

Mississippi State Health Plan FY 2007

Executive Summary

Legal Authority and Purpose

Section 41-7-171 et seq., Mississippi Code 1972 Annotated, as amended, establishes the Mississippi Department of Health (MDH) as the sole and official agency to administer and supervise all health planning responsibilities for the state, including development and publication of the *Mississippi State Health Plan*. The *State Health Plan*:

- Identifies priority health care needs in Mississippi,
- Recommends ways in which those needs may be met, and
- Establishes criteria and standards for health-related activities which require Certificate of Need review.

The effective dates of the *Fiscal Year 2007 Mississippi State Health Plan* extend from November 11, 2006, through June 30, 2007, or until superseded by a later *Plan*.

Outline of the State Health Plan

The *Plan* is divided into sections:

Section A

- Description of Mississippi's demographic characteristics
- Identification of health status indicators based on vital statistics
- Summary of major health care resources
- Identification of priority health needs
- Establishment of policies and strategies to help meet identified needs
- Examination of health care professionals shortage

Section B

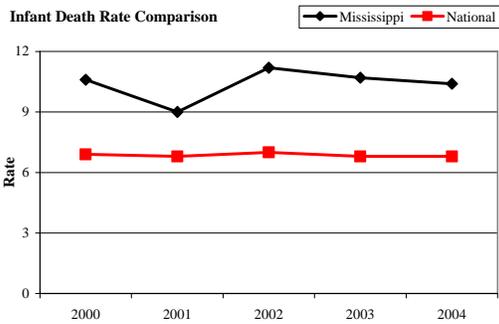
- Description of existing services
- Evaluation of the need for additional services
- Description of Certificate of Need criteria and standards

Demographic Profile

Mississippi had an estimated 2,902,966 people dispersed in 82 counties and 296 incorporated cities, towns, and villages. While 50.4 percent of the people live in one of the incorporated municipalities, 51.2 percent live in areas classified as rural by the Census Bureau. Nearly 20 percent of the people live in a city with a population of 25,000 or more, and only 34.9 percent in a city of 10,000 or more. The 2000 Census reported 1,161,953 housing units in Mississippi and an average occupancy of 2.45 persons per unit. Employment decreased from 1,249,700 in 2004 to 1,237,300 in 2005 (annual average), a one percent increase. This figure includes all Mississippi residents who are employed, whether the employment is within Mississippi or out-of-state. Mississippi ranked 49th among the states in per capita income and 48th in median family income. High school graduation rates in Mississippi rose to 74.3 percent in 2000, from 64.3 percent in 1990, a gain of ten points. Although there has been marked improvement in income, education, and housing, Mississippi remains well below the national average in these areas.

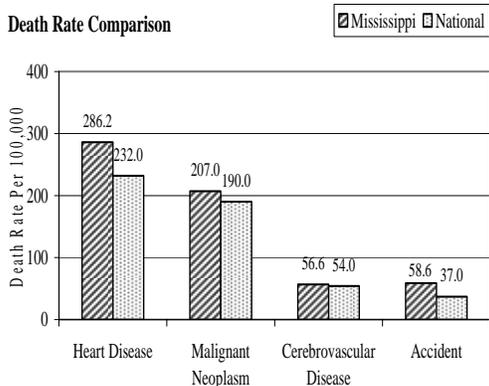
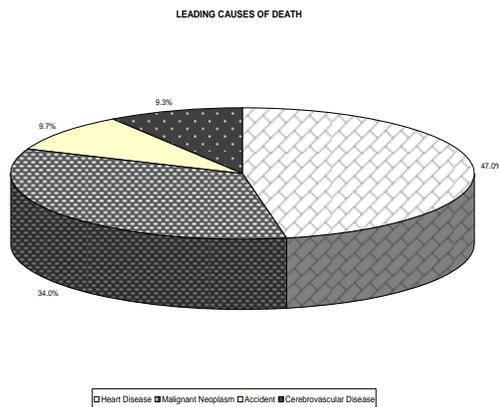
Health Status

Live Births: In 2004, live births numbered 42,809, compared to 42,321 registered in 2003. A physician attended 97.6 percent of all in-hospital births (41,783). Nurse midwives delivered 837 live births. A total of 497 congenital malformations were reported in 2004 for a rate of 11.6 per 1,000 live births. Mississippi experienced 419 fetal, 11 maternal, and 417 infant deaths in 2004. The infant mortality rate in Mississippi has declined since 1980; from 17.0 per 1,000 live births in 1980 to 10.4 per 1,000 live births in 2004.



