Missouri | 1,026 | 648 | 2,338 | 1,873 | 80 | 5,965 |
| Dallas | 0 | 0 | 0 | 4 | 0 | 4 |
| Greene | 43 | 41 | 103 | 140 | 3 | 330 |
| Henry | 0 | 0 | 2 | 12 | 0 | 14 |
| Hickory | 0 | 0 | 0 | 2 | 0 | 2 |
| Jasper | 8 | 10 | 16 | 30 | 0 | 64 |
| Lawrence | 0 | 0 | 6 | 21 | 0 | 27 |
| McDonald | 0 | 0 | 0 | 5 | 0 | 5 |
| Newton | 11 | 14 | 27 | 25 | 0 | 77 |
| Polk | 1 | 1 | 4 | 15 | 0 | 21 |
| St. Clair | 0 | 0 | 5 | 6 | 0 | 11 |
| Stone | 0 | 0 | 3 | 8 | 0 | 11 |
| Taney | 1 | 2 | 13 | 21 | 2 | 39 |
| Vernon | 1 | 1 | 3 | 8 | 0 | 13 |
| Webster | 0 | 0 | 0 | 12 | 0 | 12 |
| 5-Southeastern Region | 43 | 37 | 127 | 218 | 0 | 425 |
| Bollinger | 0 | 0 | 1 | 1 | 0 | 2 |
| Butler | 6 | 8 | 21 | 18 | 0 | 53 |
| Cape Girardeau | 14 | 11 | 39 | 37 | 0 | 101 |
| Carter | 0 | 0 | 0 | 1 | 0 | 1 |
| Douglas | 0 | 0 | 0 | 4 | 0 | 4 |
| Dunklin | 5 | 4 | 7 | 9 | 0 | 25 |
| Howell | 3 | 1 | 7 | 24 | 0 | 35 |
| Iron | 2 | 0 | 0 | 5 | 0 | 7 |
| Madison | 1 | 0 | 4 | 2 | 0 | 7 |
| Mississippi | 0 | 0 | 0 | 5 | 0 | 5 |
| New Madrid | 0 | 0 | 4 | 1 | 0 | 5 |
| Oregon | 0 | 0 | 1 | 1 | 0 | 2 |
| Ozark | 0 | 0 | 0 | 4 | 0 | 4 |
| Pemiscot | 2 | 3 | 4 | 4 | 0 | 13 |
| Perry | 0 | 2 | 1 | 7 | 0 | 10 |
| Reynolds | 0 | 0 | 3 | 1 | 0 | 4 |
| Ripley | 0 | 0 | 2 | 3 | 0 | 5 |
| Ste. Genevieve | 5 | 4 | 8 | 13 | 0 | 30 |
| St. Francois | 0 | 0 | 0 | 2 | 0 | 2 |
| Scott | 2 | 3 | 12 | 36 | 0 | 53 |
| Shannon | 2 | 1 | 5 | 2 | 0 | 10 |
| Stoddard | 1 | 0 | 3 | 14 | 0 | 18 |
| Texas | 0 | 0 | 4 | 12 | 0 | 16 |
| Wayne | 0 | 0 | 0 | 4 | 0 | 4 |
| Wright | 0 | 0 | 1 | 8 | 0 | 9 |
| 6-Northwestern Region | 18 | 14 | 44 | 69 | 0 | 145 |
| Andrew | 0 | 0 | 1 | 3 | 0 | 4 |
| Atchison | 0 | 0 | 0 | 4 | 0 | 4 |
| Buchanan | 11 | 9 | 28 | 22 | 0 | 70 |
| Caldwell | 0 | 0 | 2 | 2 | 0 | 4 |
| Carroll | 1 | 0 | 1 | 3 | 0 | 5 |
| Daviess | 0 | 0 | 1 | 2 | 0 | 3 |
| DeKalb | 0 | 0 | 0 | 1 | 0 | 1 |
| Gentry | 1 | 0 | 0 | 2 | 0 | 3 |
| Harrison | 1 | 0 | 1 | 2 | 0 | 4 |
| Holt | 0 | 0 | 1 | 1 | 0 | 2 |
| Johnson | 3 | 3 | 6 | 14 | 0 | 26 |
| Nodaway | 1 | 2 | 3 | 11 | 0 | 17 |
| Worth | 0 | 0 | 0 | 2 | 0 | 2 |
| 7-Northeastern Region | 9 | 12 | 53 | 123 | 0 | 197 |
| Adair | 2 | 1 | 19 | 29 | 0 | 51 |

TABLE 84 continued

| Physician Supply in Missouri Counties (By County They Work In) 2002 | | | | | | |
|--|---------------------------|---------------|--------------------------|-----------------------------|----------------------------|---------------|
| WORK COUNTY | Primary Pediatrics | OB/GYN | General Internist | General Primary Care | Pediatric Specialty | TOTALS |
| Missouri | 1,026 | 648 | 2,338 | 1,873 | 80 | 5,965 |
| Chariton | 0 | 0 | 1 | 3 | 0 | 4 |
| Clark | 0 | 0 | 0 | 4 | 0 | 4 |
| Grundy | 0 | 1 | 1 | 4 | 0 | 6 |
| Knox | 0 | 0 | 0 | 2 | 0 | 2 |
| Lewis | 0 | 0 | 0 | 4 | 0 | 4 |
| Linn | 1 | 0 | 1 | 9 | 0 | 11 |
| Livingston | 1 | 3 | 3 | 5 | 0 | 12 |
| Macon | 0 | 0 | 2 | 6 | 0 | 8 |
| Marion | 1 | 3 | 11 | 14 | 0 | 29 |
| Mercer | 0 | 0 | 0 | 1 | 0 | 1 |
| Monroe | 0 | 0 | 0 | 3 | 0 | 3 |
| Pike | 0 | 0 | 0 | 4 | 0 | 4 |
| Putnam | 0 | 0 | 1 | 2 | 0 | 3 |
| Ralls | 1 | 0 | 0 | 2 | 0 | 3 |
| Randolph | 2 | 2 | 7 | 8 | 0 | 19 |
| Saline | 0 | 2 | 6 | 12 | 0 | 20 |
| Schuyler | 0 | 0 | 0 | 3 | 0 | 3 |
| Scotland | 0 | 0 | 1 | 3 | 0 | 4 |
| Shelby | 0 | 0 | 0 | 2 | 0 | 2 |
| Sullivan | 1 | 0 | 0 | 3 | 0 | 4 |

As listed above, the pediatric specialty physicians are located in seven counties: Clay County (1); Jackson County (29); St. Louis County (6); St. Louis City (34); Boone County (5); Greene County (3); Cape Girardeau County (19); Howell County (2); Ste. Genevieve County (1); Scott County (2); and Buchanan County (13).

4.1.5. Dental Health Care Networks

The eroding capacity to deliver dental health services to MCH populations was detailed in an earlier section of this assessment (See Section 3.3.5.4.). Dental workforce statistics for 2003 indicate that during that year there were 47 dentists per 100,000 population. While the growing shortage of dental practitioners has reached the crisis stage in Missouri (particularly with regard to the lack of dentists treating Medicaid eligible children), there is still a dental health delivery infrastructure in place that can be built upon.

Based upon a unique, population-based workforce model, need estimates for preventive oral health services will be available for Missouri in July 2005. A gap/productivity analysis for this model will be completed and available July 2006.

4.1.5.1. Infrastructure

| | |
|--|-----------|
| • Population served by public water system | 5,629,707 |
| • Percentage of people on public water systems that receive fluoridated water | 82% |
| • Number of dental schools | 1 |
| • Number of dental hygiene schools | 4 |
| • Number of dental assisting schools | 6 |
| • Number of community-based low-income dental clinics | 28 |
| • Number of school-based or school-linked dental clinics | 2 |
| • Number of school-based health centers with an oral health component | 0 |
| • Number of local health departments with a dental program | 8 |
| • Number of tribal, state, or local agencies with service populations of 250,000 or more | 4 |
| • Number of agencies with a dental program | 2 |
| • Number of dental programs directed by a dental professional | 2 |
| • Number of directors with an advanced public health degree | 2 |

4.1.5.2. Workforce

| | |
|---|-------|
| • Number of dentists in Missouri | 2,666 |
| • Percentage of dentists enrolled in Medicaid | 26% |
| • Percentage of dentists enrolled in SCHIP | 26% |
| • Number of dental hygienists in the state | 1,774 |

In 1999, the Oral Health Network of Missouri (OHNM) was created to pool their resources to support the following:

1. Recruitment/Retention of Oral Health Professionals
2. Finance/Reimbursement Improvement and Revision
3. Education and Prevention Expansion
4. Infrastructure Development

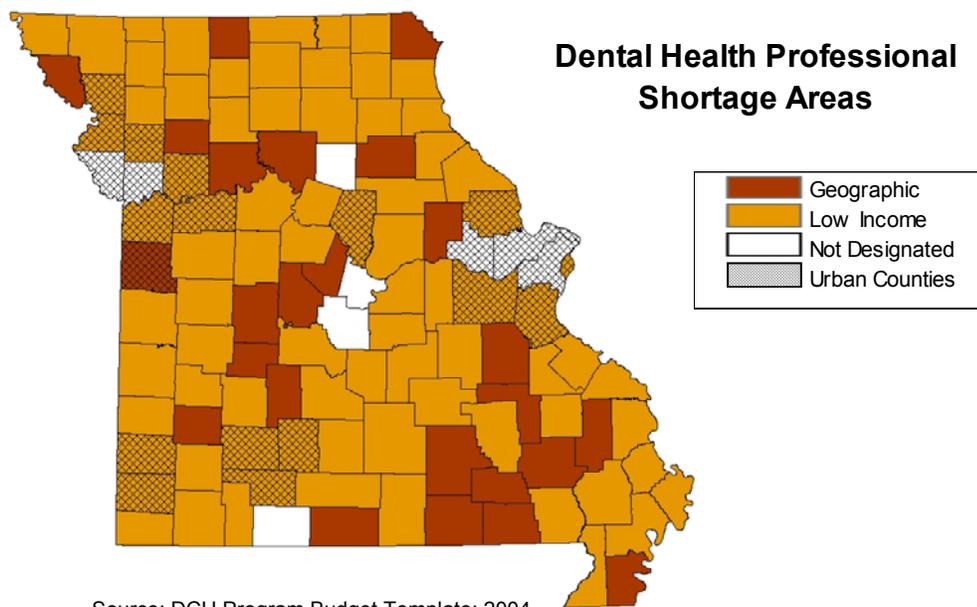
OHNM is a statewide oral health care network whose members provide oral care to medically underserved, uninsured, and insured populations at over 24 delivery sites within Missouri's rural and urban communities. The OHNM is a non-profit tax exempt organization that received Bureau of Health Care Integrated Services Development Initiative (ISDI) funding. Many of the community health centers identified on pages 136 to 139 are a part of this coalition that provide oral care to the medically underserved and are designated by this symbol: ☑.

4.1.5.3. Programs

- Comparison of increase/loss of practicing dentists (and where loss or increase has occurred) since last MCH five-year needs assessment was conducted in 2000
- Numbers of dental hygienists working in Missouri (documentation of whether numbers of dental health professionals have increased or decreased)

The following map documents dental health professional shortage areas in Missouri. As the map indicates, all but nine counties in Missouri have been designated as having a shortage of dental health professionals:

FIGURE 24



4.1.6. Mental Health Networks

Missouri Coalition of Community Mental Health Centers' Web site (www.mocmhc.org) provides the following information.

In Missouri, Community Mental Health Centers, designated as Administrative Agents by the Missouri DMH, are the primary treatment providers for both adults and children in DMH's Comprehensive Psychiatric Services Division.

In accordance with State Statute 632.050 RSMo, these designated centers serve as entry/exit points in each geographic area, into and from the state mental health delivery system, offering a continuum of comprehensive mental health services.

All member agencies are accredited or certified by one or more of the following:

- Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
- Commission on Accreditation of Rehabilitation Facilities (CARF)
- Council on Accreditation (COA)
- Missouri Department of Mental Health (DMH)

Member agencies have provided comprehensive community mental health care and/or substance abuse treatment services and support for an average of 25 years per agency.

Member agencies provide a statewide mental health and substance abuse treatment network with staff approximating:

- 130 Psychiatrists
- 210 Psychologists
- 2200 Other Professional Staff

The Missouri Coalition of Community Mental Health Centers Network provides a comprehensive array of psychiatric and substance abuse treatment services and supports as appropriate for children/adolescents, adults, and senior adults.

Each member Community Mental Health Center provides all of the following:

- Core Services
 - Screening and Assessment
 - Case Management
 - Medication Management
 - Outpatient (Individual, Group, Family)
 - Inpatient (Provide or Access)
 - Rehabilitation

- 24-Hour Emergency Services
- Community Support
- Consultation
- Education and Prevention

Additionally, each member agency provides several of the following:

- Specialized Services
 - Substance Abuse Treatment
 - Treatment for Co-Occurring Disorders
 - Specific Disorder Treatment Programs
(e.g. Anxiety, Depression, Attention Deficit, Sexual Abuse, Stress, Eating, etc.)
 - Crisis Stabilization
 - “Families First” Home-Based Intervention
 - Professional Parent Homes/Therapeutic Foster Care
 - Specialized Outpatient Programs for Children/Adolescents
 - Residential for Children/Adolescents
 - Residential for Adults
 - Pre-Vocational and Supported Employment
 - Supported Housing

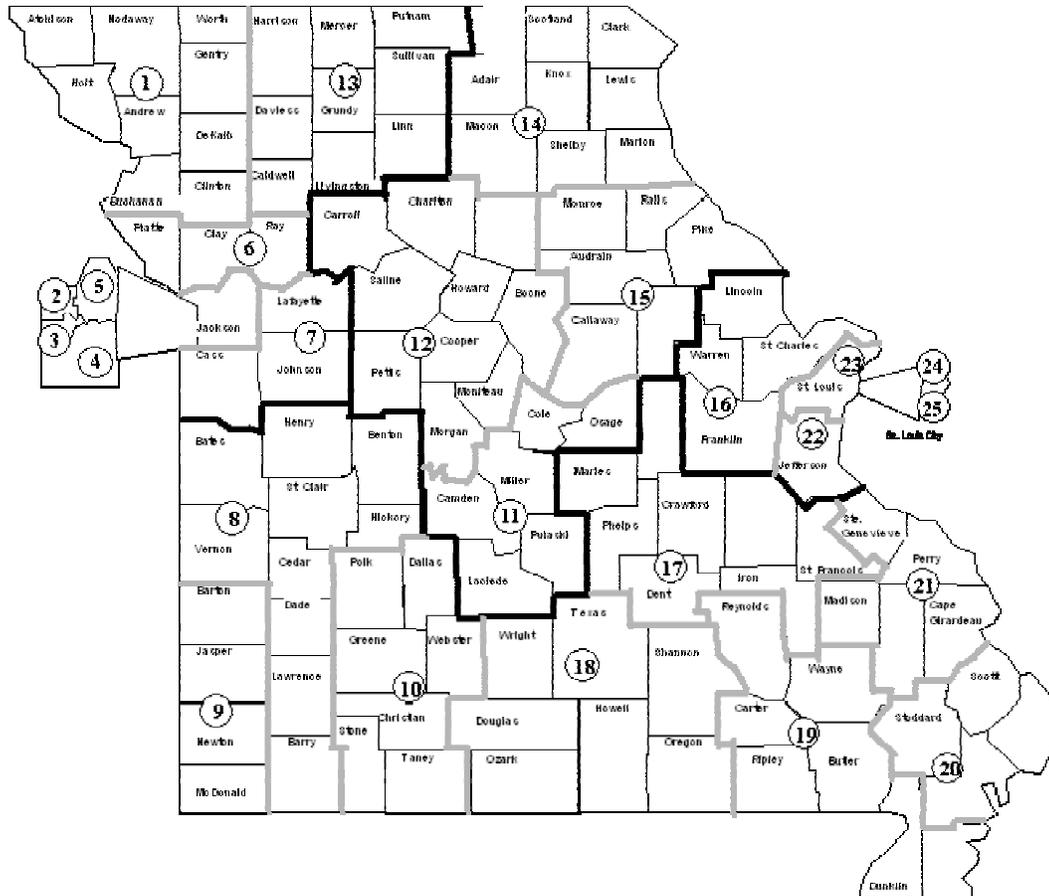
DMH’s Web sites www.dmh.missouri.gov and www.dmh.mo.gov/opa/pubs/Wheretogo.htm provided the following information and maps.

DIVISION OF COMPREHENSIVE PSYCHIATRIC SERVICES (CPS) SERVICE AREAS

The division operates 11 facilities and supports 25 administrative agents and more than 600 community residential facilities. Through these facilities, CPS provides an array of services, including evaluation, day treatment, outpatient care, psychiatric rehabilitation, housing services, crisis services and hospitalization, as well as evaluation and treatment of persons committed by court order.

