State of Louisiana

2004 Diabetes Prevention and Control Program
Annual Report

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Louisiana Department of Health and Hospitals

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Department of HEALTH and HOSPITALS

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Introduction

The Louisiana Diabetes Prevention and Control Program (DPCP) is pleased to present its 2004 Annual Report. As a member of the Department of Health and Hospitals Office of Public Health, the Diabetes Prevention and Control Program is dedicated to positively affecting the lives of citizens of Louisiana, especially those with or those at risk for developing diabetes. In addition, the Office of Public Health is committed to the development, implementation, and management of public health services for the citizens of Louisiana.

The overall goal of the Louisiana Diabetes Prevention and Control Program is to reduce the burden of diabetes in Louisiana. We plan to reach this goal through three main tasks: Monitor, Inform, and Strengthen. Recognizing the harmful effect of diabetes on individuals, families, communities and the state, the Diabetes Prevention and Control Program strives to provide effective and timely interventions designed to inform and educate the public on the risk factors associated with diabetes, methods of prevention, and best practices in management of the disease.

The Diabetes Prevention and Control Program have made significant achievements in working toward this end in recent years. In addition to a very successful media campaign, the program has increased in staff, community activities and financial resources. We hope to continue this trend in the future in order to build a more comprehensive statewide program that will serve as a valuable resource to all citizens of Louisiana.

The *2004 Louisiana Diabetes Prevention and Control Program Annual Report* is designed to provide an overview of the work of the Diabetes Prevention and Control Program, its goals, objectives, activities, successes and barriers. The report also features statewide and regional data related to diabetes prevalence, mortality, risk factors, complications, and case management. The information provided will be used by the Diabetes Prevention and Control Program and others to assess the progress of the program and help in the development of future initiatives.

Shawn B. Smith, MSW, GSW
Program Monitor
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According to the 2004 Behavioral Risk Factor Surveillance System (BRFSS), approximately eight and three-tenth percent or 274,000 adults in Louisiana have diabetes. Among all states, Louisiana had the ninth highest prevalence of diabetes. Additionally, the prevalence of diabetes in Louisiana has made a steady increase over the last ten years from an estimated five percent of the adult population in 1994 to eight percent in 2004. Regional estimates of diabetes prevalence indicate that citizens of Southeast Louisiana are most at risk for developing diabetes compared to all other regions.

The Louisiana Hospital Inpatient Discharge Database (LAHIDD) was used to study morbidity and the cost of hospitalizations related to diabetes. Approximately sixteen percent of discharges and eighteen percent of hospital costs in 2001 were attributable to people of all ages with diabetes as the principal or secondary diagnosis. A comparison of the total number of black and white people with diabetes in the state and the number of discharges for each population revealed that hospitalization rates for blacks were nearly twice that of whites. Additionally, on average, the cost of hospital discharge for black diabetics in Louisiana was nearly two and a half times that of white people with diabetes.

Although diabetes is highly preventable, failure to control the disease can be fatal. Diabetes is the fifth leading cause of death in Louisiana. Moreover, Louisiana has the highest age adjusted rate of death due to diabetes as the underlying cause and has maintained this position since 1996. Parish level mortality rates for 2002 show that, while prevalence rates are higher in the southernmost region of the state, rates of death due to diabetes is greater in North Louisiana.

In addition to geographic disparities, there are also demographic disparities, with males, blacks and Hispanics experiencing a higher rate of death, when compared to females and whites. Furthermore, people with diabetes are at an increased rate of death due to cardiovascular disease. Of the 3,190 diabetes related deaths in 2002, approximately 830 (twenty-six percent) listed cardiovascular diseases as the underlying cause of death.

Given the state of diabetes nationwide and throughout Louisiana, efforts toward health care reform are essential. Under the direction of Louisiana's governor, Kathleen Babineaux Blanco, there has been an increase in statewide interest, funding, and development of chronic disease related state programs. A demand for knowledge and education as it relates to the prevention and management of chronic disease has also emerged to help the Louisiana Diabetes Prevention and Control Program expand upon its current reach of programs and initiatives in order to better impact the lives of Louisiana citizens.

The Diabetes Prevention and Control Program has been funded through a cooperative agreement from the Centers for Disease Control and Prevention since October 1996. The mission of the Diabetes Prevention and Control Program is to reduce the morbidity and mortality

of diabetes in the state of Louisiana, and the program intends to accomplish this by adopting specific goals and objectives to identify existing health disparities, promote and educate persons about healthy lifestyles, and assess and track developed programs.