Rate = Infant deaths per 1,000 live births
National rates from Center for Disease Control & Prevention (rate for 2004 preliminary data)

Deaths: There were 27,748 deaths reported in 2004, with cardiovascular diseases, principally heart disease and stroke, being the leading cause, accounting for 29.7 percent of deaths, followed closely by malignant neoplasm, accounting for 21.5 percent.



Rate per 100,000 population

Obesity: Mississippi has had the highest rates of adult overweight and obesity in the

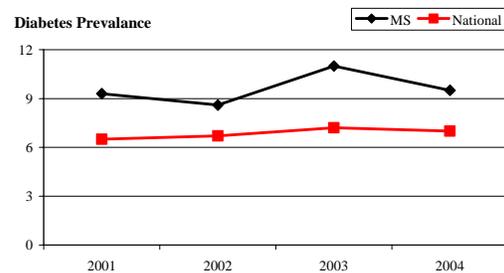
nation. Overweight and obesity are one of the state's most pressing public health problems. The increasing high rate of diabetes in the state is largely a consequence of the increasing rate of obesity.

Hypertension: Hypertension (high blood pressure) is a major risk factor for coronary heart disease (CHD), heart failure, and stroke. The high (and rising) prevalence of hypertension is a reason for the high CHD and stroke mortality rates in the state. Mississippi is one of 11 states in the southeast U.S. known as the "Stroke Belt".

Diabetes: The 2004 prevalence of diabetes in Mississippi was 9.5 percent, the third highest in the nation. Diabetes is the primary cause of macrovascular disease, stroke, adult blindness, end-stage renal disease, and non-traumatic lower extremity amputations. Diabetes is also an important risk factor for coronary heart disease, stroke, and various complications of pregnancy. The 2004 diabetes prevalence rate showed a 13.6 percent decrease from the 2003 prevalence rate. Authorities estimate that adult onset diabetes is under-reported by 40 percent.

2004 Diabetes Prevalence

Diabetes prevalence decreased slightly from 2003 to 2004 with Mississippi at a rate of 9.5 percent compared to a National rate of 7.0 percent.



Behavioral Risk Factor Surveillance System

	Mississippi	National
Diabetes Prevalence	9.5%	7.0%

Behavioral Risk Factor Surveillance System

Cancer: Each year, more than 15,000 Mississippians are diagnosed with cancer. In

order of frequency, the top five sites of cancer diagnosis were lung, breast, prostate, colorectal, and bladder. Cancer caused 5,964 deaths to Mississippians during 2004. Lung cancer is the most common cause of cancer death.

Tuberculosis: Mississippi reported 103 new cases of tuberculosis in 2005 or a rate of 3.5 cases per 100,000 population; this compares with the national rate of 5.1 cases per 100,000 population.

Sexually Transmitted Diseases: Sexually transmitted diseases remain a public health problem in Mississippi. A total of 47 cases of early syphilis were reported, or a rate of 1.98 new cases per 100,000 population. This compares with a national rate of 2.5. The state had 7,170 cases of gonorrhea, 21,258 chlamydia infections, and 577 new cases of AIDS reported in 2005.

Hepatitis: Mississippi reported 19 cases of hepatitis A, 53 cases of hepatitis B, and 19 cases of hepatitis C in 2005 for a rate of 0.7, 3.72, and 1.15 for hepatitis A, B, and C, respectively. CDC reported national rates at 2.6, 2.6, and 0.4, respectively.

Occupational Injuries and Illnesses: Seventy-three occupational related fatalities and 13,197 work-related injuries or illnesses were reported in 2005.

Health Care Resources

Health Professionals: The following table details the count of health professionals during 2005.