FIGURE 25

Division of Comprehensive Psychiatric Services Service Areas



Source: MO Department of Mental Health's Web site: <http://www.dmh.missouri.gov/opa/pubs/Wheretogo.htm>

Area 1

Family Guidance Center, 510 Francis St., #200, St. Joseph, MO 64501-1706; 816-364-1501
Affiliated Center: Community Recreation and Resocialization, Inc., 525 S. 10th Street, St. Joseph, MO 64501; 816-233-0430

Counties served: Atchison, Nodaway, Holt, Andrew, Buchanan, Clinton, DeKalb, Gentry, Worth

Areas 2-5

2. Truman Medical Center Behavioral Health, 2211 Charlotte, Kansas City, MO 64111; 816-404-5700

3. Swope Parkway Health Center, 3801 Blue Parkway, Kansas City, MO 64130; 816-922-7645; 800-735-2966 (TT)

4. ReDiscover, 901 NE Independence Avenue, Lee's Summit, MO 64086; 816-246-8000

5. Comprehensive Mental Health Services, 10901 Winner Road, P.O. Box 520169, Independence, MO 64052; 816-254-3652 800-735-2966 (TT)
County served: Jackson

Area 6

Tri-County Mental Health Services, 3100 NE 83rd St., Kansas City, MO 64119; 816-468-0400; 800-955-8339 (TT)
Counties served: Platte, Clay, Ray

Area 7

Pathways Community Behavioral Healthcare, Inc., 520C Burkarth Road, Warrensburg, MO 64093; 660-747-7127
Counties served: Lafayette, Johnson, Cass

Area 8

Affiliated Centers: Pathways Community Behavioral Healthcare, Inc., 1800 Community Drive, Clinton, MO 64735; 660-885-4586
Clark Community Mental Health Ctr., 307 Fourth St., P.O. Box 285 Monett, MO 65708; 417-235-6610
Counties served: Bates, Vernon, Henry, St. Clair, Cedar, Benton, Hickory, Barry, Lawrence, Dade

Area 9

Ozark Center, 3006 McClelland, P.O. Box 2526, Joplin, MO 64803; 417-781-2410, 800-735-2966 (TT)
Counties served: Barton, Jasper, Newton, McDonald

Area 10

Burrell Behavioral Health, 1300 Bradford Parkway, Springfield, MO 65804; 417-269-5400, 417-269-7209 (TT)
Counties served: Greene, Christian, Stone, Taney, Webster, Dallas, Polk

Area 11

Pathways Community Behavioral Health Care, Inc. 1905 Stadium Blvd. P.O. Box 104146, Jefferson City, MO 65110-4146; 573-634-3000
Affiliated Center: New Horizons Community Support Services, 2013 William St., Jefferson City, MO 65109 573-636-8108
Counties served: Cole, Osage, Miller, Camden, Laclede, Pulaski

Area 12

University Behavioral Health Services, 601 Business Loop 70 W., Suite 202 Columbia, MO 65201; 573-884-1550, 573-884-1012 (TT)
Affiliated Center: New Horizons Community Support Services, 1408 Hathman Place, Columbia, MO 65201 573-443-0405
Counties served: Carroll, Chariton, Randolph, Howard, Pettis, Cooper, Boone, Moniteau, Morgan, Saline

Area 13

North Central Missouri Mental Health Center, 1601 East 28th, Box 30,
Trenton, MO 64683; 660-359-4487

Counties served: Harrison, Mercer, Putnam, Daviess, Grundy, Sullivan, Caldwell,
Livingston, Linn

Area 14

Mark Twain Area Counseling Center, 105 Pfeiffer Avenue, Kirksville, MO
63501 660-665-4612

Counties served: Schuyler , Scotland , Clark, Adair, Knox, Lewis, Macon, Shelby,
Marion

Area 15

Arthur Center, 321 West Promenade, Mexico, MO 65265; 573-582-1234

Counties served: Monroe, Ralls, Audrain, Pike, Montgomery, Callaway

Area 16

Crider Center, 1032 Crosswinds Ct., Wentzville, MO 63385; 636-332-8000

Counties served: Lincoln, Warren, Franklin, St. Charles

Area 17

BJC Behavioral Health, 1085 Maple St., Farmington, MO 63640; 573-756-5353

Affiliated Center: Pathways Community Behavioral Healthcare, 1441 Forum
Drive, P.O. Box 921, Rolla, MO 65402; 573-364-7551

Counties served: Gasconade, Maries, Phelps, Crawford, Washington, St.
Francois, Iron, Dent

Area 18

Ozark Medical Center, P.O. Box 1100, West Plains, MO 65775; 417-257-6762
417-257-5868 (TT)

Counties served: Wright, Texas, Shannon, Douglas, Ozark, Howell, Oregon

Area 19

Family Counseling Center, 925 Highway VV, P.O. Box 71, Kennett, MO 63857;
573-888-5925

Counties served: Dunklin, Pemiscot, Reynolds, Carter, Ripley, Wayne, Butler

Area 20

Bootheel Counseling Services, 760 Plantation Blvd., P.O. Box 1043, Sikeston,
MO 63801; 573-471-0800

Counties served: Stoddard, Scott, Mississippi, New Madrid

Area 21

Community Counseling Center, 402 South Silver Springs Road, Cape Girardeau, MO 63701; 573-334-1100

Counties served: Ste. Genevieve, Cape Girardeau, Perry, Bollinger, Madison

Area 22

Comtre Community Treatment, 227 Main St., Festus, MO 63028; 636-931-2700

County served: Jefferson

Area 23-25

23. BJC Behavioral Health Services, 1430 Olive, Suite 500 St. Louis, MO 63103; 314-206-3700, 314-206-3837 (TT)

BJC Behavioral Health (North Site) 3165 McKelvey Rd. Suite 200, Bridgeton, MO 63044-2550; 314-206-3900

BJC Behavioral Health (South Site) 343 S. Kirkwood Rd., Suite 200, Kirkwood, MO 63122-6915; 314-206-3400

24. Hopewell Center, 1504 S. Grand, St. Louis, MO 63104; 314-531-1770

25. BJC Behavioral Health Services, 1430 Olive, Suite 500 St. Louis, MO 63103; 314-206-3700, 314-206-3837 (TT)

Affiliated Centers: Places for People, Inc., 4120 Lindell Blvd., St. Louis, MO 63108; 314-535-5600

Independence Center, 4380 W. Pine Blvd., St. Louis, MO 63108; 314-533-4380

ADAPT Institute of MO, 2301 Hampton, St. Louis, MO 63139; 314-644-3111

Counties served: St. Louis City, St. Louis County

STATE OPERATED FACILITIES:

Cottonwood Residential Treatment Center

1025 North Sprigg Street, Cape Girardeau, MO 63701 573-290-5888

Fulton State Hospital

600 East Fifth Street, Fulton, MO 65251 573-592-4100

Hawthorn Children's Psychiatric Hospital

1901 Pennsylvania Avenue, St. Louis, MO 63133 314-512-7800

Metropolitan St. Louis Psychiatric Center

5351 Delmar, St. Louis, MO 63112 314-877-0500

Mid-Mo Mental Health Center

#3 Hospital Drive, Columbia, MO 65201 573-884-1300

Northwest Missouri Psychiatric Rehabilitation Center

3505 Frederick, St. Joseph, MO 64506 816-387-2300

St. Louis Psychiatric Rehabilitation Center

5300 Arsenal, St. Louis, MO 63139 314-644-8000

Southeast Missouri Mental Health Center

1010 West Columbia, Farmington, MO 63640 573-218-6792

Southwest Missouri Psychiatric Rehabilitation Center,

1301 Industrial Parkway East, El Dorado Springs, MO 64744 417-876-1002

Western Missouri Mental Health Center

1000 East 24nd Street, Kansas City, MO 64108 816-512-7000

Missouri Sexual Offender Treatment Center

1016 W. Columbia, Farmington, MO 63640 573-218-7045

DIVISION OF ALCOHOL AND DRUG ABUSE

The division's services are delivered through a network of providers coordinated by district offices.

Treatment Programs:

Individuals who meet the eligibility criteria have access to a variety of treatment options. In addition to detoxification services, the division offers residential and outpatient rehabilitation, special services for women and adolescents, as well as programs that emphasize substance abuse prevention.

Prevention Programs:

The Missouri Division of Alcohol and Drug Abuse works with communities to help develop resources to prevent alcohol, tobacco, and other drug problems. In each community a "Community 2000 Team" composed of local leaders provides leadership and plans local programs. A network of Community 2000 Support Centers and statewide services provided by ACT (Association of Community Task Forces) Missouri support the local team by training them and helping them with their action plans.

Some of the specific types of programs that Community 2000 teams start in their communities include the following:

- Alternative Activities
- Cultural Diversity
- Media Campaigns
- Student Assistance
- Volunteerism
- Empowering Youth
- Parenting Skills
- Community Awareness

DIVISION OF MENTAL RETARDATION AND DEVELOPMENTAL DISABILITIES

The Division of Mental Retardation and Developmental Disabilities (MRDD) is responsible for ensuring that the citizens of Missouri have access to services and supports relating to prevention of disabilities, evaluation, habilitation, and rehabilitation. The division achieves its mission through service coordination and support staff in 17 facilities. Additionally, the division has contractual arrangements and oversight responsibilities with programs funded, licensed, or certified by DMH.

People of all ages are eligible for the division services. The division's 11 regional centers conduct comprehensive evaluations to determine an individual's eligibility according to state law. The law requires that a person's disability must have occurred before age 22 (during the developmental period) and that it is likely to continue indefinitely. Charges for the cost of services are determined by using a table that evaluates family size, income, and the type of service.

FIGURE 27

Division of Mental Retardation and Developmental Disabilities Regional Center Service Areas



Source: MO Department of Mental Health's Web site: <http://www.dmh.missouri.gov/opa/pubs/Wheretogo.htm>

4.1.7. Local Public Health Network

The public health system in Missouri is comprised of the Missouri Department of Health and Senior Services (MDHSS), 114 LPHAs, and multiple other partners, such as health care providers, that work together to protect and promote health.

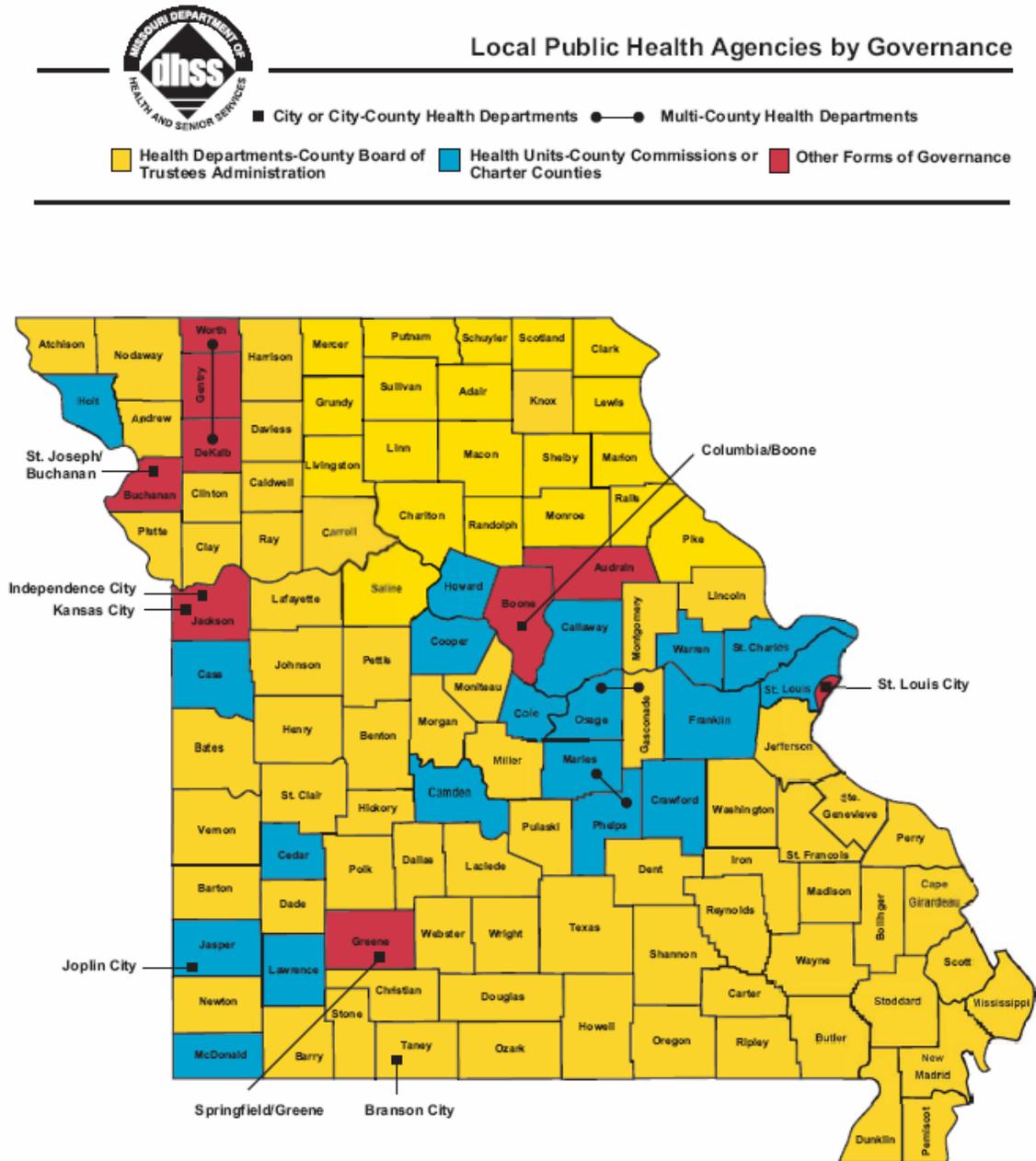
Local public health agencies in Missouri are autonomous and operate independently of each other and are independent from federal public health agencies. Through contracts, they work directly with MDHSS to deliver public health services in each of Missouri's communities. MDHSS receives funds from Centers for Disease Control and Prevention, other federal agencies, state general revenue, and other sources and distributes these funds that provide support for local public health programs. MDHSS also provides technical support, laboratory services, a communication network, and other vital services to aid local efforts.

The above text was taken from the Missouri Department of Health and Senior Services Web site: <http://www.dhss.mo.gov/LPHA/index.html>. Also located at the <http://www.dhss.mo.gov> Web site are data and statistical reports (<http://www.dhss.mo.gov/LPHA/DataStats.html>):

- Local Public Health Agencies & Services
- Local Public Health Agency Financial Information
- Financial Trends in Local Public Health Agencies: 1999-2003
- Local Public Health Agency Financial Review: 1997-2001, 2002, and 2003
- Local Public Health Agency Infrastructure Survey Reports for 2001 through 2004
- MICA (Missouri Information for Community Assessment)
- Community Data Profiles (State, County and City Profiles)

The following map provides a graphic overview of LPHA capacity in Missouri:

FIGURE 28



August 2004

Source: MO Department of Health and Senior Services' Web site <http://www.dhss.mo.gov/LPHA/index.html>

In 2004, the most recent LPHA capacity assessment was completed by the DHSS Center for Local Public Health Services. This assessment measured the capacity of LPHA administration, workforce, services and programs offered, and activities related to communicable disease reporting in communities. Some of the findings of this assessment, are provided below:

- **Satellite Locations:** 23% of agencies report having branch locations, down from 27% in 2003. Of the 26 agencies with branch offices, most (77%) have only 1 site. The remaining agencies have from 2 to 10 separate branch locations. Twenty-seven percent (27%) of branch offices are open to provide services only 1 to 5 hours per week while 65% are open 16 or more hours each week.
- **Availability:** 16% of local public health agencies in Missouri reported they are open for business at their main facility less than 40 hours a week during 2004. Most agencies (64%) serve the public between 40 and 44 hours each week, and 20% are open 45 hours or more each week.
- **Emergency Contact:** 100% of agencies have a system to receive notification and respond to emergencies at all times of the day or night. Cell phones are relied upon by 94% of agencies for after-hours communication, and 75% of agencies provide cell phones for their key staff. Fifty-five percent (55%) of agencies use pagers.
- **Strategic Planning:** 89% of agencies report having a strategic plan. Of the 102 agencies that have a plan, 49% report that it was updated in 2003 or 2004. Forty-five percent (45%) have not updated their plan for 3 years or more. Sixty-four percent (64%) of agencies report referring to their strategic plan from one to four times during the year; however, 21% do not ever refer to it. All agencies with a strategic plan involved their staff in its development or revision, 87% involved their governing body, and 57% involved members of the community. Strategic plans are used by 68% of agencies for performance management, 67% use it for budget allocation, and 51% use the plan for marketing.

The map Missouri Counties Receiving Support and Services to Reduce Abortions in Figure 32 depicts those counties with LPHAs that have MCH contracts targeting the reduction of teenage births (unintended pregnancies). Currently there are 109 LPHAs (counties) that have entered into MCH contracts with DHSS. In addition to the twelve counties that have selected teenage pregnancies (reduction of unintended pregnancies) as a focus for their MCH contracts, other LPHAs are accountable for achieving other MCH outcomes that mirror MCH priorities in their counties.

The following matrix depicts the MCH-related performance measures that formed the basis for determining priority outcome areas in each of the Missouri counties with MCH contracts and where the efforts are being focused.

TABLE 85
Missouri Maternal and Child Health Contract Performance Measures

| Performance Measure | Baseline Calendar Year 1999 | Target Calendar Year 2010 |
|---|-----------------------------|---------------------------|
| Pregnant Women, Mothers and Infants | | |
| Increase the percent of infants born to pregnant women receiving prenatal care beginning in the first trimester. | 84.60% | 91.70% |
| Decrease the percent of pregnant women receiving inadequate prenatal care. | 11.20% | 0.00% |
| Decrease the percent of women who have reported smoking during pregnancy. | 19.00% | 8.00% |
| Decrease the percent of mothers with live births, which occurred within 18 months of a previous live birth. | 10.90% | 5.90% |
| Decrease the rate of births (per 1,000) to teenagers aged 15-17. | 29.5 | 3.5 |
| Decrease the percent of live births to females with less than 12 years of education. | 19.20% | 10.00% |
| Decrease the percent of births weighing less than 2,500 grams. | 7.70% | 5.10% |
| Decrease the infant mortality rate per 1,000. | 8.5 | 5.80 |
| Increase the percent of Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen (EPSDT). | 71.00% | 80.00% |
| Children and Adolescents | | |
| Decrease the percent of children without health insurance. | 8.70% | 0.00% |
| Increase the percent of children age 2 who have completed immunizations for Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Hib, Hepatitis B. | 85.90% | 91.9% |
| Increase the percent of third grade children who have received protective sealant on at least one permanent molar tooth. | 11.30% | 38.30% |
| Increase the percent of children aged one to six years tested for lead poisoning. ** | 9.00% | 12.00% |
| Decrease the percent of children who are obese. | 8.70% | 2.70% |
| Decrease the rate of probable cause cases of child abuse and neglect per 1,000 population for children under age of 18. | 15.6 | 12.8 |
| Decrease the death rate per 100,000 due to unintentional injuries among children aged 1 through 14 years. | 13.7 | 6.7 |
| Decrease the rate of deaths to children aged 1-14 caused by motor vehicle crashes per 100,000 children. | 6.3 | .09 |
| Decrease the rate of suicide deaths among youths aged 15-19. | 13.0 | 8.1 |

**Baseline year for state and county rates is 1997.

NOTE: The data for this matrix was generated prior to the inclusion of the performance measure "Emergency room visits for asthma age 5-14".