Over the past several years the Diabetes Prevention and Control Program has worked towards the established goals and objectives through partnerships with many state agencies. The Diabetes Prevention and Control Program has produced an award winning media campaign, and written and published several reports to increase the knowledge base surrounding diabetes related issues, developed a statewide surveillance system for diabetes related data, and produced its first Behavioral Risk Factor Surveillance System Diabetes Module Report. Moreover, the Diabetes Prevention and Control Program participated in the Louisiana Diabetes Management and Education Task Force during the 2001-2002 legislative session, which was charged with studying the effectiveness of diabetes education and management in Louisiana.

As a result of the Diabetes Prevention and Control Program's past successes, program activities have continued and expanded to help promote the mission of the Diabetes Prevention and Control Program. The Diabetes Prevention and Control Program has partnered with many agencies and community groups across Louisiana in order to complete activities specified in the cooperative agreement with the Centers for Disease Control and Prevention, and those sponsored by the Louisiana Office of Public Health. Housed under the Office of Public Health's Community Health Promotion and Chronic Disease Program (CHPCDP), the Diabetes Prevention and Control Program is in constant collaboration with the Louisiana Tobacco Control Program, Heart Disease and Stroke Prevention Program, Asthma Program, the Louisiana Council for Obesity Prevention and Management, and the Chronic Disease Epidemiology Unit.

Due to the close relationship that exists between chronic disease programs, a department-wide strategic planning process has begun to help foster collaboration among various programs, incorporate diabetes prevention and control messages, programs, and activities into other chronic disease programs, in order to increase the impact of prevention efforts. Collaborative efforts include, the Diabetes Prevention and Control Program serving on the Heart Disease and Stroke Task Force, working with the Tobacco Prevention and Control Program to increase the number of people with who partake in smoking cessation, *Lighten up Louisiana!* to promote weight loss and physical activity, and the Louisiana Council for Obesity Prevention and Management.

Additionally, as of 2004, the Louisiana Diabetes Initiatives Council (LDIC) and the Louisiana Diabetes Advisory Council (LDAC) are working to reduce mortality and morbidity associated with diabetes within the state of Louisiana. The Louisiana Diabetes Initiatives Council duties include collaboration with the Secretary of the Department of Health and Hospitals to implement council recommendations and program goals, an annual assessment of statewide diabetes educational programs, research and clinical activities, promote diabetes initiatives, and develop Louisiana Legislative session agendas. The Louisiana Diabetes Advisory Council worked to provide statewide leadership to prevent and reduce the burden of diabetes through surveillance, collaboration, provider and patient education, state plan development, evaluation, guideline development, quality of care improvement, diabetes awareness, strategic planning, funding advocacy, service/access advocacy, and legislative or policy advocacy.

Further Diabetes Prevention and Control Program activities include the Diabetes Resource Guide, collaboration with STEP Together New Orleans, which seeks to identify persons undiagnosed with diabetes and promote healthy lifestyles with physical activity and nutrition, and "Healthy Vision" clinics, which aim to increase the number of people with diabetes who are receiving annual eye exams, thereby reducing the incidence of diabetic retinopathy.

Along with the current activities the Diabetes Prevention and Control Program collaborates on, community outreach is a major component of the program. The Louisiana Council of Community Health Centers for Health Disparities was established as a result of collaboration with the Heart Disease and Stroke Program. The council provided mini-grants to federally qualified health centers, thereby promoting collaboration among the centers. Moreover, the council aims to encourage participation in the Health Disparities Collaborative, provide a communication base, and simplify statewide data collection. Additionally, national awareness observations are recognized each year and statewide health fairs are held to help increase public awareness of diabetes and available resources through local and statewide partnerships.

In 2004, the Diabetes Prevention and Control Program conducted a Diabetes Public Health System Assessment. Using the 10 Essential Public Health Services (EPHS) as a guide, the DPCP was provided with a thorough and current assessment of statewide diabetes-related health services capacity and performance in order to facilitate continuous quality improvement and strategic planning efforts. The assessment was conducted according to guidelines suggested by the Division of Diabetes Translation at the Centers for Disease Control and Prevention (CDC), as a part of a nationwide initiative to strengthen the diabetes public health infrastructure. Over 40 stakeholders participated in the assessment, the results of which indicate that, while Louisiana rates high in program planning and implementation, technical assistance and support and evaluation/quality improvement components were found to be less effective.