Health Professionals by Type (2005)

Health Profession	Number
Physicians*	5,421
Dentists*	1,407
Chiropractors	265
Optometrists	283
Pharmacists	2,682

Registered Nurses	33,750
Nurse Practitioners	1,599
Licensed Practical Nurses	13,405
Nursing Assistants / Aides	16,391
Physicians' Assistants	67
Physical Therapy Practitioners	1,346
Occupational Therapists	727
Social Workers	4,191

*Active

Long Term Care: Mississippi has 185 public or proprietary skilled nursing homes, with a total of 17,112 licensed beds; 11 entities have received CON approval for the construction of 543 additional beds; and 12 facilities have voluntarily delicensed a total of 512 nursing home beds, which are being held in abeyance by MDH. This count excludes eight facilities that operate 1,747 beds not subject to Certificate of Need review and serve a specific population. The *Plan* indicates a need for 8,388 additional skilled nursing beds.

The state has 13 intermediate care facilities for the mentally retarded with a total of 2,724 beds. The state also has six psychiatric residential treatment facilities for emotionally disturbed children and adolescents, with a total of 358 licensed and CON approved beds. The *Plan* indicates that the state is presently over-bedded by 190 mentally retarded/developmental disabled long-term care and 76 psychiatric residential treatment beds.

The state has 184 licensed personal care homes, with 5,102 beds; various retirement or senior housing facilities that provide apartments for independent living; and several continuing care retirement communities that provide continuum of care to the elderly. Fifty-three Mississippi hospitals have designated 674 beds as swing-beds, which provided 80,206 inpatient days of long-term skilled nursing care to 6,322 persons. Eleven hospitals operated a total of 167 as a “distinct-part

skilled nursing facility.” Nine freestanding Medicare-approved hospitals provide long-term acute care services to patients who do not require more than three hours of rehabilitation per day. Two additional facilities have received CON approval to offer LTAC services.

Acute Care Hospitals: Mississippi had 97 non-federal acute (short term) care hospitals, with a total of 11,273 licensed medical-surgical beds, of which 10,304 were set-up and staffed. The count excludes hospitals operated by the state and federal agencies that serve a unique population. Twenty-eight of the 97 hospitals have been designated as Critical Access Hospitals, providing outpatient, emergency, and limited inpatient services only. The average daily census of Mississippi hospitals was 5,211. Fifty-five of the state's hospitals reported occupancy rates of less than 40 percent during FY 2005. Mississippi is over-bedded, with an average of 6,044 licensed beds remaining vacant on any given day.

Acute Care Hospital Data (2005)

	Number
Non-Federal Acute Care Hospitals	97
Licensed Medical-Surgical Beds	11,273
Medical-Surgical Beds Setup	10,304
Critical Access Hospitals	28 *
Average Daily Census	5,229

*Included in 97 acute care hospitals

Diagnostic Imaging Services: The following table details the number of diagnostic imaging procedures performed by providers during 2005.

Diagnostic Imaging Procedures by Type (2005)

Diagnostic Imaging Service	Procedures
Magnetic Resonance Imaging	225,604
Digital Subtraction Angiography	51,450
Computer Assisted Tomography	503,010
Positron Emission Tomography	7,354

Acute Care Services: Radiation Therapy uses ionizing radiation to treat diseases, primarily cancer. Brachytherapy radiation implantation was performed on 2,824 patients in 15 hospitals; the state’s only GammaKnife® reported 110 external beam radiation therapy procedures; and 21 cancer treatment centers performed 159,694 megavoltage therapeutic procedures during 2005.

Acute Care Services: Extracorporeal Shock Wave Lithotripsy (ESWL). The lithotripter is a medical device which disintegrates kidney or biliary stones (gallstones) by using shock waves. Twenty-eight Mississippi hospitals and two free-standing facilities provided 3,576 renal ESWL procedures during FY 2005.

Acute Care Services: Cardiac Cauterization. Cardiac catheterization, predominately a diagnostic tool that is an integral part of cardiac evaluation, brings together two disciplines: cardiac catheterization (the evaluation of cardiac function) and angiography (X-ray demonstration of cardiac anatomy). Cardiac catheterization includes various therapeutic interventions. In FY 2004, the state’s 52 cardiac catheterization laboratories performed 40,939 adult and 367 pediatric cardiac catheterizations. Providers performed a total of 9,234 percutaneous transluminal coronary angioplasties to improve myocardial blood flow.