Source: MCH Performance References

4.1.8. Emergency Medical Service Networks

In reference to emergency medical services capacity for the citizens of Missouri (including the MCH population), the following information from

<http://www.dhss.mo.gov/EMS/index.html>) provides an overview of the section in DHSS responsible for assuring providers of emergency services meet or exceed the standards.

The Emergency Medical Services (EMS) of the Section for Health Standards and Licensure in Missouri's Department of Health and Senior Services is responsible for protecting the health, safety and welfare of the public by assuring that emergency medical services provided by ambulance services, emergency medical response agencies, trauma center, training entities and emergency medical technicians meet or exceed established standards.

EMS investigates complaints and may exercise its authority to deny, place on probation, suspend or revoke the licensure of an ambulance service, training entity, trauma center, emergency medical response agency, and emergency medical technician when statutory or regulatory violation is substantiated.

All applicants (initial or re-licensure) for emergency medical technician licensure must undergo a criminal background check before being approved for Missouri licensure.

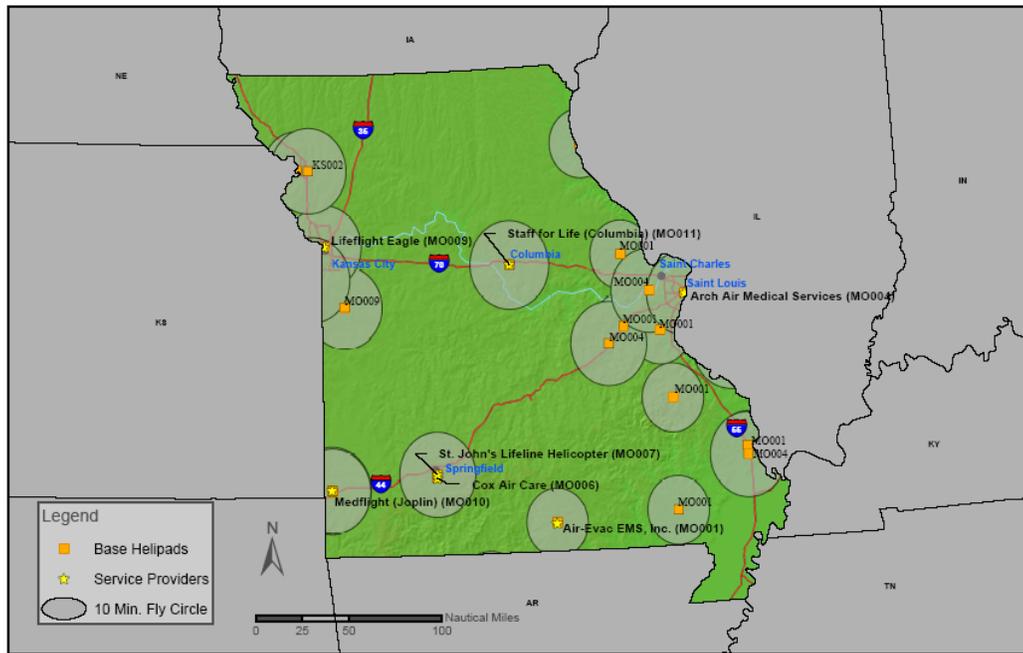
Of a network of 29 trauma centers which serve Missouri, ten are Level I trauma centers of which three are designated as Pediatric Centers. Missouri's Trauma Nurse Managers oversee both Adult and Pediatric Trauma Centers. In addition to the 10 Level I trauma centers, there are 11 Level II and 8 Level III trauma centers.

In 1987 Missouri legislature created the State Advisory Council on EMS. The council consists of 16 multidisciplinary individuals with trauma/EMS or health care expertise from rural and urban areas of the state. Sub-committees include Legislative, Pediatric, Trauma, 9-1-1, Specialty Care Transport, Air Ambulance, and EMS Regional Medical Directors. The council makes recommendations regarding policies, plans, procedures, and regulations related to the EMS/Trauma System to DHSS.

In March 2004, DHSS, Unit of Emergency Medical Services received an HRSA State Partnership Grant to revitalize Missouri's Emergency Medical Services for Children (EMSC). As a result, EMS is building coalitions with Injury Prevention, School Nurses Association, and Homeland Security. A list-serve for EMSC and trauma has been developed. A strategic planning session has been held for EMSC

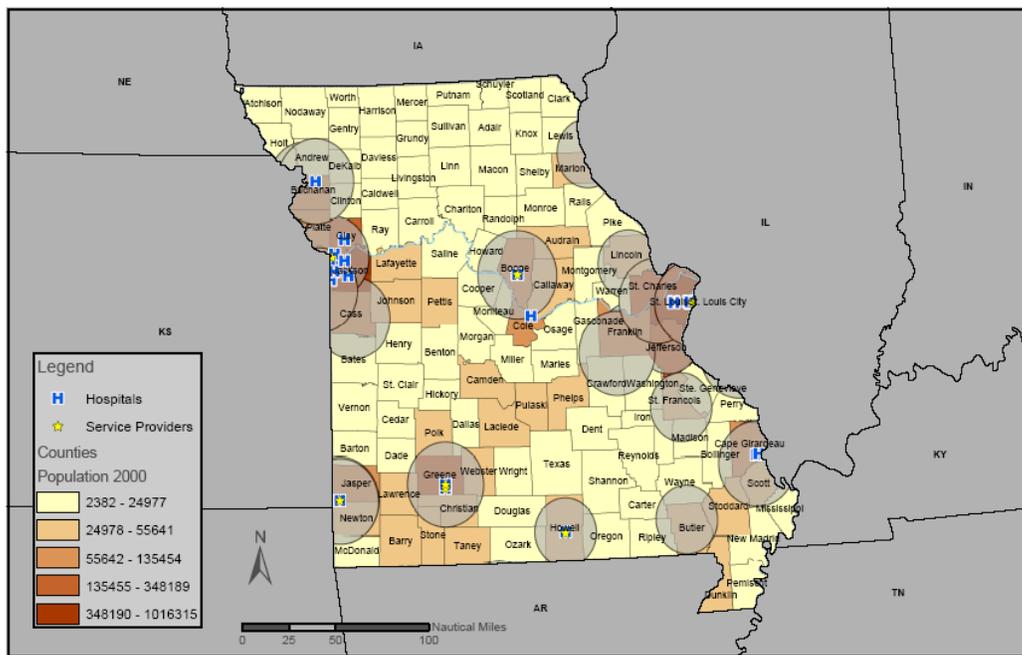
The following maps are provided by EMS to illustrate the coverage and capability of the EMS/Trauma System to handle the needs of Missouri residents including the MCH population.

FIGURE 29
Air Ambulance Services Map



Source: DHSS, Emergency Medical Services

FIGURE 30
Missouri Hospitals and Service Providers

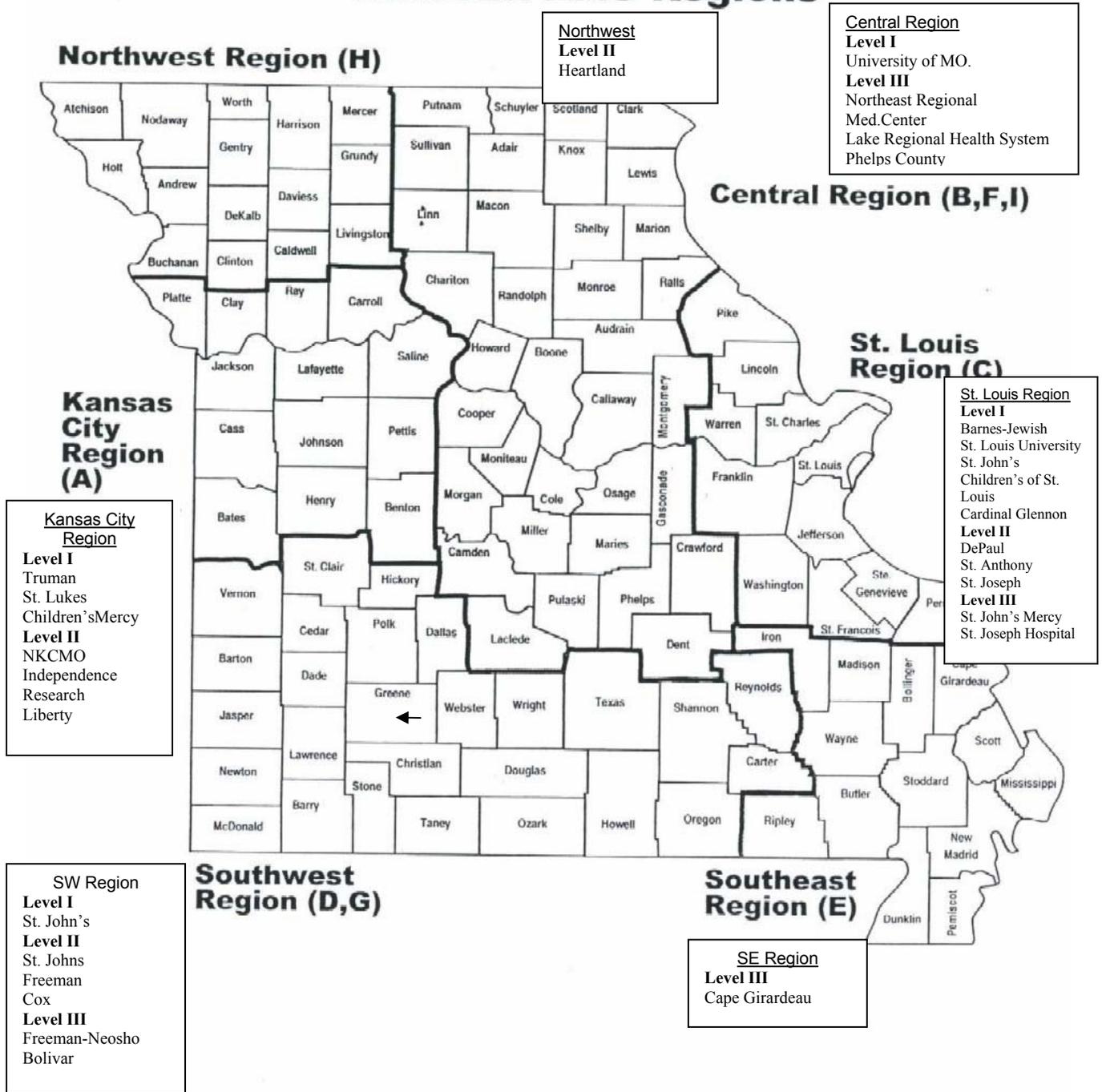


Missouri

Source: DHSS, Emergency Medical Services

FIGURE 31

Missouri EMS Regions



**Missouri Department of Health & Senior Services
 Office of Emergency Response/Terrorism**

Source: DHSS, Emergency Medical Services

4.2. Population-Based Services

4.2.1. Reproductive Health Services

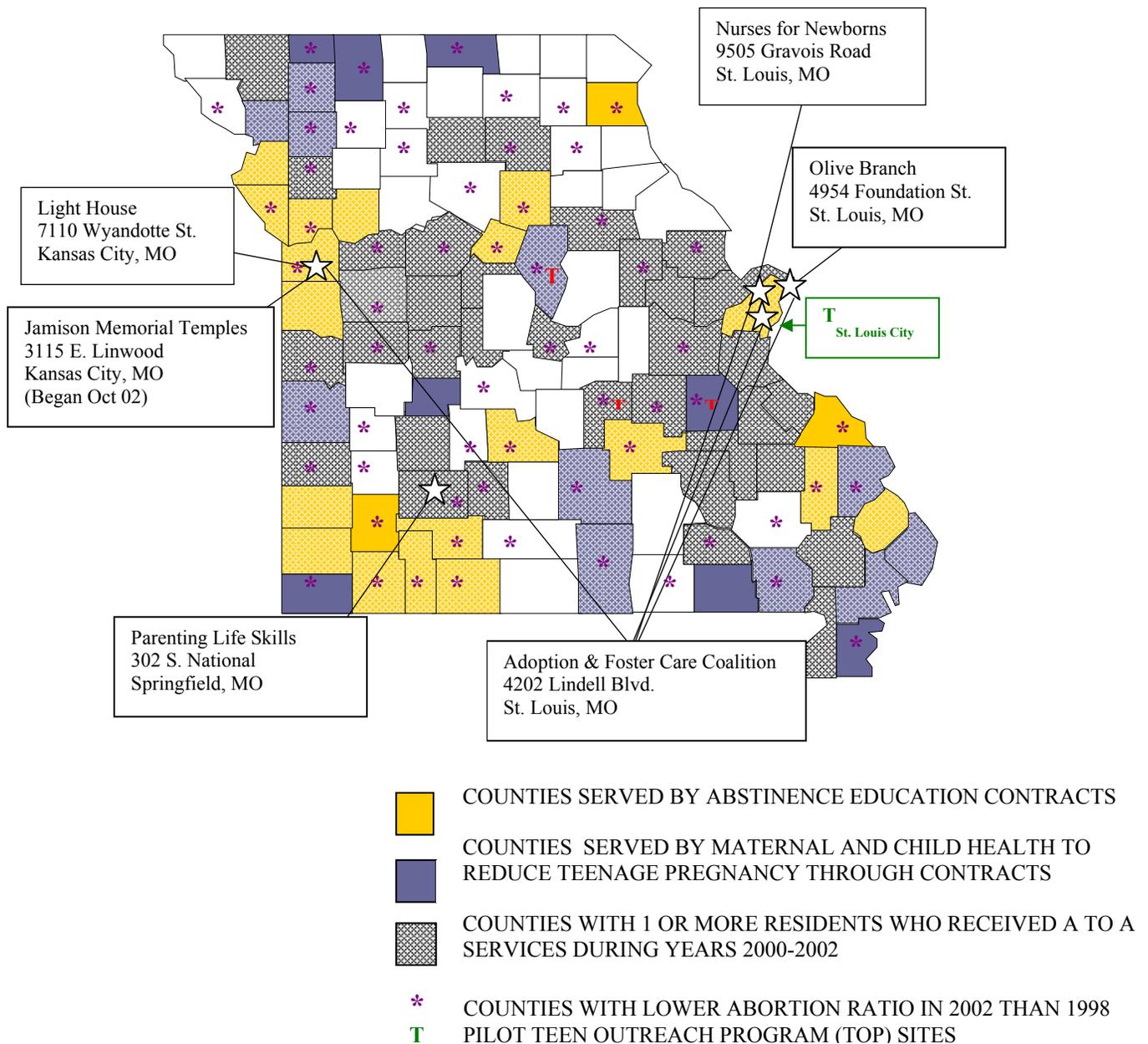
DCH supports three important programs that collectively provide a reproductive health network for MCH populations in Missouri:

- **The Alternatives to Abortion (A to A) Program** is aimed at providing support for coordinated services for pregnant women in Missouri depending upon their need in order to achieve healthy birth outcomes. The services that may be offered to qualifying women during pregnancy and for one year postpartum include case management for pregnancy maintenance that is required; instruction in the development of parenting skills; job training and placement; drug and alcohol testing and treatment; and protection from domestic abuse. In addition, services may include one or more of the following: adoption assistance, childcare, clothing, delivery, educational services, food, housing, medical care, ultrasounds, supplies, transportation, prenatal care, newborn/infant care, mental health care, utilities, and other services related to pregnancy, newborn care, and parenting. Services are delivered through competitively bid contracts with regional coalitions and community providers in Missouri.
- **The Abstinence Education Program** provides education to adolescents with the purpose of delaying involvement in sexual activity until marriage and to decrease out of wedlock pregnancies, adolescent pregnancy and birth rates, and sexually transmitted diseases. This initiative reinforces the A to A Program by reducing unintended pregnancies and the need to even consider abortion as an alternative.
- **Maternal and Child Health Coordinated System (MCH Contracts)** help establish and maintain an integrated multi-tiered service coordination system (direct care, enabling, population based, and infrastructure building) capable of adapting to address targeted maternal and child health issues. Each contractor has a contractual obligation to utilize evidence-based interventions and address identified maternal and child health risk indicators that are the most disparate from comparative state rates. Many contractors are helping to build their local MCH systems upon MCH related reproductive health indicators such as reducing teenage/unintended pregnancies.

The following map depicts the counties of residents who received Alternatives to Abortion Program services, counties served by Abstinence Education contracts, and counties served by Maternal and Child Health contracts addressing the reduction of teenage pregnancy. These latter two programs have impact upon the number of abortions by preventing unintended pregnancies and thereby preventing abortions that may be associated with those unintended pregnancies:

FIGURE 32

Missouri Counties Receiving Support and Services to Reduce Abortions



NOTE: Counties color coded and with hatch marks have both services.