As a result of the Louisiana State Diabetes Public Health System Assessment, a Performance Improvement Plan was developed based on all of the essential public health services. Stakeholders specified priority areas, barriers, promising practices and corrective actions needed to address identified problems. Future recommendations have been incorporated into the Diabetes Prevention and Control Program's Cooperative Agreement with the CDC and future Louisiana Diabetes initiatives Council strategic planning.

Future activities for the Diabetes Prevention and Control Program include strategic planning to further promote the collaboration of the Office of Public Health chronic disease programs and the Louisiana Diabetes Initiatives Council.

Diabetes or diabetes mellitus develops when blood glucose levels are too high, resulting in poor insulin production and/or use. Insulin is necessary to convert sugar from food into energy for daily life. The circulatory system, eyes, nerves, and kidneys may be harmed over time and an increase in the risk of developing heart disease and/or suffering a stroke.

The major types of diabetes include Type 1, insulin-dependent diabetes mellitus (IDDM), Type 2, non-insulin dependent diabetes mellitus (NIDDM), gestational diabetes; or other specific types resulting from specific genetic conditions, surgery, drugs, malnutrition, infections, and other illnesses.

Type 1 diabetes develops when the body fails to produce insulin and usually occurs in children and young adults. Type 2 diabetes develops when the body fails to use insulin correctly or produce sufficient insulin. This usually occurs in adults, however it has been increasingly found in children and adolescents. Gestational diabetes is diagnosed in some women during pregnancy.

The majority of people diagnosed with diabetes have Type 2 diabetes. Risk factors for Type 2 diabetes include older age, obesity, high blood pressure, family history of diabetes, history of gestational diabetes, having a baby weighing more than nine pounds at birth, and physical inactivity. Additionally, African-Americans, Hispanic/Latino Americans, American Indians, Asian Americans, and Pacific Islanders are at increased risk of developing Type 2 diabetes.

Physical activity, while important for everyone, is especially critical for people with diabetes. It helps to lower blood glucose, blood pressure, and cholesterol levels. It also helps insulin to work more efficiently, improves blood circulation, lowers heart disease and stroke risk and helps maintain a healthy weight. Moreover, physical activity helps with the prevention of diabetes associated health outcomes, such as heart disease and stroke. Physical activity should include a comprehensive routine for at least 30 minutes a day on most days, which includes aerobic activity, such as jogging, swimming, and walking; strength training; stretching; and being active throughout the day.

Good nutrition is also essential to help lower blood glucose, blood pressure, and cholesterol levels, help to loose weight or maintain a healthy body weight, help insulin work more efficiently, and keep proper blood glucose levels regular. Furthermore, a healthy diet reduces the risk of developing diabetes associated health outcomes, such as heart disease and stroke. A healthy diet should have limited portion sizes and include foods that are low in saturated fats and carbohydrates, and high in whole grains and fruits and vegetables.

Additionally, it is important to have routine foot and eye exams, as well as maintain proper blood pressure, blood glucose, and cholesterol levels, triglycerides, and weight through

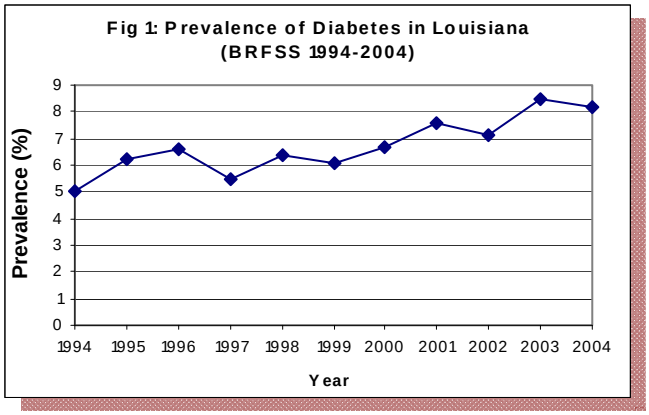
regular visits with a healthcare provider to help prevent and/or manage diabetes and associated health outcomes.