Acute Care Services: Open Heart Surgery. Open-heart surgery involves a number of procedures, including valve replacement, repair of cardiac defects, coronary bypass, heart transplantation, and artificial heart implantation. Providers performed a total of 4,036 such surgeries during 2005.

Acute Care Services: Perinatal Care. Three Mississippi hospitals reported more than 2,000 obstetrical deliveries each in FY 2005, accounting for 19.8 percent of the state's 39,832 hospital deliveries.

Acute Care Services: Outpatient Services.

Hospitals received 1,674,009 emergency room visits and 2,262,596 clinic visits for a total of 3,936,605 outpatient visits during 2005.

Acute Care Services: Ambulatory Surgery.

Fifty-five percent of the 266,555 surgeries performed in hospitals (147,702) were outpatient surgeries. The state's 24 freestanding ambulatory surgery centers performed an additional 89,707 surgeries during 2005.

Mental Health Services: The public mental health system, including regional community mental health centers and the community service divisions of the state psychiatric hospitals provided services to a total of 64,074 adults and 28,220 adolescents and children. Mississippi's four state-operated mental hospitals, which provide the majority of inpatient psychiatric care, operated 1,902 beds and admitted 2,682 adult patients during 2005. Mississippi has 12 hospital-based and two freestanding non-state operated adult psychiatric facilities, with a capacity of 513 licensed beds for adult psychiatric patients.

Three freestanding facilities and six hospital-based facilities, with a total of 222 licensed beds, provide acute psychiatric inpatient services for children and adolescents. Additionally, the Department of Mental Health operates a separately-licensed 60-bed facility at Mississippi State Hospital to provide short-term inpatient psychiatric treatment for children and adolescents. East Mississippi State Hospital operates a 50-bed psychiatric and chemical dependency treatment unit for adolescent males.

Rehabilitative Services: Comprehensive medical rehabilitation (CMR) services are intensive care providing a coordinated multidisciplinary approach to patients with severe physical disabilities that require an organized program of integrated services. Level I facilities offer a full range of CMR services to treat disabilities such as spinal

cord injury, brain injury, stroke, congenital deformity, amputations, major multiple trauma, polyarthritis, fractures of the femur, and neurological disorders, including multiple sclerosis, cerebral palsy, muscular dystrophy, Parkinson's Disease, and others. Level II facilities offer CMR services to treat disabilities other than spinal cord injury, congenital deformity, and brain injury. Seven hospital-based Level I facilities offered CMR services to 4,286 patients and nine hospital-based Level II facilities offer limited CMR services to 2,494 additional patients.

Home Health Care: The 63 home health agencies licensed to provide services to certain home-bound patients provided 2,352,343 home health visits to 62,700 Mississippians during the year. The breakdown of visits by the Department of Health, the hospital based, and freestanding home health agencies are as follows:

Home Health Patients & Visits by Agency (2004)

Home Health Agencies	Patients Served	Home Health Visits
Department of Health	1,171	89,442
Hospital-Based	15,555	576,391
Freestanding	45,974	1,686,510
Total	62,700 *	2,352,343

*Non-duplicate count

End Stage Renal Disease: End Stage Renal Disease (ESRD) describes the loss of kidney function from chronic renal failure to the extent that the remaining kidney function will no longer sustain life. Treatment generally consists of either transplantation or dialysis consisting of peritoneal dialysis or hemodialysis. Kidney transplantation is the treatment of choice for most patients with end stage renal failure. The University of Mississippi Medical Center has the only transplant program in the state and performed 26 cadaver transplants during the calendar year 2005. Mississippi had 70 ESRD facilities which collectively housed 1,567 hemodialysis stations providing

maintenance dialysis services to 5,116 patients during 2005.

Statutory and Policy Changes

Statutory provisions contained in Mississippi Code 41-7-191, Subsection 13, which exempts continuing care retirement centers from CON review if applicants meet certain conditions, were repealed effective July 1, 2005 because of an included repeal provision.

The State Board of Health, on July 13, 2005, modified its policy governing Magnetic Resonance Imaging (MRI) procedures estimation methodology to require that projected procedures (submitted by referring physician affidavit) be based on actual MRI procedures referred during the past year.