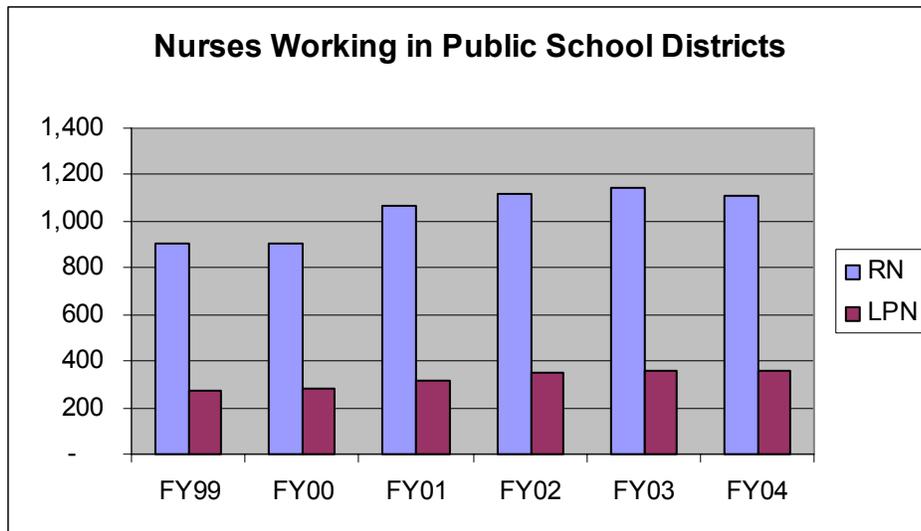
Source: DCH Program Budget Templates: 2004

4.2.2. School Health Services

Through this program, contracts are provided to public schools, public school districts, and local public health agencies to establish or expand population-based health

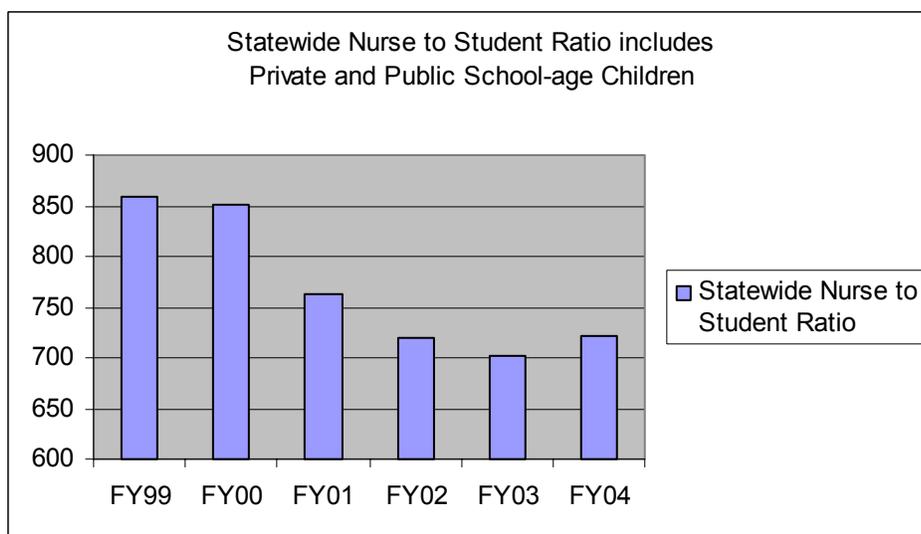
services for school-age children in defined geographic areas. The program focus is on increasing access to primary and preventive health care. Every effort is made to assure an adequate nurse to student ratio. The program is a collaborative effort of the DHSS/DCH, DSS, and DESE. The number of school nurses in Missouri has steadily increased during the life of this program and the “adequate ratio” of school nurses to students served has also steadily improved over the life of this program:

TABLE 86



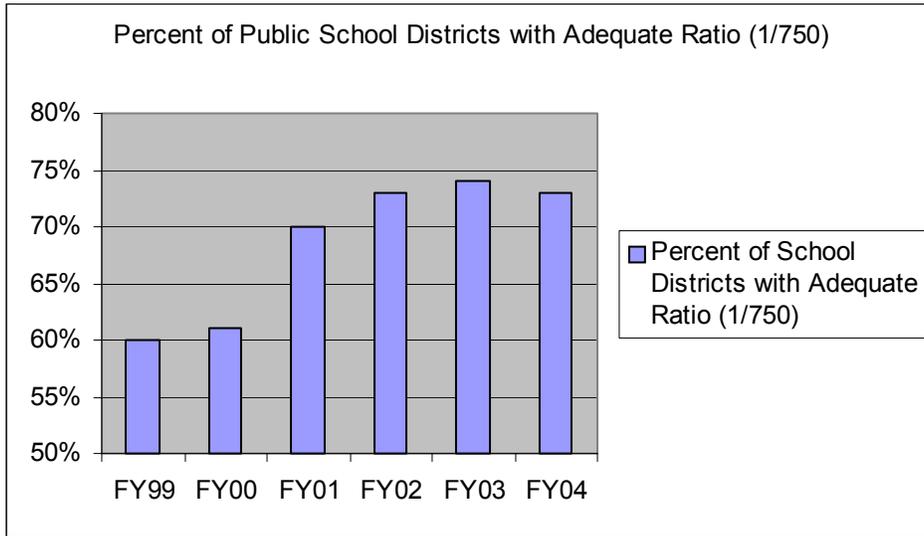
Source: DCH, Section for Community Health Systems and Support (CHSS)

TABLE 87



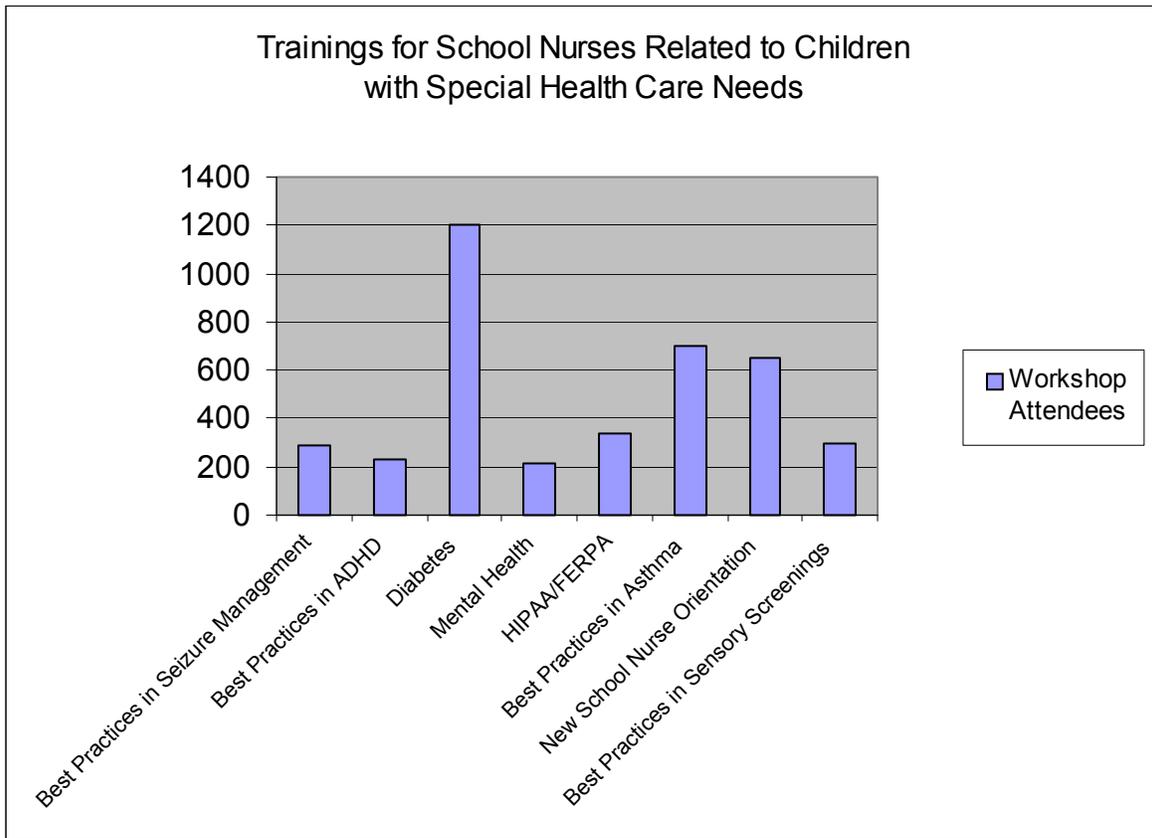
Source: DCH, Section for Community Health Systems and Support (CHSS)

TABLE 88



Source: DCH, Section for Community Health Systems and Support (CHSS)

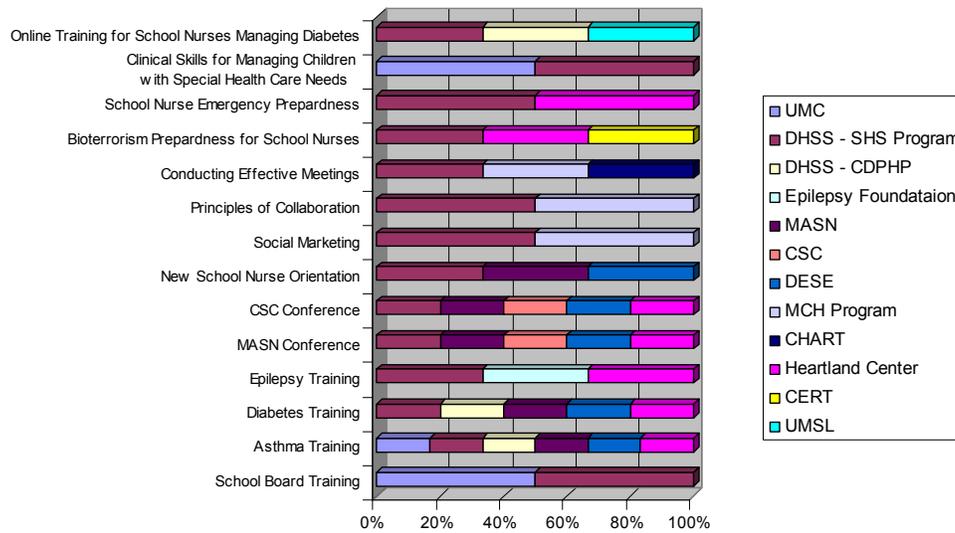
TABLE 89



Source: DCH, Section for Community Health Systems and Support (CHSS)

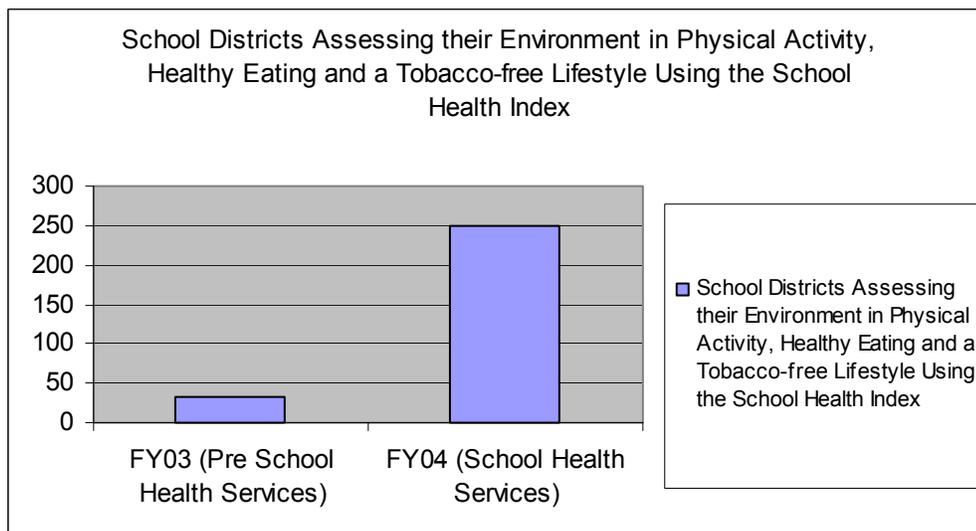
TABLE 90

Partnerships in Training



Source: DCH, Section for Community Health Systems and Support (CHSS)

TABLE 91

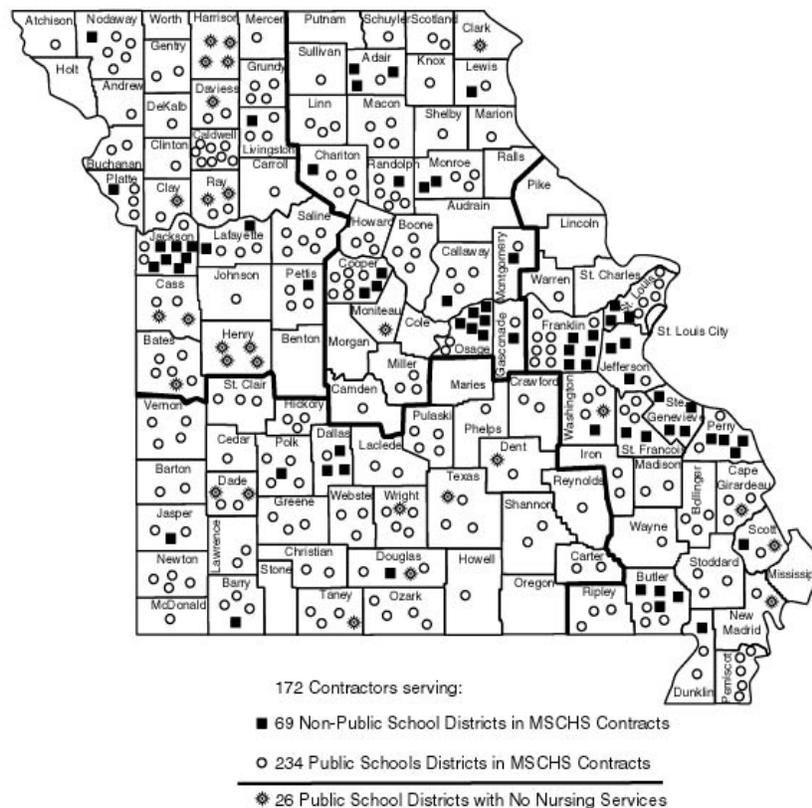


Source: DCH, Section for Community Health Systems and Support (CHSS)

The following map depicts public and non-pubic districts in Missouri with school-age children contracts and those school districts that are still without school health nursing services:

FIGURE 33

Missouri Department of Health and Senior Services
 Missouri School-Age Children's Health Services Program
 FY04



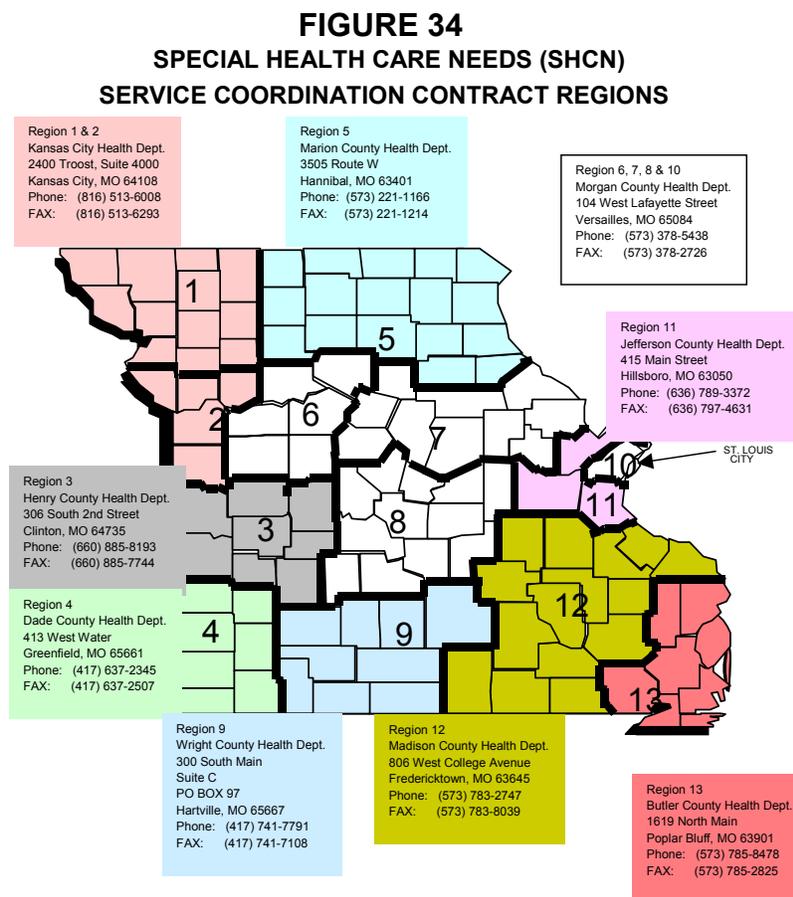
11/12/03

Source: DCH Program Budget Templates: 2004

4.2.3. Children with Special Health Care Needs (CSHCN) Program

CSHCN provides services for children with disabilities, chronic illness, and birth defects. Services include assessment, treatment, and service coordination, including *HOPE Service* providing statewide healthcare support services for children under the age of 21 who meet financial and medical eligibility criteria. This includes preventive, diagnostic,

and treatment services for CSHCN. Service coordination facilitates, coordinates, monitors, evaluates services and outcomes, and encourages an individual/family to develop the skills needed to function at their maximum level of independence. Administrative Case Management services are provided for the Medicaid Healthy Children and Youth/Physical Disabilities Waiver (HCY/PDW) programs and include prior authorization of medically necessary services and coordination of services for Medicaid payment beyond the scope of the Medicaid state plan. CSHCN services are delivered through a statewide service coordination network that has been outsourced through community-based contracts with local public health agencies and through participating provider contracts with local administrative providers for medical and primary/specialty care services. In recent years, the administrative focus of CSHCN has shifted from the provision of direct/enabling services (through authorization of services to be provided by participating providers) to more of a population-based approach with contractors linking children with special health care needs to all available services. Service coordination contract regions covering CSHCN population groups in Missouri can be depicted as follows:



Source: DCH Program Budget Templates: 2004

The CSHCN capacity assessment included an analysis of the four constructs of the CSHCN system in Missouri:

1. State program collaboration with other State agencies and private organizations,
2. State support for communities,
3. Coordination of health components of community-based systems, and
4. Coordination of health services with other services at the community level.