Prevalence of Diabetes

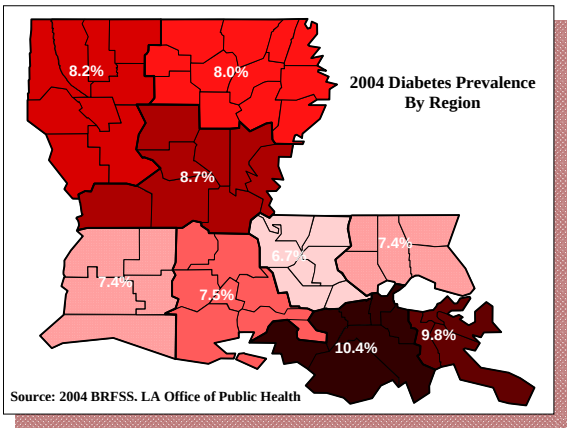
The Behavioral Risk Factor Surveillance System (BRFSS) is a national survey tool used at the state level to collect information on behavior related diseases and risk factors in adults over the age of eighteen. Developed by the Centers for Disease Control and Prevention (CDC), it has been used by the Louisiana Office of Public Health since the early 1990's. Data gathered by this surveillance system include information about Diabetes, Heart Disease, Obesity, Tobacco Use, Asthma, and other disease related issues.

According to the 2004 Behavior Risk Factor Surveillance System, approximately eight and three-tenth percent or two-hundred seventy-four thousand adults in Louisiana have diabetes. This is a slight decrease from 2003 when the prevalence of diabetes in Louisiana was 8.6 percent. In comparison, an estimated 7.2 percent of adults in the Unites States have diabetes (2003 BRFSS). Among all states, Louisiana had the ninth highest prevalence of diabetes, tied with Florida and Kentucky.

In Louisiana, the prevalence of diabetes has made a steady increase over the last 10 years from approximately 5 percent of the adult population in 1994 to eight percent in 2004. (Fig 1) Analysis of data indicates that there are several disparities in the prevalence of diabetes between race and demographic groups. In 2004, an estimated 10.9 percent of African American, 7.9 percent of Hispanic, and 7 percent of White adults had diabetes. In addition, those whose total household income is less $13,000 per year are more likely to develop diabetes than those who earn $50,000 per year or more (13.6 percent versus 6.8 percent). Furthermore, citizens of Louisiana who have less than a high school education are more than twice as likely to have diabetes as those who have graduated from college (14.4 percent versus 6.8 percent)..



Source: Louisiana BRFSS, Office of Public Health



Regional estimates of diabetes prevalence indicate that citizens of Southeast Louisiana are most at risk for developing diabetes compared to all other regions. The nine Administrative Regions of the Louisiana Department of Health and Hospitals were used to compare different geographical areas of the state. Region 2 (comprised of Ascension, East Baton Rouge, East Feliciana, Iberville, Pointe Coupee, West Baton Rouge and West Feliciana Parishes) has the lowest overall prevalence rate of diabetes compared to all other regions with 6.7 percent. Region 3

(Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, and St. Mary Parishes) has the highest prevalence of diabetes at 10.4 percent.

The Optional Diabetes Module of the BRFSS includes twelve questions specific to diabetes that ask age at diagnosis, frequency of blood sugar monitoring, prevalence of diabetes related complications and regularly scheduled examinations, and diabetes self-management education. A study of this data shows that 61 percent of adults with diabetes in Louisiana had an annual Hemoglobin A1c test in the year prior to the survey, 70 percent had an annual dilated eye exam, 63 percent checked their blood glucose levels daily, and only 52 percent had ever received self-management education for diabetes.

Finally, cross tabulations of those persons who have diabetes in addition to other diseases, shows that 22 percent of adults with diabetes have also been told by a physician that they have had either a heart attack, stroke or coronary artery disease. Approximately, 28 percent reported that diabetes has affected their eyes, and 37 percent were limited in some way because of physical, mental, or emotional problems.

Cost of Diabetes in Louisiana

Although the study of diabetes is very important in Louisiana, data concerning morbidity and the cost of care has been limited until recently. The Louisiana Hospital Inpatient Discharge Database (LAHIDD), which became assessable to the Diabetes Prevention and Control Program within the last few years, estimates the cost of hospitalizations in Louisiana due to diabetes as well as other diseases. The Louisiana Hospital Discharge Database is an independent surveillance program developed by the Louisiana Office of Public Health Center for Health Statistics and has been administered since 1998. In 2001 the Louisiana Hospital Discharge Database collected inpatient discharge data from 146 of 197 hospitals in Louisiana, accounting for 86 percent of all hospital beds. By collecting data annually, the database is a valuable tool used to generate morbidity and co-morbidity statistics from across Louisiana. This information is important to the evaluation of healthcare utilization in the state as well as the identification of disease trends.

Year 2001 hospitalizations which indicated the ICD-9 diagnosis code for diabetes (250) as the principal diagnosis or up to the eleventh secondary diagnosis were collected and analyzed. Additional information collected for analysis included parish of residence, diagnosis codes, procedure codes, age, race, gender, length of stay, and cost of hospitalization.

Using the hospital discharge data, the number of discharges, cost of hospitalization, and length of hospital stay was studied for diabetics hospitalized in Louisiana. The Behavior Risk Factor Surveillance System data was used to determine the prevalence of diabetes and the actual number of diabetics in the state. With a combination of both databases, the rate of hospitalizations, average cost, and incidence rate of amputation was also determined. In order to make comparisons based on these two datasets, however, analysis of Louisiana Hospital Discharge Data was limited to patients over the age of eighteen.

In 2001, there were 561,671 hospital discharges in Louisiana totaling over $8 billion. Of these, approximately 16 percent (93,000) of discharges and 18 percent ($1.5 billion) of the costs

were attributable to people of all ages with diabetes as the principal or secondary diagnosis. From the 93,000 discharges with diabetes as the principal or one of eleven secondary diagnoses, 85,098 were excluded from analysis based on non-diabetes related principal diagnoses or age leaving only 7,902 adult discharges over the age of eighteen with diabetes as the principal diagnosis.

The cost of these 7,902 discharges was nearly $109 million at an average of $13,800 per discharge (Table 1). The discharges were further analyzed by race and by sex for black and white diabetics. Using a combination of the Louisiana Hospital Discharge Database and the Behavior Risk Factor Surveillance System, discharges for black and white people with diabetes were studied for disparities in the rate of hospitalization and average costs.

Table 1 **Hospital Discharges with the Principal Diagnosis of Diabetes 2001 (18+ years of Age)**

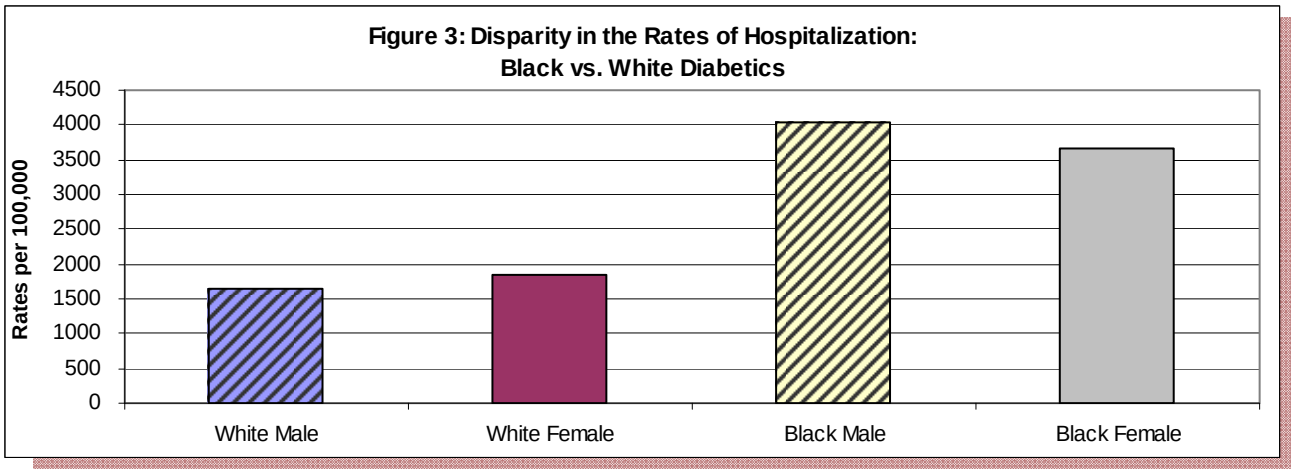
A	B[1]	C[1]	D[2]	E[1,2]	F[2]	G[1,2]	H[2]	I[2]
Population	Percent	Number	Discharges	Rate of Hosp.	Total Cost	Avg. Cost/Diabetic	Cost/Disc	Avg. LOS
Males	6.9	104,775	3,430	3,273.7	$ 47,193,472.28	$ 450.43	$ 13,759.03	5.5
Females	8.4	139,400	4,472	3,208.0	$ 61,799,036.48	$ 443.32	$ 13,819.10	5.6
Whites	7.2	143,535	2,506	1,745.9	$ 38,316,500.88	$ 266.95	$ 15,289.90	5.4
Blacks	8.7	75,159	2,852	3,794.6	$ 46,103,975.05	$ 613.42	$ 16,165.49	5.7
White Male	6.9	66,700	1,095	1,641.7	$ 17,742,210.89	$ 266.00	$ 16,202.93	5.6
White Female	7.5	76,935	1,411	1,834.0	$ 20,574,289.99	$ 267.42	$ 14,581.35	5.2
Black Male	6.9	26,770	1,083	4,045.6	$ 16,715,109.49	$ 624.40	$ 15,434.08	5.3
Black Female	10.2	48,389	1,769	3,655.8	$ 29,298,865.56	$ 605.49	$ 16,562.39	6.0
Louisiana	**7.7**	**244,175**	**7,902**	**3,236.2**	**$108,992,509.00**	**$ 446.37**	**$ 13,793.03**	**5.6**