Local Public Health Agency/Family Partnership: Special Health Care Needs (SHCN) of the Section for Maternal, Child and Family Health (MCFH) in DCH contracts with one LPHA to implement Family Partnership statewide activities. Family Partners are located in the community of participants/families. The Family Partnership: provides families with the opportunity to offer each other support and information; gives families the opportunity to provide SHCN input regarding the needs of individuals with special needs; increases public awareness of the issues facing families of individuals with special needs; builds community awareness of the unique needs of individuals with disabilities; and promotes state legislation for programs for individuals with special needs and their families. Family Partnership members are parents, legal guardians, or siblings of individuals with special health care needs. The Family Partnership provides opportunities for communication, advocacy, and networking through a family and agency team effort. Family Partners participate in regular meetings and discussions to review processes and documents in order to make suggestions to make these items more useful to families and participants with special health care needs. Resource information is shared through face-to-face meetings, monthly conference calls with family partnership members, and quarterly regional newsletters. At each meeting, the Family Partnership group is trained or given information on topics pertinent to their needs as families of special needs individuals such as medical home. Family Partners provide outreach activities to encourage participation in the Family Partnership meetings.

Family Partners will be included in SHCN Area Office and management meetings and will review SHCN processes, policies, and literature to ensure SHCN practices are “family friendly” and useful. A core group of 20 families statewide will be involved in the development and feedback of documents, forms, fact sheets, newsletters, and the MCH Block Grant application for next year. Family Partners will provide outreach activities to encourage participation in the Family Partnership activities. Outreach activities will be planned in accordance for the year, targeting all geographic areas of the state. Outreach effectiveness will be evaluated. Family Partnership information will remain accessible on the Internet. Families will receive resource information through the Family Partnership activities. Families will be reimbursed for lodging, meals, mileage, respite (if needed), and a stipend to participate in Family Partnership meetings.

In addition, SHCN would like to develop a support-matching network for families of special needs individuals, individuals with disabilities, and professionals. The Family Partnership could also partner with organizations such as Missouri Partnership for Leadership Education (LEND) and Missouri Partnership for Enhanced Delivery of

Services (MO-PEDS) to offer training for health professionals regarding the unique needs of persons with disabilities. Family Partners could be utilized by offering training to the health professionals on a variety of topics affecting special needs individuals and their families. Some examples of training topics could include the importance of a medical home, the challenges of navigating the system, difficulties in finding a qualified health professional, and the challenges in finding an appropriate insurance source that meets most of the unique needs of individuals with special needs.

Local Public Health Agencies/CSHCN Service Coordination: SHCN maintains contracts for thirteen regions throughout the state to provide service coordination for children with special health care needs. Through regional contracts, participants/families receive service coordination from individuals who were located within the participant's region and, therefore, are very knowledgeable about local services. SHCN provides continual training, mentoring and technical assistance opportunities for the contracts, and monitors the contracts to assure quality. Service Coordination is a collaborative process that assists a participant/family to assess their needs and resources and develop a plan to address those needs, including assessment for home-based services. Service Coordination facilitates, implements, coordinates, monitors, and evaluates services and outcomes and encourages a participant/family to develop the skills needed to function at their maximum level of independence. The Service Coordination process includes: screening, referral and eligibility determination, assessment of needs, Service Plan development and implementation, resource linkage, monitoring and evaluation, and transition/closure. The Contracted Service Coordinators complete Comprehensive Assessment Tools, Service Plans, and Transition Plans with participants/families to address specific needs and services available to assist in the achievement of the best possible health and highest level of functioning for SHCN participants. Service Coordinators utilize the Comprehensive Assessment Tool (CAT) to assist in identification of participant/family needs in addition to determining if the participant/family has a medical home. The CAT is uniquely designed to address the specific needs of individuals within each life-stage. The CAT is completed with participants/families on an annual basis. Needs that are identified by the participant/family and Service Coordinator are outlined in the development of the Service Plan. A Service Plan is also completed with participants/families on an annual basis. A Service Plan is developed in cooperation with the participant/family and identifies the following: concerns, priorities, and resources of the participant/family; outcomes or changes the participant/family wants to occur; services needed to address the identified outcomes; method, duration, and location of services; service providers; funding resources to cover the cost of the services; and the effective date for the initiation of services. A Service Plan is developed from the information obtained during the assessment process. This plan is a 'blue print' for how services will be provided to meet the needs of the participant/family. It is also a method of communication for payment of claims. Transition Plans are completed by Service Coordinators with participants/families and team members during transition meetings. Transition Plans address the needs of participants as they: transition from one life-stage to another life-stage, discontinue from a service, or transition to a new Service Coordinator or agency. Transition Plans assist in determining the transition needs and appropriate timelines for

referrals to other agencies. The Contracted Service Coordinators also conduct outreach activities to identify children with special health care needs. Service Coordinators utilize the CSHCN Screener as tool to identify children in the general population who have special health care needs. Contracted Service Coordinators participate in interagency meetings and promotional functions to educate the public about issues for individuals with special health care needs and increase knowledge of SHCN services.

Department of Social Services, Division of Medical Services

(Medicaid)/Administrative Case Management: SHCN maintains a cooperative agreement with the DSS/DMS (Medicaid) to provide Administrative Case Management. SHCN authorizes the medical necessity of in-home nursing services and provides Service Coordination for participants of the following: Healthy Children and Youth (HCY) for participants under the age of twenty-one and Physical Disabilities Waiver (PDW) for participants over the age of twenty-one. All Missouri Medicaid recipients under the age of twenty-one (21) are eligible to receive HCY Services. SHCN Service Coordinators may approve Advanced Personal Care Services, Personal Care Services, and Private Duty Nursing during home visits. SHCN Service Coordinators may give verbal approval for HCY Case Management with a LPHA and Skilled Nurse Visits with a Home Health Agency without a home visit. SHCN Service Coordinators provide Service Coordination that links families with services and resources to help them maintain the HCY participant safely in their home. Assistance provided includes: help with establishing a medical home; referrals for periodic EPSDT Screening Exams; referrals to physicians, therapists, home health agencies, and services; regular home visits to assess family needs; and assistance in assuring that appropriate medical care is being provided through Medicaid. PDW is limited to people who have received, or would have qualified for, Private Duty Nursing through the HCY Service prior to their twenty-first birthday. PDW participants may not be receiving any services through any other waiver program. PDW is designed to allow participants who turn twenty-one to stay in their home with ongoing support, similar to what they were receiving, or would have qualified for, through the HCY Service prior to their twenty-first birthday. PDW provides approval for medically necessary services that are identified by SHCN Service Coordinators.

Local Public Health Agencies and the University of Missouri at Mt. Vernon/Adult Head Injury Service Coordination: SHCN maintains contracts with LPHAs and the University of Missouri at Mount Vernon to provide Service Coordination for Missouri residents over the age of 21 and have survived a traumatic brain injury (TBI). Service Coordination provided includes: evaluation and assessment of needs; information and education regarding the causes and effects of TBI and prevention of secondary conditions; development of a Service Plan; regular evaluation and updates of the Service Plan; assistance in locating and accessing medical care, housing, counseling, transportation, rehabilitation, vocational training, and cognitive/behavior training. SHCN continues to administer the Adult Head Injury Service. This service provides assistance to individuals and families in locating, coordinating, and purchasing rehabilitation and psychological services for individuals who have survived a traumatic brain injury. Adult Head Injury Service rehabilitation funding includes: psychologist/neurophysiologist evaluation, rehabilitation and therapies, support services, pre-vocation/pre-employment

training, transportation supported employment, special instruction, and transitional home and community support training. Adult Head Injury Service is payer of last resort. Participants must meet financial eligibility guidelines to qualify. SHCN also administers an Adult Head Injury Grant awarded through HRSA.

Missouri Head Injury Advisory Council (MHIA), Sisters of St. Mary Hospital (SSM), Commission for Accreditation of Rehabilitation Facilities (CARF), St. Francis Hospital, St. Luke's Hospital, Truman Medical Center, Rusk Rehabilitation Center, Missouri Rehabilitation Center, Southeast Missouri State University

(SEMO)/Traumatic Brain Injury Early Referral Pilot Project: Through a HRSA grant a systematic process was designed to link the survivor of a TBI and family to the right place (the SHCN Service Coordinator specializing in TBI) as early in the recovery process as possible. Protocols were developed with input from the MHIA, which includes TBI survivors and families, as well as state agencies and hospital discharge planners. Seven hospitals across the state participate in the protocols designed to ensure individuals are linked to the right resources as quickly as possible after the TBI. St. Luke's has written the early referral procedures into policy, thereby building in long term sustainability. To date more than fifty individuals have been referred through this pilot Early Referral project. The DHSS information system, Missouri Health Strategic Architecture and Information Cooperative (MOHSAIC), has been modified to track pertinent information in order to determine additional data on the number of referrals that actually are either enrolled in the Adult Head Injury program or are being monitored by the TBI Service Coordinator to assure that the transition to the community is successful. Hospital staff expressed admiration for what they termed a proactive design by the state that helps all concerned. The hospitals actively advertised their participation, in one case preparing a press release. All seven hospitals have agreed to link their Web sites to the DHSS Web site.

Children's Trust Fund, Citizens for Missouri's Children Crider Center, Department of Corrections, Department of Economic Development, Department of Elementary and Secondary Education, Department of Insurance, Department of Mental Health, Department of Social Services, Family Voices, Fetal Infant Mortality Review Board, Head Start, Heart of America, Metro Council on Early Learning, Missouri Dental Association, Missouri Primary Care Association, Parent Link, Parents as Teachers, Partnership for Children, Project Life, Ozark Center, Southeast Missouri State University, State of Missouri Governor's Office, United Way, University of Missouri Hospital and Clinics/Early Childhood Comprehensive Systems Grant: ECCS grants have been awarded to Title V agencies across the country to lead the charge in assembling a group of stakeholders to guide the development of a State Plan to create an early childhood comprehensive system organized in a way that would be easy for families to use. In Missouri, DHSS is using an interagency approach for the leadership of this grant. DHSS, DESE, DMH, DSS, and the Head Start State Collaboration Office form the steering committee for this grant. A larger coalition of stakeholders, including family members, representing the public and private sectors meet quarterly. The Missouri ECCS Plan will be developed to promote the well being of all young children and their families. The ECCS Plan for Missouri is

structured along a natural continuum from child and family through community and state. It allows for the participants/families to be involved in the identification of their needs and the decision making process identified to meet these needs. The ECCS plan will be included in the state strategic plan. The implementation phase of the ECCS grant will include collaboration among state agencies and stakeholders to develop plans for data collection and public education in focus areas of medical home, parenting information, family support, early childhood programs, disparity safeguards, and social and emotional mental health.

Institute for Human Development (IHD)/Cultural Competency: SHCN has a contract with IHD to provide professional training and awareness that will increase cultural-competency of SHCN staff, members, and providers. Also provided will be the identification of Hispanic families that have children with special health care needs or other disabilities to assist with training and serving their needs. By continuing to monitor the changing demographics of populations in the State of Missouri and identifying areas in which to assist with cultural training and serving specific needs of various cultural groups, SHCN will be better prepared to meet the needs of participants and provide services in a culturally competent manner.

Missouri Assistive Technology/Assistive Technology: SHCN has a contract with the Missouri Assistive Technology to provide funding for access to assistive technology and assistive technology services for children with special health care needs. Funding for access to assistive technology and assistive technology services will enhance health care services.

University of Missouri Instructional Material Laboratory (IML)/Service Coordinator Competency: IML and SHCN are collaborating to develop a list of uniform competencies for Service Coordinators. A training curriculum will be designed to assist Service Coordinators in meeting the competency expectations identified. A Web-based competency tracking system will be provided to assure that competency standards are uniformly implemented for all SHCN staff and contract Service Coordinators.

Medical Home Contracts in Central Missouri, South East Missouri, and South West Missouri/Medical Home: SHCN has contracts with health care facilities to develop and establish a medical home system in community-based settings that delivers high-quality health care and increases access to primary care for children with special health care needs and their families. The medical home initiative will provide training, educational resources, meetings, and promotional materials to: school nurses, Head Start, childcare providers, and other community health professionals. Also provided are procedures for referrals and screenings of qualified children with special health care needs.

Missouri Partnership for Enhanced Delivery of Service (MO-PEDS)/Medical Home: SHCN contracted with MO-PEDS to develop medical home training materials and provide training to SHCN staff and contractors. SHCN staff, contractors, and Family Partners will continue to provide additional medical home information, updates, and

process improvement trainings to health professionals, SHCN staff, contracted Service Coordinators, and Family Partnership members. Additional information will be made available through trainings, Internet, newsletters, Care Notebooks, and Family Partnership meetings as it becomes available.

Department of Elementary and Secondary Education, Department of Mental Health, Department of Social Services, Managed Care Organizations, and Systems of Care Board/Insurance: These departments, organizations, and systems collaborated to obtain information about children with special health care needs that transition within the systems of care and identify gaps in insurance coverage for the special needs population.

Federally Qualified Health Centers and Local Public Health Agencies /Insurance: These centers and agencies conducted surveys to identify gaps in insurance coverage for the special health care needs population and to establish processes for participants/families to apply for Medicaid to assist in reducing the gaps in coverage.

Managed Care Organizations/Insurance: The MCOs conducted surveys to determine the process used to manage their children with special health care needs populations. The collaboration helped to identify children and offer services or return them to fee-for-service if the children did not have on-going special health needs.

University of Missouri Center for Health Policy/Insurance: SHCN participated in the 2nd Annual Health Policy Summit. The University of Missouri Center for Health Policy sponsored a summit, which included information on state initiatives for the uninsured, primary care in Missouri Community Health Centers, and a report on the 2004 Missouri Health Care Insurance and Access Survey and Qualitative Data Findings.

Department of Insurance, Department of Social Services (Medicaid and MC+ Health Care), Medical Assistance for Families (MAF), Family Partnership, and Medical Assistance for Workers With Disabilities (MAWD)/Insurance: An insurance glossary, comparison checklist, and fact sheet were developed to assist participants/families in making choices related to insurance. These materials are available on the SHCN Web site and have been distributed to participants/families. The fact sheet includes contact information for collaborative agencies for assistance in obtaining adequate insurance for individuals with special health care needs.

Chamber of Commerce, Community Connections, Contracted Service Coordinators, and Family Partners/Resource Index: Using community resources, such as the Chamber of Commerce Web site, and in collaboration with Family Partners, Contracted Service Coordinators, and Community Connections, SHCN developed a comprehensive resource index of healthcare and community service providers by life-stage and county. The resource index contains contact information and a description of each resource. The comprehensive resource index of healthcare and community service providers will continue to be revised and updated. The resource index will be provided to SHCN staff and contract Service Coordinators. SHCN will identify partners

of collaboration and coordinate with other existing efforts to reduce duplication of similar efforts focused on developing and maintaining resource information. Service Coordinators are better able to connect participants with local healthcare and community services due to the development of an extensively researched resource index. Through partnerships and collaboration, the resource index will be more comprehensive and there will be a reduction of duplicative efforts.

State and local healthcare and community agencies/Care Notebooks: The Care Notebooks are a tool for participants/families to utilize to organize medical information. The Care Notebooks are distributed to participants/families to help organize information about community-based service systems so that these systems are easier to use. The effectiveness of the Care Notebook will be evaluated. The content of the Care Notebooks will be assessed to assure that the tool is beneficial to participants/families of all life stages. The evaluation of the content of the Care Notebooks will assist in the assurance that the Care Notebooks are beneficial to all participants/families. The Care Notebooks contain information about other state programs, as well as community resources. The provision of this information to participants/families links them with appropriate resources and promotes collaborative practices.

American Red Cross; State Plan; local emergency response personnel; local, regional, and state disaster planning activities/emergency preparedness and response: Participants/families are provided with the American Red Cross Disaster Services' "Disaster Preparedness for People with Disabilities." Service Coordinators discuss emergency preparedness with participants/families to encourage the development of emergency response plans. Emergency response forms are updated annually with each participant/family. This information is maintained within each Area Office to be available during time of an emergency. Local emergency response personnel have been notified of the availability of the information. Through Family Partnership, service coordination, and available data, SHCN has identified the most common needs of SHCN participants/families during a disaster. SHCN actively participates in local, regional, and state disaster response planning activities to represent the needs of SHCN participants. SHCN will contribute to a statewide plan to increase awareness of emergency response personnel about the needs of individuals with special health care needs.

Service Coordinators, Women, Infants and Children clinics, local public health agencies, conferences, health fairs, school health nurses, other medical and school professionals/CSHCN screeners: The CSHCN screening tool is used to identify children with special health care needs. Screeners have been disseminated to Service Coordinators, school health nurses, health fairs, WIC clinics, conferences, LPHAs, and other medical and school professionals. SHCN will investigate other children's health care screeners and determine if any collaboration is needed with individuals and agencies that either develop or utilize these screeners so that the system is accessible to families and children with special health care needs without being duplicative.

SHCN Providers/Provider Availability: SHCN enrolls approved providers to obtain medical care and ancillary services for participants enrolled in the Hope Service and the Adult Head Injury Service. SHCN has improved the provider enrollment process, as the provider enrollment forms are now available on the Internet. Provider licenses are verified on the Internet prior to enrollment to assure that the licenses are current. The eligibility status of approved providers is reviewed periodically. SHCN maintains provider enrollment information in the MOHSAIC system for availability to Service Coordinators and emails contracted Service Coordinators on a regular basis to inform them of new and discontinued providers. SHCN will provide participants/families with information and resources to assist families in selecting appropriate providers. SHCN will evaluate the availability of SHCN providers and consider the development of focus groups to identify provider issues. Focus groups will create an opportunity for families to partner in creating educational materials and empower participants/families to make informed decisions when selecting appropriate providers. Input gained from families will help SHCN develop policies to improve the quality of provider services and increase families' satisfaction with providers. Service Coordinators will provide input to identify gaps in SHCN provider availability. The development of a process to improve SHCN provider availability to SHCN participants will assist in the assurance that SHCN participants are able to receive necessary services.

Department of Elementary and Secondary Education (Vocational Rehabilitation), Department of Mental Health, Department of Health and Senior Services (Division of Senior Services, Women Infants and Children, and Council for Adolescent and School Health) Department of Social Services, Local Public Health Agencies, Federally Qualified Health Centers, Independent Living Centers (Southwest Center for Independent Living), Missouri Partnership for Enhanced Delivery of Service, Missouri Rehabilitation Center, The Whole Person, advocacy agencies, attorneys, child behavioral/parenting support agencies, child care providers, community groups, dentists, emergency management agencies, families and Family Partners, home health agencies, hospitals, medical specialty clinics, physicians, primary care providers, and schools/Transitions: Participants who are transitioning (from one life-stage to another, discontinuing a service, transferring to a new Service Coordinator, or transferring to a new agency) receive assistance to plan for these changes in order to achieve the best possible outcome. Service Coordinators have tools such as the transition planning form and life-stage transition guide to use and share with participants to plan for changes. Participants/families, service coordinators, and other transition team members have an opportunity to provide input about the transition planning process developed by SHCN and to identify possible areas of improvement through a transition satisfaction survey. To promote organized community-based service systems and encourage smooth transitions, SHCN frequently collaborates with other community-based service systems by participating in various case conferences, outreach and site visits, presentations, conferences and teleconferences, meetings, workshops, and in-services and trainings. Some examples include: "Cradle to Classroom: Nurturing Mental Health in Early Childhood Conference," "Perspective on Transition with a Focus on Cultural Competency," and The System of

Care Coalition. SHCN is also contributing to the development of a State Adolescent Health Framework.

State and local healthcare and community agencies /Referral Sources: The CAT, developed as a mechanism to evaluate a participant's/family's needs and resources, contains a system of "core assessment elements" common to all life stages, with assessment items pertinent to specific life stages. A separate tool was developed for each life-stage and is completed with the Service Coordinator and participant/family on an annual basis. The CAT also contains criteria to identify whether the participant has a medical home. Information obtained through the completion of the CAT is integrated into a Service Plan. The CAT and the Service Plan is a standardized way to identify the needs of the participant/family, as well as services necessary to make transitions through all aspects of life. Families are provided contact information to appropriate referral sources as needs are identified through the completion of the CAT and the Service Plan. This referral process promotes collaborative efforts with other State agencies and private organizations. Participants/families are linked with healthcare and community services at the local level.

Department of Elementary and Secondary Education (Local and State Interagency Coordinating Councils), Department of Social Services, Council on Adolescent for School Health, Federally Qualified Health Centers, Healthy Community and Schools Unit, Local Public Health Agencies, Missouri Rehabilitation Center, clinics, community professionals, dentists, health care facilities, physicians, schools, other private and public entities/Outreach: SHCN collaborates to promote and provide education about SHCN services and medical homes. A presentation was developed to provide external entities with an overview of SHCN services and initiatives. SHCN participates in advisory boards, committees, exhibits, health fairs, meetings, panels, and provider presentations. Through SHCN collaboration, promotion, and training efforts, public agencies, private entities, and families will be better educated about the concerns of individuals with special health care needs and a medical home, which will empower participants/families to secure a medical home and receive necessary services.

4.2.4 Comprehensive Cancer Prevention and Control Program

The following information was taken from DHSS's Breast and Cancer Control Web site: <http://www.dhss.mo.gov/BreastCervCancer/>.

Excluding all cancers of the skin, breast cancer is the most common cancer among women in Missouri and accounts for nearly one-third of all cancers diagnosed in women. According to the Surveillance, Epidemiology and End Results (SEER) program, an average of 3,951 cases of breast cancer per year were diagnosed among Missouri women between 1996 and 2000. The American Cancer Society estimate of new breast cancer cases for Missouri women in 2004 is 4,680. The American

Cancer Society 2004 estimate of breast cancer deaths for Missouri women is 870.

The risk of developing breast cancer increases with age. Nationally, 95 percent of new breast cancer cases and 97 percent of breast cancer deaths occurred in women aged 40 and older. At this time, there is no guaranteed way to prevent breast cancer for women who are at average risk, which is why screening via mammography and clinical breast examination is so important.

In Missouri, cervical cancer incidence and mortality rates have decreased markedly in the past several decades, with most of the reduction attributed to the introduction of the Pap test.

Cervical cancer risk is closely linked to sexual behavior and to sexually transmitted infections with certain types of human papilloma virus (HPV), a virus that can promote the development of cancer. Other risks associated with cervical cancer include having sex at an early age (before age 18), having many sexual partners, or having partners who have had many sexual partners...In addition, cigarette smoking increases cervical cancer risk, especially in conjunction with the use of oral contraceptives.

Pap test utilization in Missouri differs by many demographic factors, including education, income, race, and having health insurance. Also, geographic differences are seen in incidence of cervical cancer throughout Missouri.

According to the 1996-2000 SEER program, the incidence rate of cervical cancer in African-American women in Missouri (15.7 per 100,000) is nearly double the rate for white women (9.8 per 100,000). Death rates from the same SEER program report among African-American women (5.7 per 100,000) are more than two times higher than among white women (2.5 per 100,000).

The cancer prevention and control program managed by DCH is aimed at preventing and reducing cancer-related illnesses and deaths through:

- Screenings and diagnostic services;
- Referring diagnosed cases for treatment (diagnosed 524 cases of breast cancer and 342 cases of cervical cancer since 1993);
- Maintains vital statistics on new cancer cases;
- Responds to cluster inquiries;
- Education and outreach;
- Assists community support groups and coalitions; and
- Supports school-based initiatives.

4.2.5. Missouri Diabetes Prevention and Control Program

Nationally, more than 13,000 children are diagnosed with type 1 diabetes each year and the number diagnosed with type 2 diabetes is on the rise. Type 2 diabetes is most often seen in American Indians, African-Americans, and Hispanic children at higher rates when compared to whites. Overall, about 5-10% of diabetes is type 1 and 90-95% is type 2.

In Missouri, about 1% of women questioned through the BRFSS survey reported that they had been told by a physician that they had pregnancy-related diabetes. About 6.6% of all women had been told they had any type of diabetes in their lifetime.

The diabetes prevention and control program reduces the burden (e.g., secondary complications, health care costs) of diabetes by providing screenings, referrals, care management and reducing primary risks (e.g., obesity and physical inactivity) in communities and through health care systems. Some services of this program are provided to women of childbearing age in Missouri. The following contractors provide diabetes prevention and control services:

- Pemiscot Memorial Hospital
- St. Louis County Health Department
- Kansas City Neighborhood and Community Health Services
- Missouri Patient Care Review Foundation
- University of Missouri
- St. Louis University School of Public Health
- Four Federally Qualified Health Centers (FQHCs)
 - St. Louis Myrtle Hillard Davis Comprehensive Health Care, Inc.
 - Grace Hill Neighborhood Health Center
 - People's Health Centers
 - Southeast Missouri Health Network

4.2.6. Maternal and Child Health Coordinated Systems

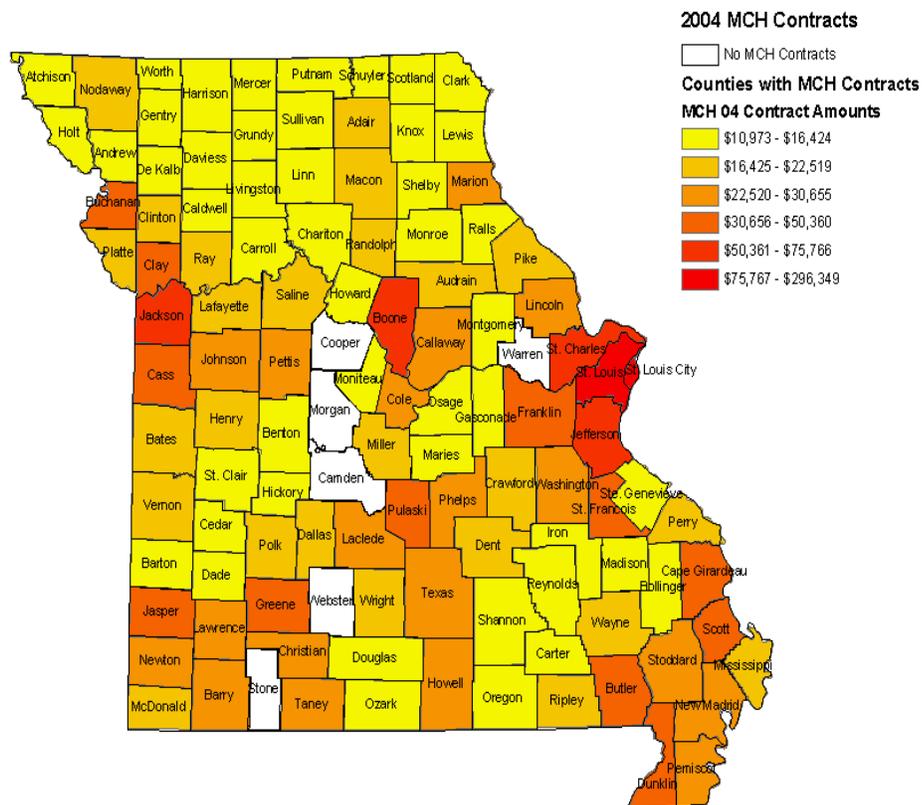
This program distributes a portion of MCH Title V Block Grant funds to local public health agencies through the MCH services contract. The contracts emphasize local MCH system development or enhancement to address targeted risk indicators that to a large extent mirror national MCH performance measures. Those indicators include:

- Percent of children without health insurance
- Pregnancy among adolescents ages 15-17
- Inadequate prenatal care
- Newborns with genetic disorders
- Infant mortality
- Motor vehicle deaths among children 1-14
- Smoking during pregnancy
- Obesity among children

TEL-LINK, an information and referral service, is also part of MCH Coordinated Systems. TEL-LINK staff can transfer callers to the appropriate agency or treatment center for the following services: immunizations, prenatal care, perinatal substance abuse, adoption, WIC, services for children with special health needs, and other essential services for MCH populations.

The following map shows levels of funding that various local communities in Missouri receive through the MCH contracts. The funding formula for MCH contracts is primarily population-based, where counties with the largest number of MCH population groups receive corresponding levels of MCH (contract) funding.

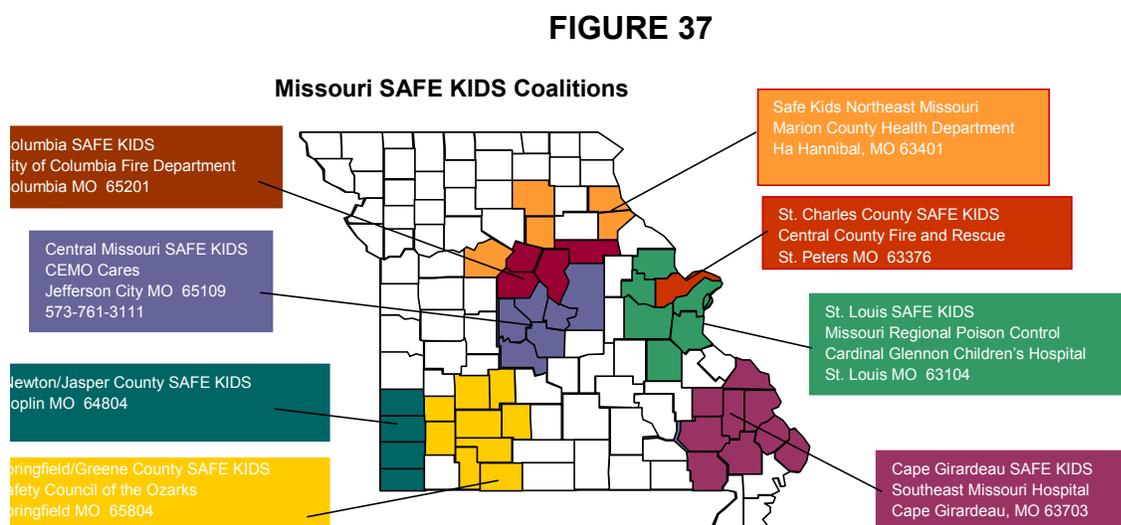
FIGURE 36
2004 Maternal and Child Health Contracts



Source: DCH Program Budget Templates: 2004

4.2.7. Injury Prevention Network

This program supports a range of activities to reduce the incidence of fatal and non-fatal injuries in Missouri. The program supports the implementation of injury prevention programs in communities statewide and establishes partnerships such as the Missouri SAFE KIDS Coalition and THINK FIRST Missouri, a brain and spinal cord injury presentation that is provided to Missouri schools. The Missouri SAFE KIDS Coalition(s) network can be depicted as follows:



Source: DCH Program Budget Templates: 2004

4.3. Infrastructure-Building Services

Missouri continues to invest in and support sophisticated MCH information systems. Those systems are used for surveillance of MCH health status and to monitor MCH outcomes and performance measures. These systems are maintained by CHIME; OSEPHI with DCH; and the Office of Surveillance with the Division of Environmental Health and Communicable Disease Prevention.

4.3.1. Center for Health Information and Management Evaluation (CHIME)

CHIME oversees the statistical support and health care assurance activities of DHSS. CHIME collects, analyzes, and distributes health-related information which promotes better understanding of health problems and needs in Missouri. CHIME designs and supports Web-based state and community health profiles that include many key MCH

indicators (largely generated from birth certificate data) that are monitored to generate data for many national and state MCH performance measures:

4.3.1.1. Demographic

- Females 15-17
- Females 18-34
- Females 35-44
- Live births and fertility rate
- Live births – five-year change
- Families 15-44 below 185% of poverty
- Families 15-44 on Medicaid

4.3.1.2. Preconception

- Births to females < 20
- Births to females > 20
- Births to females > 34
- Out of wedlock births
- Maternal education < 12 yrs
- Spacing < 18 months
- Abortions
- Abortions to females < 18

4.3.1.3. Prenatal

- Inadequate prenatal care
- Late care (2nd/3rd trimester)
- No care
- Prenatal Medicaid
- Prenatal WIC participants
- Prenatal food stamps
- Prior infant child death
- Mother = 20% overweight for height
- Mother = 15% underweight for height
- Weight gain < 15 lbs
- Weight gain > 45 lbs
- Mother Smoking

4.3.1.4. Delivery

- Out of hospital deliveries
- High risk not delivered in obstetric level II or III

- Cesarean sections
- Fetal deaths

4.3.1.5. Neonatal

- Low birth weight (< 2500 grams)
- Very low birth weight (< 1500 grams)
- Small for gestational age
- Premature (< 37 weeks gestation)
- Birth defects
- Neonatal deaths
- Perinatal deaths
- High risk infants not cared for in level II or level III nursery

4.3.1.6. Postneonatal

- Postneonatal deaths
- Infant deaths
- Infants participating in WIC

4.3.2. Office of Surveillance, Evaluation, Planning and Health Information (OSEPHI)

The surveillance unit of this office is responsible for both population and individual (client) based surveillance activities related to maternal, infant, child, and general health status; chronic risk factors and behaviors; environmental influences; and access and utilization of public health and health services. Surveillance activities include tracking selected indicators, disseminating data reports, and analyzing and interpreting the health data to develop interventions to improve the health of all Missourians. Key MCH related surveillance systems supported by OSEPHI can be summarized as follows:

4.3.2.1. Behavioral Risk Factor Surveillance System Program

The Behavioral Risk Factor Surveillance System (BRFSS) Program tracks the prevalence of chronic-disease related characteristics and monitors progress toward national health objectives related to decreasing high-risk behaviors, increasing awareness of medical conditions, and increasing the use of preventive health services of persons aged 18 years and older. BRFSS:

- Is the largest continuously conducted telephone survey in the world.
- Enables CDC, the state health departments, and other health and education agencies to monitor risk behaviors related to chronic diseases, injuries, and death.
- Is an effective tool in preventing disease and promoting health.

Missouri includes core questionnaires in its BRFSS survey tool each year. In 2005, those core questionnaires can be outlined as follows:

- Section 1: Health Status
- Section 2: Healthy Days – Health-related Quality of Life
- Section 3: Health Care Access
- Section 4: Exercise
- Section 5: Diabetes
- Section 6: Hypertension Awareness
- Section 7: Cholesterol Awareness
- Section 8: Cardiovascular Disease Prevention
- Section 9: Asthma
- Section 10: Immunizations
- Section 11: Tobacco Use
- Section 12: Alcohol Consumption
- Section 13: Demographics
- Section 14: Veteran’s Status
- Section 15: Disability
- Section 16: Arthritis Burden
- Section 17: Fruits and Vegetables
- Section 18: Physical Activity
- Section 19: HIV/AIDS
- Section 20: Emotional Support and Life Satisfaction

Additionally, Missouri will support optional questionnaires in its future BRFSS surveys that deal with oral health, women’s health, diabetes, interpersonal violence, sexual assault, and other modules that will help this state to better monitor health risk behaviors.

4.3.2.2. Cancer Registry Program

The Cancer Registry Program tracks the incidence (new cases) of cancers that occur, their locations within the body, the disease stage of the cancer at the time of diagnosis, and the kinds of treatment that patients receive. Completeness of reporting (invasive cancer vs. non-invasive) is a key measure of efficiency for this surveillance system that is closely monitored annually.

4.3.2.3. Pediatric Nutrition Surveillance System (PedNSS)

With the assistance of CDC, PedNSS analyzes the growth, anemia, and breastfeeding status and trends of children in federally-funded child health and nutrition programs such as WIC to monitor progress toward national health objectives and to evaluate interventions to improve the nutritional health of children. Currently data collected in this system is primarily from low- to moderate-income infants and children participating in these programs:

- Health and nutrition indicators for measuring the health and nutrition conditions of children aged 0-4 years who participated in the WIC program of Missouri in 2001;
- Socio-demographic characteristics of the children in the WIC program;
- Prevalence rates of health and nutrition indicators of 2001; and
- Trends of prevalence rates of health and nutrition indicators from 1992.