A. Population	Selected populations. Louisiana estimates are for adults of all races.
B. Percent	Percent of adults who have diabetes (Prevalence)
C. Number	Estimated number of adults in the population who have diabetes
D. Discharges	Number of Inpatient discharges for adults with diabetes as the principal diagnosis
E. Rate of Hospitalization	Number of discharges per 100,000 adult diabetics [(D/C)*100,000]
F. Total Cost	Total cost of hospitalization for adult diabetics
G. Ave. Cost per Diabetic	Cost of hospitalization per adult diabetic (F/C)
H. Cost per discharge	Cost of hospitalization per hospital discharge for adults with diabetes (F/D)
I. Average Length of Stay	Length of hospital stay per discharge in days

SOURCE: [1] LOUISIANA OFFICE OF PUBLIC HEALTH, CHRONIC DISEASE EPIDEMIOLOGY UNIT, BRFSS 2001
[2] LOUISIANA OFFICE OF PUBLIC HEALTH, STATE CENTER FOR HEALTH STATISTICS, LAHIDD 2001

Rate of Hospitalization

Based on the number of hospital discharges and the number of people with diabetes in each population, the rate of hospitalization was calculated for blacks and whites (Figure 3). While there were similarities between blacks and whites in the number of hospital discharges (2,852 vs. 2,506), a comparison of the total number of black and white people with diabetes in the state and the number of discharges for each population revealed that hospitalization rates for blacks were nearly twice that of whites (3,795/100,000 vs. 1,746/100,000). Black males had the highest rate of hospitalization (4,045/100,000); followed by black females (3,655/100,000), white females (1,836/100,000), and white males (1,641/100,000).



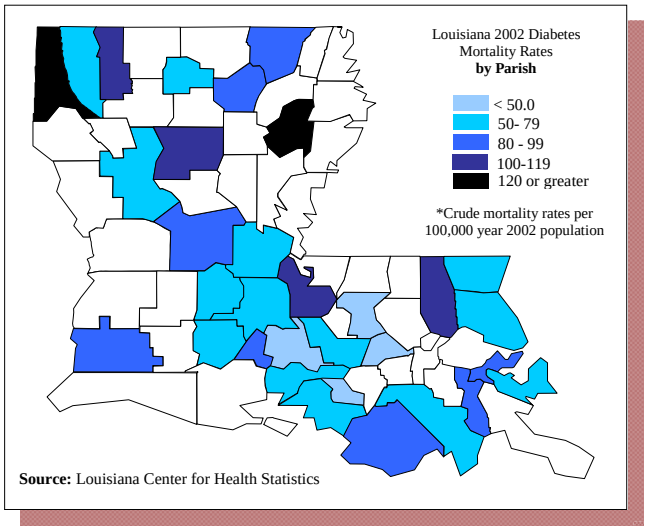
SOURCE: OFFICE OF PUBLIC HEALTH, STATE CENTER FOR HEALTH STATISTICS, LAHIDD 2001

Average Cost of Hospitalization per Diabetic

In addition, the average cost per person with diabetes was generated based on the total number of people with diabetes in each population and the cost of hospitalization. The total cost of hospitalization was approximately $109 million in 2001 for 224,000 people with diabetes in Louisiana, at an average of $446 per person with diabetes. While there were twice as many white people with diabetes in Louisiana as blacks, the total cost of discharge was higher for blacks than for whites because of the high rate of hospitalization in the black population. Therefore, on average, the cost of hospital discharge for the total population of black people with diabetes in Louisiana was nearly 2.5 times that of white people with diabetes ($613 vs. $267). There is little difference, however, in the actual cost of hospitalization per discharge between blacks and whites.

Mortality

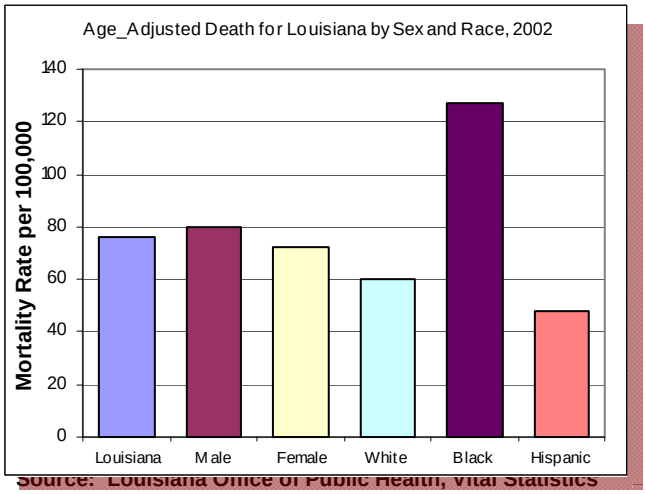
Although diabetes is highly preventable, failure to control the disease can be fatal. Diabetes is the sixth leading cause of death in the United States, contributing to over 213,062 deaths in 2000. In Louisiana, diabetes is the fifth leading cause of death and, in 2002, was listed on 3,190 death certificates at either the underlying or other secondary cause of death. Of all states, Louisiana has the highest age adjusted rate of death due to diabetes as the underlying cause (42.1/100,000) and has maintained this position since 1996. When combined with diabetes as the secondary cause of death, the age adjusted mortality rate rises to 76/100,000 statewide.



A study of parish level mortality rates for 2002 shows that, while prevalence rates are higher in the southernmost region of the state, the rate of death due to diabetes is greater in

North Louisiana. Caddo and Franklin Parishes both have crude death rates of over 145/100,000. Ascension, St. Martin, and East Baton Rouge have the lowest crude death rates due to diabetes at 40, 45 and 45/ 100,000, respectively.

In addition to geographic disparities in diabetes related mortality, there are also demographic disparities evident. In 2002, the diabetes related death rate was higher for males than females (80.1 vs. 72.4) while the rate of death for blacks (127.2) was twice that of whites (60.5) and nearly three times the rate of death for Hispanics (48.2).



Source: Louisiana Office of Public Health, Vital Statistics

In addition, persons with diabetes are at an increased rate of death due to cardiovascular disease. Of the 3,190 diabetes related deaths in 2002, approximately 830 (26 percent) listed cardiovascular diseases as the underlying cause of death. For citizens of Louisiana, the age adjusted mortality rate due to cardiovascular disease as the underlying cause of death is 353.2/100,000. For people with diabetes, however, the rate of death due to cardiovascular disease is 370.1/100,000

Louisiana, under the direction of Governor Kathleen Babineaux-Blanco, has made a concerted effort towards health care reform. This effort has lead to an increase in statewide interest, increased funding, and development of chronic disease related state programs. It has also lead to an increase in the demand for knowledge and education as it relates to the prevention and management of chronic diseases. As a result, the Louisiana Diabetes Prevention and Control Program have worked hard to expand upon its current reach of programs and initiatives in order to better impact the lives of Louisiana citizens.

Goals and Objectives

The Louisiana Diabetes Prevention and Control Program is funded through a cooperative agreement from the Centers for Disease Control and Prevention (CDC) since October 1996. The mission of this program is to reduce the morbidity and mortality of diabetes in the state of Louisiana. The Diabetes Prevention and Control Program DPCP intends to accomplish this though the adoption of specific goals and objectives. Among them are:

A. **Identify and reduce health disparities**
Objective. Demonstrate success in reducing health disparities for minorities in Louisiana

B. **Establish linkages to promote wellness and physical activity**
Objective. Increase the percent of adults with diabetes who engage regularly, preferable daily, in moderate physical activity for at least 30 minutes per day.