4.3.2.4. Pregnancy Nutrition Surveillance System (PNSS) Program

PNSS analyzes behavioral and nutritional risk factors among pregnant and postpartum women in the state enrolled in public health programs to monitor progress toward national health objectives and to evaluate interventions designed to improve the nutritional health of the women of childbearing age. This system generates the following information:

- Demographic information on race/ethnicity, education, and age distributions in the 2001 Missouri PNSS population.
- Some PNSS indicators for mothers and infants and prevalence rates on these indicators.
- Mutual influences among factors of maternal behavior, mothers' health situation, and birth outcome.

4.3.2.5. Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS is a surveillance project of the CDC and the state health departments. PRAMS collects state-specific, population-based data on maternal attitudes and experiences prior to, during, and immediately following pregnancy. PRAMS represents a logical extension and expansion of pregnancy related data collected on Missouri's birth certificate. Beyond "check-off" list questions asked at the time the birth certificate is completed, there is currently no mechanism in Missouri for a more in-depth survey of early postpartum women concerning the following indicators:

- Attitudes and feelings about the most recent pregnancy
- Content and source of prenatal care
- Maternal alcohol and tobacco consumption
- Physical abuse before and during pregnancy
- Pregnancy-related morbidity
- Infant health care
- Maternal living conditions
- Mother's knowledge of pregnancy-related health issues, such as adverse effects of tobacco and alcohol, benefits of folic acid, and risks of HIV.

This system is currently under development in Missouri. A pilot PRAMS (Missouri Pregnancy Related Assessment) survey is being conducted through support of State

Systems Development Initiative (SSDI) funding with the aim of positioning Missouri to join other states working with CDC to routinely generate PRAMS surveillance data.

4.3.3. Office of Epidemiology

The Office of Epidemiology provides epidemiologic leadership and expertise for divisions and centers at DHSS, LPHAs, as well as other stakeholders and partners to enhance the health and safety of the citizens of Missouri. The office strives to achieve this mission by translating science to guide effective use of public health surveillance; planning and evaluating interventions; test and researching public health innovations; providing epidemiologic and medical consultation; and conducting epidemiologic teaching and training. With many of its activities increasingly integrated with OSEPHI, this office generates the following products for DCH:

- Research
 - Evidence-based research
 - Applied research
 - Health disparity research
 - Research design
 - Qualitative research
 - Comparative descriptive research
- Survey design
- Logic models
- Epidemiologic consultations and technical assistance
- Epidemiologic research and special studies such as:
 - Case control studies
 - Cohort studies
 - Literature review

4.3.4. Office of Surveillance (Environmental Health and Communicable Disease Prevention)

Through development and improvements of the statewide surveillance system, this office tracks and documents occurrence and distribution of communicable, vaccine preventable, sexually transmitted, and environmentally-induced diseases in Missouri as well as potential intentional introduction of disease by terrorist agents. The surveillance by this office of the following conditions among MCH population groups is of particular significance in terms of understanding the priority health needs of these groups:

- HIV/AIDS
- Gonorrhea
- Chlamydia
- Syphilis

Additionally, this office monitors immunization levels among women of childbearing age*, pregnant women* and infants** in Missouri:

- Measles/mumps/rubella*
- Hepatitis B*
- Diphtheria**
- Pertussis**
- Tetanus**
- Poliomyelitis**
- Hepatitis B**

5. Selection of State Priority Needs

5.1. Methodologies/Process Followed

A multi-pronged approach was followed in the selection of MCH priority needs for the state of Missouri. The process of comparing priorities and performance measures, the identification of priorities via MICA Priorities, and the selection of potential top MCH priorities for Missouri is described in the following paragraphs. This approach relied upon assistance from the DHSS Office of Epidemiology and included the following elements:

- (1) Evaluation of state performance measures used in four identified benchmark states (Indiana, Kentucky, Oklahoma, and Tennessee), previous Missouri MCH priority needs, CDC health goals for 2010, and the results of MCH Title V focus groups was completed.
- (2) Identification of and prioritization of MCH-related health problems and health risk behaviors for infants, children, adolescents, and women of childbearing age were completed by DHSS Public Health Epidemiologists using the Priority MICA.

Identification of priorities via MICA Priorities

The Priority MICA is a data system that allows the user to rank the diseases/conditions and risk factors in order of severity that are impacting Missouri's population. This data system's function is to rank priority issues in Missouri by using a set of predetermined criteria measuring risk and severity through morbidity and mortality indicators including the use of "amenability to change". Amenability to change is determined by the evidence-based literature on effective interventions that address those diseases/conditions or risk factors.

Among the three subpopulations of interest, infants/children, adolescents, and adult women, the priority areas were ranked according to severity and risk for Missouri's population. The criteria used in the rankings included: death trend, number of deaths, racial disparity for deaths, hospital days of care, number of hospitalizations and ED visits, racial disparity for ED visits, disability burden, amenability to change and community support.

- (3) In the third element of this approach, DHSS Public Health Epidemiologists used their professional knowledge and judgment to identify potential top MCH priority needs by comparing national performance measures, state performance measures, and priorities.

Benchmarking Performance Measures and Priorities

The process began by comparing performance measures and priorities. Performance measures describe specific MCH needs that, when successfully addressed, can lead to

better health outcomes within specific time frames. Priorities are identified every five years. As part of the Title V legislated needs assessment, seven to ten priorities are selected for focused programmatic efforts over the succeeding five years. The Title V Information System (TVIS) electronically captures data from the annual grant applications and provides key words for all performance measures and priorities, which can be sorted by state and by type (i.e., measure or priority). Key words in this analysis included: access to health care, breastfeeding, communicable diseases, surveillance and investigation, disparities, environmental health, folic acid, health promotion, health screening, tobacco use, immunization, intentional/unintentional injuries, obesity, oral health, prenatal care, program planning/evaluation, reproductive health, service coordination, and substance use.

The first comparisons were conducted regarding national performance measures. These national performance measures are:

1. The percent of newborns who are screened and confirmed with condition(s) mandated by their State-sponsored newborn screening programs (e.g. phenylketonuria and hemoglobinopathies) who receive appropriate follow up as defined by their State.
2. The percent of children with special health care needs age 0 to 18 years whose families partner in decision making at all levels and are satisfied with the services they receive. (CSHCN survey)
3. The percent of children with special health care needs age 0 to 18 who receive coordinated, ongoing, comprehensive care within a medical home. (CSHCN Survey)
4. The percent of children with special health care needs age 0 to 18 whose families have adequate private and/or public insurance to pay for the services they need. (CSHCN Survey)
5. Percent of children with special health care needs age 0 to 18 whose families report the community-based service systems are organized so they can use them easily. (CSHCN Survey)
6. The percentage of youth with special health care needs who received the services necessary to make transition to all aspects of adult life. (CSHCN Survey)
7. Percent of 19 to 35 month olds who have received full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, and Hepatitis B.
8. The rate of birth (per 1,000) for teenagers aged 15 through 17 years.
9. Percent of third grade children who have received protective sealants on at least one permanent molar tooth.
10. The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children.
11. Percentage of mothers who breastfeed their infants at hospital discharge.
12. Percentage of newborns who have been screened for hearing before hospital discharge.
13. Percent of children without health insurance.
14. Percent of potentially Medicaid-eligible children who have received a service paid by the Medicaid Program.

15. The percent of very low birth weight infants among all live births.
16. The rate (per 100,000) of suicide deaths among youths aged 15 through 19.
17. Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates.
18. Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.

The second comparisons were conducted regarding state level performance measures. Missouri's current performance measures are:

1. Percent of low-income children who consume nutritionally adequate diets.
2. Percent of MC+ Managed Care Organizations (MCOs) utilizing MCH data.
3. Percent of pregnant women who have reported smoking.
4. Percent of tobacco use among children (14-18 years old).
5. The infant mortality rate per 1,000 live births.
6. Percent of child-care facilities receiving health and safety consultation.
7. Percent of citizens drinking fluoridated water

The final comparisons were conducted regarding state level priorities. Missouri's current priorities are:

1. Healthcare Access (for MCH populations)
2. Prevention of Smoking Among Children and Adolescents
3. Reduction of Unintended Pregnancies
4. Reduction of Child and Adolescent Injuries
5. Reduction of Child Abuse and Neglect
6. Minority Health Disparities
7. Expanded MCH Information Systems

Professional judgment was used to categorize MICA identified priorities. Finally, consideration was given to measures and priorities by comparable states as well as national measures; priority needs determined by Priority MICA; and the availability of data to measure change.

- (4) The fourth element of this approach, was to essentially follow the same group nominal ranking process that was followed with MCH stakeholders five years ago:
 - A representative group of MCH stakeholders was selected. The group included both division management and external stakeholders. The nominal group process allowed each member to participate openly and assured that all had an equal opportunity to make choices without undue influence or pressure.
 - Members of the stakeholders group were provided with a draft of the Title V MCH Needs Assessment. The needs assessment provides information regarding MCH demographics, disparities, access, risk behaviors, morbidity, and mortality as well as a summary of MCH priority needs assessment completed by the Public Health Epidemiologists.

- Stakeholder members were provided with decision elements, decision criteria, and a format for setting down decisions they made. The members were asked to select which problems/needs were to be prioritized from those identified in the needs assessment draft. Problems/needs were then assigned scores based on five criteria. After scoring, the members ranked their top ten problems/needs.
- This process consisted of involving (facilitating) the stakeholder group in the decision-making process and adoption of mathematical procedures for scoring the decisions reached by each member.
- The primary output of this process was the ranking of the list of needs that captured the collective thinking of this group.

The criteria the stakeholder group followed as a guide in ranking MCH priority needs, can be summarized as follows:

Criterion 1 – Degree to which need can be impacted by known effective interventions:

- Low – few known effective interventions exist to impact need
- Moderate – promising interventions exist to reach goal, but significant uncertainties remain
- High – effective and applicable interventions exist to impact need

Criterion 2- Degree of health-related consequence(s) of not addressing need:

- Low – minor health-related consequences to individuals or society if need not addressed
- Moderate – moderate health-related consequences to individuals or society if need not addressed
- High – major health related consequences to individuals or society if need not addressed

Criterion 3 – Degree of state and national support other than Title V for impacting need, i.e., consider the “big picture” -- finances, politics, service system priorities, and socio-economic issues:

- Low – the “big picture” is such that Title V participation will have little effect on whether or not the need impacted
- Moderate – the “big picture” is such that Title V participation will have a moderate effect on whether or not the need impacted
- High – the “big picture” is such that Title V participation will have a major effect on whether or not the need impacted

Criterion 4 – Degree of current demographic disparity regarding need (e.g. race, gender, income, place of residence):

- Low – demographic disparities regarding goal are nonexistent to negligible
- Moderate – demographic disparities regarding goal are moderate
- High – demographic disparities regarding goal are major

Criterion 5 – Degree to which other local providers or service consumers identify need as a high MCH priority for their geographical jurisdictions:

- Low – other local providers or service consumers identify need as a low MCH priority
- Moderate – other local providers or service consumers identify need as a moderate MCH priority
- High – other local providers or service consumers identify need as a high MCH priority

These four elements were then blended by the MCH Title V Director for Missouri and her staff to generate a “composite” MCH priority needs listing that is reflected in the MCH priority need statements that follow and that are an essential part of this five-year needs assessment.

5.2 Selection of State MCH Priority Needs and Needs Assessment Summary

On May 2, 2005, selected MCH “stakeholders” from across Missouri gathered in Jefferson City to review a draft version of the MCH Five-Year Needs Assessment and to participate in the previously described group nominal priority ranking process. That process yielded some 15 MCH priority need areas that were then scaled down to ten MCH priority need areas through this process. After the MCH stakeholders completed their qualitative group nominal ranking of MCH priorities, the Office of Epidemiology presented the results of their methodology to select MCH priorities (described on pages 194-196). The results of these two methodologies were surprisingly similar and blended to yield the ten overriding MCH priority needs for Missouri.

MCH INFRASTRUCTURE

- **Support Adequate Early Childhood Development and Education in Missouri** – Collaborate to coordinate efforts through a leadership role in an interagency coalition for the purpose of better targeting existing resources for early childhood development and education, identifying gaps in service delivery and infrastructure, and pursuing necessary resources to address these identified areas.

- **Improve the Mental Health Status of MCH Populations in Missouri –** Collaborate with state and local partners to transition our state mental health service delivery system to a public health model through a variety of avenues, including our leadership role in a multi-agency *Comprehensive Children’s Mental Health System* planning and implementation process; technical assistance to school communities implementing CDC’s School Health Index and transition to use of Coordinated School Health model; and a focus on the prevention aspect of mental health and substance abuse issues, particularly in relation to pregnant women, children, and adolescents.
- **Enhance Environmental Supports and Policy Planning/Development for the Prevention of Chronic Disease –** Provide technical assistance and support to local, state, and regional initiatives to develop or enhance environmental supports and/or policies aimed at addressing the three primary risk factors for the development of chronic disease: nutrition, physical activity and tobacco use/secondhand smoke. Emphasis will be placed upon environmental supports and policies that focus upon the development of positive lifestyle choices and habits and decrease chronic disease for the next generations.

POPULATION BASED MCH SERVICES

- **Reduce Interpersonal/Domestic Violence Among MCH Populations –** Continue to advocate for primary prevention to reduce interpersonal violence, as well as provide technical assistance and resources to local and regional partners to implement primary prevention planning in their respective areas using evidence-based approaches.
- **Prevent and Reduce Smoking Among Adolescents and Women –** Collaborate with statewide partners to reduce the number of women who smoke during pregnancy using evidence-based practice.
- **Reduce Obesity Among Children, Adolescents, and Women –** Collaborate with statewide partners to achieve healthy weight among an increased percentage of children and adolescents through increased physical activity and healthy eating habits.
- **Reduce Disparities in Birth Outcomes –** Collaborate with state and national partners to examine the intransigent causes and correlations to poor birth outcomes to allow focused interventions and initiatives. Implement and evaluate these resultant interventions and initiatives to decrease racial/ethnic, geographical, and socioeconomic disparities related to low birth weight, prematurity, prenatal care received, and infant mortality.

- **Reduce Intentional and Unintentional Injuries Among Infants, Children, and Adolescents in Missouri** – Collaborate with statewide partners to implement environmental supports and local, regional, and state policies to positively impact motor vehicle accidents/deaths among adolescents; suicide attempts/completions among adolescents; and intentional/unintentional injuries among infants and children.

DIRECT/ENABLING MCH SERVICES

- **Improve Access to Care** – Provide technical assistance and resources in collaboration with other statewide partners to assure adequacy and cultural competency of provider networks which support reproductive health, primary health, oral health, and mental health/substance abuse services for women, infants/children, adolescents, and special health care need populations, with an emphasis on medical/oral health home.
- **Reduce and Prevent Oral Health Conditions Among MCH Populations in Missouri** – Collaborate with statewide partners to identify and address gaps in oral health service delivery system; conduct oral health surveillance to inform the oral health systems enhancement initiatives; support the training and placement of oral health professionals in underserved areas to better meet the oral health needs of MCH populations in Missouri; encourage the integration of oral health preventive services into primary care and school health settings.

In comparing these 2005 MCH priority needs with MCH priority need areas that were identified in the 2000 Five-Year Needs Assessment for Missouri, there are some priority need areas that were carried over into the next MCH block grant operating cycle; some MCH priority need areas that no longer have the same level of magnitude and are not listed among the top ten MCH priority need area(s) for the next five-year cycle; and a few new emerging MCH priority needs that resulted from this assessment.

MCH priority need areas that were carried over into the 2006 - 2010 five-year cycle:

- Healthcare Access (for MCH populations)
(now listed as Access to care)
- Prevention of Smoking Among Children and Adolescents
(now listed as Prevent and Reduce Smoking Among Adolescents and Women)
- Reduction of Child and Adolescents Injuries
(now listed as Reduce Intentional and Unintentional Injuries Among Infants, Children and Adolescents)
- Reduction of Child Abuse and Neglect
(expanded to Reduce Interpersonal/Domestic Violence Among MCH Populations)

- **Minority Health Disparities**
(now listed as Reduce Disparities in Birth Outcomes as disparities relate to birth outcomes by geographic origin and to racial/ethnic groups)

MCH priority need area that is no longer listed among Missouri's top ten MCH priority need areas

- Expanded MCH Information Systems

MCH priority need areas that emerged for the first time in the MCH Five-Year 2005 MCH Needs Assessment

- Reduction of Obesity Among Children, Adolescents, and Women
- Improvement of Mental Health Status of MCH Populations in Missouri
- Support of Adequate Early Childhood Development and Education
- Implementation of Environmental Health Policies for the Prevention and Reduction of Chronic Disease

These priorities establish a framework for the allocation of Title V MCH block grant resources over the next five years and certain of these priority needs such as smoking among MCH population groups reduction of obesity and adequate early childhood development can be favorably impacted through the allocation of MCH block grant funding to support these priority needs. However, the overriding MCH priority need for Missouri that emerged based upon the staff analysis, results of focus groups conducted, MCH stakeholders meeting (group nominal ranking process), and the application of the previously described epidemiological MCH needs selection methodology, was to improve access to care for MCH population groups in Missouri. Improved access to MCH services will require a much larger commitment of State resources beyond Title V MCH Block Grant funding.

The following table summarizes the comparisons of the new priority needs with the performance measures.

TABLE 92
Updated Comparison of Missouri Department of Health and Senior Services
MCH Title V Performance Measures (National and State), Health Systems Capacity Indicators, and State Priorities

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|------|---|--|---|--|------------------|------|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| | National Performance Measures (NPM) | | | | | | |
| NPM1 | The percent of infants who are screened for conditions mandated by their State-sponsored newborn screening programs (e.g. phenylketonuria and hemoglobinopathies) and receive appropriate follow up and referral as defined by their State. | ---- | PNA00-1. Health Care Access ----- PNA05-1. Early Childhood Development and Education PNA05-9. Improve Access to Care | 2 ----- 2 2 | 100 | 100 | + |
| NPM2 | The percent of children with special health care needs age 0 to 18 whose families partner in decision-making at all levels and are satisfied with the services they receive. (CSHCN Survey) | ---- | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care | 3 ----- 3 | New in 2003 | 57.2 | --- |
| NPM3 | The percent of children with special health care needs age 0 to 18 who receive coordinated, ongoing, comprehensive care within a medical home. (CSHCN Survey) | #9 Increase percent of Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen (EPSDT). #10 Decrease the percent of children without health insurance. | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care | 2 ----- 3 | New in 2003 | 55.7 | ---- |
| NPM4 | The percent of children with special health care needs age 0 to 18 whose families have adequate private and/or public insurance to pay for the services they need. (CSHCN Survey) | #10 Decrease the percent of children without health insurance | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care | 1 ----- 1 | New in 2003 | 66 | ---- |
| | | | | | | | |

TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|------|---|--|--|--|------------------|------|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| NPM5 | The percent of children with special health care needs age 0 to 18 whose families report the community-based service system is organized so they can use it easily. (CSHCN Survey) | ---- | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care | 3 ----- 3 | New in 2003 | 75.2 | ---- |
| NPM6 | The percentage of youth with special health care needs who received the services necessary to make transitions to all aspects of adult life. (CSHCN Survey) | ---- | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care | 3 ----- 3 | New in 2003 | 5.8 | ---- |
| NPM7 | Percent of 19 to 35 month olds who have received full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B. | #11 Increase percent of children age 2 who have completed immunizations for measles, mumps, rubella, polio, diphtheria, tetanus, pertussis, Hib, hepatitis B | PNA00-1. Health Care Access ----- PNA05-01. Early Childhood Development and Education PNA05-9. Improve Access to Care | 1 ----- 1 1 | 68.9 | 76.4 | + |
| NPM8 | The rate of birth (per 1,000) for teenagers aged 15 through 17 years. | #5 Decrease rate of births to teenagers aged 15-17. #6 Decrease percent of live births to females with less than 12 years of education. | PNA00-3. Reduction of Unintended Pregnancies ----- PNA05-7. Reduce Disparities in Birth Outcomes | 1 ----- 3 | 26.9 | 21.5 | + |
| | | | | | | | |

*Ranking Legend:.....
 1=Highly Related.....
 2=Medially Related....
 3= Minimally Related.

TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|-------|---|---|---|--|------------------|------|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| NPM9 | Percent of third grade children who have received protective sealants on at least one permanent molar tooth. | #12 Increase percent of third grade children who have received protective sealant on at least one permanent molar tooth. | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care PNA05-10. Reduce and Prevent Oral Health Conditions | 1 1 1 | 11.8 | 14 | + |
| NPM10 | The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children. | #17 Decrease rate of deaths to children aged #16 Decrease death rate per 100,000 due to unintentional injuries among children aged 1 through 14 years. #15 Decrease rate of probable cause cases of child abuse and neglect per 1000 population for children under age of 18. | PNA00-4. Reduction of Child and Adolescent Injuries PNA00-5. Reduction of Child Abuse and Neglect ----- PNA05-8. Reduce Intentional and Unintentional Injuries | 1 1 | 5 | 4.9 | + |
| NPM11 | Percentage of mothers who breastfeed their infants at hospital discharge. | ---- | PNA00-4. Reduction of Child and Adolescent Injuries ----- ---- | 3 ---- | 55.6 | 64.7 | + |
| | | | | | | | |

*Ranking Legend:.....
 1=Highly Related.....
 2=Medially Related....
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TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|-------|---|--|---|--|------------------|------|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| NPM12 | Percentage of newborns who have been screened for hearing before hospital discharge. | ---- | PNA00-1. Health Care Access ----- PNA05-1. Early Childhood Development and Education PNA05-9. Improve Access to Care | 2 ----- 1 3 | 8.2 | 98.7 | + |
| NPM13 | Percent of children without health insurance. | #10 Decrease the percent of children without health insurance. | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care | 1 ----- 1 | 11.5 | 5.9 | + |
| NPM14 | Percent of potentially Medicaid eligible children who have received a service paid by the Medicaid Program. | #9 Increase percent of Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen (EPSDT). | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care | 1 ----- 1 | 78.7 | 80.3 | + |
| NPM15 | The percent of very low birth weight infants among all live births. | #7 Decrease percent of births weighing less than 2500 grams. #8 Decrease infant mortality rate per 1000. #4 Decrease percent of mothers with live births which occurred within 18 months of a previous live birth. | PNA00-3. Reduction of Unintended Pregnancies ----- PNA05-7. Reduce Disparities in Birth Outcomes | 3 ----- 2 | 1.5 | 1.6 | - |
| | | | | | | | |

*Ranking Legend:.....
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 2=Medially Related....
 3= Minimally Related.

TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|-------|---|---|---|--|------------------|------|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| NPM16 | The rate (per 100,000) of suicide deaths among youths 15-19. | #18 Decrease rate of suicide deaths among youths aged 15-19. | PNA00-4. Reduction of Child and Adolescent Injuries PNA00-5. Reduction of Child Abuse and Neglect ----- PNA05-8. Reduce Intentional and Unintentional Injuries | 3 ----- 2 | 12.6 | 6.8 | + |
| NPM17 | Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates. | #8 Decrease infant mortality rate per 1000. | PNA00-1. Health Care Access ----- PNA05-7. Reduce Disparities in Birth Outcomes PNA05-9. Improve Access to Care | 3 ----- 2 2 | 78.5 | 78.3 | - |
| NPM18 | Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester. | #2 Decrease percent of pregnant women receiving inadequate prenatal care. | PNA00-3. Reduction of Unintended Pregnancies ----- PNA05-7. Reduce Disparities in Birth Outcomes PNA05-9. Improve Access to Care | 3 ----- 2 2 | 85.6 | 86.6 | + |
| | | | | | | | |

TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|-----------------|---|---|--|--|------------------|------|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| | | | | | | | |
| | State Performance Measures for FFY2006 Title V Block Grant Application (based on 2000 MCH Priority Needs Assessment) | | | | | | |
| SPM- PNA00-1 | The infant mortality rate per 1,000 live births. | #7 Decrease percent of births weighing less than 2500 grams. #8 Decrease infant mortality rate per 1000. | PNA00-3. Reduction of Unintended Pregnancies | 3 | 10.8 | 10.8 | + |
| SPM- PNA00-2 | Percent of low-income children who consume nutritionally adequate diets. | #14 Decrease percent of children who are obese. | PNA00-4. Reduction of Child and Adolescent Injuries | 3 | 23 | 26.1 | + |
| SPM- PNA00-3 | Percent of citizens drinking fluoridated water. | ---- | PNA00-1. Health Care Access | 3 | 74.4 | 81.5 | + |
| SPM- PNA00-4 | Percent of women who have reported smoking during pregnancy. | #3 Decrease percent of women who have reported smoking during pregnancy. | PNA00-2. Prevention of Smoking Among Children and Adolescents | 3 | 18.3 | 18.1 | + |
| SPM- PNA00-5 | Percent of MC+ Managed Care Organizations (MCOs) utilizing MCH data. | ---- | PNA00-7. Expanded MCH Info Systems | 1 | 100 | 100 | + |
| SPM- PNA00-6 | Percent of child care facilities receiving health and safety consultation. | ---- | PNA00-4. Reduction of Child and Adolescent Injuries PNA00-5. Reduction of Child Abuse and Neglect | 1 | 37.5 | 27.6 | - |
| SPM- PNA00-7 | Percent of tobacco use among children (14 to 18 years of age). | ---- | PNA00-2. Prevention of Smoking Among Children and Adolescents | 1 | 32.8 | 24.8 | + |

TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|-------------------|--|--|--|--|------------------|------|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| | PRELIMINARY State Performance Measures for FFY 2007 Title V Block Grant Application (based on 2005 MCH Priority Needs Assessment) | | | | | | |
| SPM- PNA05-1 | Percent of women who have reported smoking during pregnancy (continued from previous year) | #3 Decrease percent of women who have reported smoking during pregnancy. | PNA05-3. Enhance Environment Supports... PNA05-5. Prevent and Reduce Smoking | 1 1 | 18.3 | 18.1 | + |
| SPM- PNA05-2 | Percent of tobacco use among children (14 to 18 years of age) (continued from previous year) | ---- | PNA05-3. Enhance Environment Supports... PNA05-5. Prevent and Reduce Smoking | 1 1 | 32.8 | 24.8 | + |
| SPM- PNA05-3 | Percent of mothers who are overweight by 20% or more at birth | '---- | PNA05-3. Enhance Environment Supports... PNA05-6. Reduce Obesity Among Children, Adolescents, and Women | 2 1 | NA | NA | NA |
| **SPM- PNA05-4 | Percent of adolescents who are physically active | #14 Decrease percent of children who are obese | PNA05-3. Enhance Environmental Supports... PNA05-6. Reduce Obesity Among Children, Adolescents, and Women | 1 1 | NA | NA | NA |
| **SPM- PNA05-5 | Percent of women reporting domestic violence | #15 Decrease rate of probable cause cases of child abuse and neglect per 1,000 population for children under age of 18 | PNA05-4. Reduce Interpersonal/Domestic Violence Among MCH Populations | 1 | NA | NA | NA |
| **SPM- PNA05-6 | Percent of women 18-44 years of age who reported mental health was not good | #18 Decrease rate of suicide deaths among youths aged 15-19 | PNA05-2. Improve Mental Health Status of MCH Populations | 1 | NA | NA | NA |

**Wording of performance measure summarizes the performance measure entered in Title V Information System (TVIS). The numbering varies from the order in which measures were entered in TVIS. A more detailed description of each performance measure is found at the end of Section VI. Reporting Forms - General Information of the Title V Block Grant FFY04 Annual Report and FFY06 Application.

*Ranking Legend:.....
 1=Highly Related.....
 2=Medially Related....
 3= Minimally Related.

TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|--------------------|---|--|--|--|------------------|------|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| **SPM- PNA05-7 | Percent of children ready to learn when entering school | #9 Increase percent of Medicaid enrollees whose age is less than 1 year during reporting year who received at least 1 initial periodic screen #11 Increase percent of children age 2 with completed immunizations... #13 Increase percent of children aged 1 to 6 years tested for lead poisoning | PNA05-1. Early Childhood Development and Education PNA05-3. Enhance Environmental Supports... | 1 2 | NA | NA | NA |
| **SPM- PNA05-8 | Percent of MCH populations with access to primary care | #1 Increase percent of infants born to pregnant women receiving prenatal care beginning in first trimester #2 Decrease percent of pregnant women receiving inadequate prenatal care #9 Increase percent of Medicaid enrollees whose age is less than 1 year during reporting year who received at least one initial periodic screen #10 Decrease percent of children without health insurance #11 Increase percent of children age 2 with completed immunizations... | PNA05-7. Reduce Disparities in Birth Outcomes PNA05-9. Improve Access to Care | 2 1 | NA | NA | NA |
| **SPM- PNA05-9 | Percent of MCH populations with access to dental care | #12 Increase percent of 3rd grade children who received protective sealant on at least 1 permanent molar tooth | PNA05-10. Reduce and Prevent Oral Health Conditions | 1 | NA | NA | NA |
| **SPM- PNA05-10 | Percent of pregnant women entering WIC in the first trimester | #1 Increase percent of infants born to pregnant women receiving prenatal care beginning in first trimester #2 Decrease percent of pregnant women receiving inadequate prenatal care | PNA05-7. Reduce Disparities in Birth Outcomes PNA05-9. Improve Access to Care | 2 1 | NA | NA | NA |

**Wording of performance measure summarizes the performance measure entered in Title V Information System (TVIS). The numbering varies from the order in which measures were entered in TVIS. A more detailed description of each performance measure is found at the end of Section VI. Reporting Forms - General Information of the Title V Block Grant FFY04 Annual Report and FFY06 Application.

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TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|-------|---|--|--|--|------------------|------|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| | Health Systems Capacity Indicators | | | | | | |
| HSCI1 | The rate of children hospitalized for asthma (10,000 children less than five years of age). | #19 Decrease rate of ER visits among children aged 5-14. | PNA00-4. Reduction of Child and Adolescent Injuries ----- PNA05-3. Enhance Environmental Supports... PNA05-8. Reduce Intentional and Unintentional Injuries | 2 ----- 2 2 | 78.8 | 92.7 | - |
| HSCI2 | The percent of Medicaid enrollees whose age is less than one year who received at least one initial periodic screen. | #9 Increase percent of Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen (EPSDT). | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care PNA05-1. Early Childhood Development and Education | 1 ----- 1 2 | 71.6 | 90.3 | + |
| HSCI3 | The percent of State Children's Health Insurance Program (SCHIP) enrollees whose age is less than one year who received at least one periodic screen. | #9 Increase percent of Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen (EPSDT). | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care PNA05-1. Early Childhood Development and Education | 1 ----- 1 2 | 71.6 | 90.3 | + |

*Ranking Legend:.....
 1=Highly Related.....
 2=Medially Related....
 3= Minimally Related.

TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|-------|--|---|---|--|--|---|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| HSCI4 | The percent of women (15 through 44) with a live birth during the reporting year whose observed to expected prenatal visits are greater than or equal to 80 percent on the Kotelchuck Index. | #1 Increase percent of infants born to pregnant women receiving prenatal care beginning in first trimester. | PNA00-1. Health Care Access ----- PNA05-7. Reduce Disparities in Birth Outcomes PNA05-9. Improve Access to Care | 2 ----- 2 2 | 78.6 | 77.7 | - |
| HSCI5 | Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State. NOTE: Goal is to eliminate disparities in pregnancy health outcomes in Medicaid, non-Medicaid, and all populations in the State. | ---- | PNA00-6. Minority Health Disparities PNA00-7. Expanded MCH Info Systems ----- PNA05-7. Reduce Disparities in Birth Outcomes PNA05-9. Improve Access to Care | 1 ----- 1 2 | a) % BW: Medicaid: 9.8 Non-Mdcd: 6.3 All: 7.8 b) Infant deaths per 1000 live births: Medicaid: 9.2 Non-Mdcd: 5.9 All: 7.7 c) % Infants born to pregnant women receiving prenatal care beginning in first trimester: Medicaid: 76 Non-Mdcd: 92.1 All: 85.6 d) % Pregnant women with adequate prenatal care...: Medicaid: 67.2 Non-Mdcd: 82.5 All: 76.3 | a) % LBW: Medicaid: 9.6 Non-Mdcd: 6.7 All: 8 b) Infant deaths per 1000 live births: Medicaid: 9.9 Non-Mdcd: 6.1 All: 7.9 c) % Infants born to pregnant women receiving prenatal care beginning in first trimester: Medicaid: 79.1 Non-Mdcd: 92.8 All: 86.6 d) % Pregnant women with adequate prenatal care...: Medicaid: 69 Non-Mdcd: 84.3 All: 77.7 | |

TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|---------|---|--|--|--|--|--|--------------|
| | | | | | 1999 | 2003 | +/- Trend |
| HSCI6 | The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs for infants (0 to1), children, and pregnant women. | #8 Decrease percent of children without health insurance | PNA00-1. Health Care Access ----- PNA05-7. Reduce Disparities in Birth Outcomes PNA05-9. Improve Access to Care | 1 ----- 2 1 | Medicaid: Infants: 300 C. 1-18 yrs: 300 Pg W: 185 CHIP: Infants: 300 C. 1-18 yrs: 300 Pg W: 185 | Medicaid: a) Infants: 185 b) C. 1-5 yrs: 133 C. 6-18 yrs: 100 c) Pg W: 185 SCHIP: a) Infants: 300 b) C. 1-18: 300 | - |
| HSCI7 | The percent of EPSDT eligible children aged 6 through 9 years who have received any dental services during the year. | #12 Increase percent of third grade children who have received protective sealant on at least one permanent molar tooth. | PNA00-1. Health Care Access ----- PNA05-10. Reduce and Prevent Oral Health Conditions | 1 ----- 1 | 33 | 31.3 | - |
| HSCI8 | The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State Children with Special Health Care Needs Program. | ---- | PNA00-1. Health Care Access ----- PNA05-9. Improve Access to Care | 2 ----- 2 | 16 | 0.6 | - |
| HSCI9a* | The ability of States to assure that the Maternal and Child Health program and Title V agency have access to policy and program relevant information and data. | ---- | PNA00-7. Expanded MCH Info Systems ----- ---- | 1 ----- ---- | * | * | * |
| | | | | | | | |

*Ranking Legend:.....
 1=Highly Related.....
 2=Medially Related....
 3= Minimally Related.

TABLE 92 continued

| | MCH Title V National Performance Measures (NPM), State Performance Measures (SPM), and Health Systems Capacity Indicators (HSCI) | MCH Contract Performance Measures | MCH Title V State Priorities from Needs Assessments in 2000 (PNA00) & 2005 (PNA05) | *Priorities Relationship to NPM, SPM, and HSCI Ranking | Performance Data | | |
|---------|---|---|---|--|------------------|------|-----------------------|
| | | | | | 1999 | 2003 | +/- Trend |
| HSCI9b* | The ability of States to determine the percent of adolescents in grades 9 through 12 who report using tobacco products in the past month. | ---- | PNA00-7. Expanded MCH Info Systems PNA00-2. Prevention of Smoking Among Children and Adolescents ----- PNA05-3. Enhance Environment Supports... PNA05-5. Prevent and Reduce Smoking | 1 ----- 2 1 | * | * | + |
| HSCI9c* | The ability of States to determine the percent of children who are obese or overweight. | #14 Decrease percent of children who are obese. | PNA00-7. Expanded MCH Info Systems ----- PNA05-6. Reduce Obesity Among Children, Adolescents, and Women | 2 ----- 1 | * | * | + |
| | *Information in 1999 regarding data capacity was on Form C3. Number of questions and breakdown are slightly different than Form 19. It appears that linkage has improved and expanded to include PedNSS and WIC Program Data. | | | | | | |
| | | | | | | | |
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