C. **Reduce the rate of cardiovascular disease deaths in person with diabetes**
Objective. Reduce the rate of death from cardiovascular disease in persons with diabetes

D. **Reduce the diabetes death rate**
Objective. Reduce the diabetes Death Rate

E. **Increase the rate of persons with diabetes who smoke that have smoking cessation counseling**
Objective. Increase the percentage of adults with diabetes who attempt smoking cessation.

F. **Perform a State Diabetes Public Health System Assessment**
Objective. Conduct a statewide diabetes public health system assessment based on the 10 Essential Public Health Services.

G. Establish measurement procedures to track program success

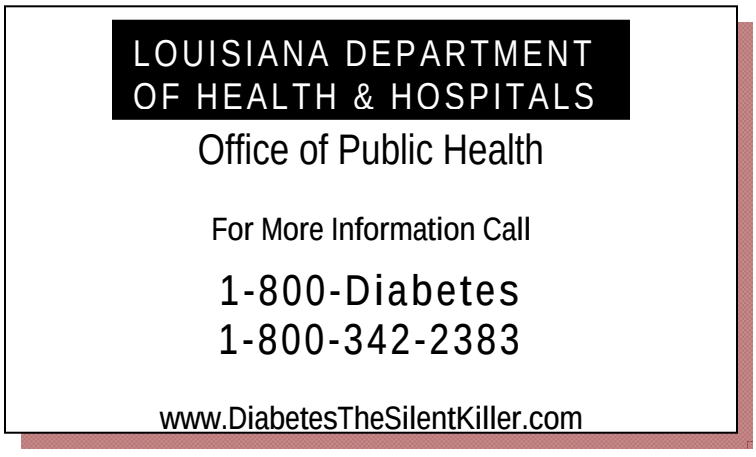
Objective. Develop and establish and maintain a comprehensive database system for diabetes in Louisiana.

Objective. Develop a Performance Improvement Plan based on information for the statewide system assessment.

Past Successes

Over the past several years, the Diabetes Prevention and Control Program has worked towards the accomplishment of these goals with some measure of success. Through partnerships with many agencies across the state, the Diabetes Prevention and Control Program has managed to provide education to healthcare providers, knowledge about treatment options for those with diabetes, extensive awareness of risk factors, and comprehensive baseline data for diabetes indicators. The Diabetes Prevention and Control Program has also produced an award winning media campaign, written and disseminated several reports to increase the knowledge base surrounding diabetes related issues, and developed a statewide surveillance system for diabetes related data.

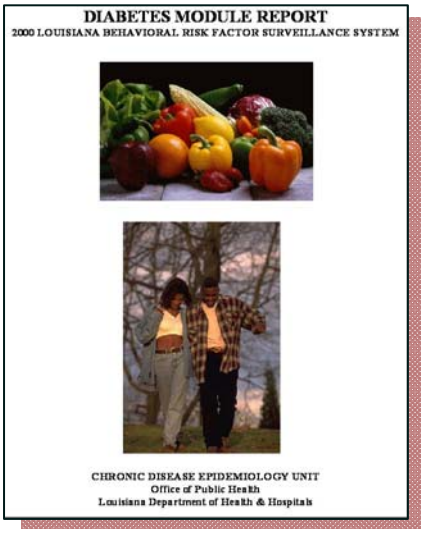
During the 2001-2002 legislative session, the Diabetes Prevention and Control Program was asked to participate in the Louisiana Diabetes Management and Education Task Force. This Task Force was charged with studying the effectiveness of diabetes education and management in Louisiana. Special emphasis was placed on ensuring that the Task Force consisted of key stakeholders in the service delivery system for diabetes self-management education programs. These include consumers, physicians, diabetes educators, pharmacists and other applicable stakeholders. In addition, both private and state operated facilities were represented on the Task Force. Every effort was made to ensure statewide representation. The questionnaires were then disseminated with a cover letter requesting assistance in completing the survey. The Task Force concluded that, although progress is being made in the area of diabetes education and management, there are several areas where improvements can and should be made. A major concern is whether effective diabetes education is available and accessible to all persons with diabetes. A report of the findings of this Task Force was developed and disseminated to the legislators and other applicable stakeholders.



In March 2003, a public relations, radio, and television media campaign was conducted by the Diabetes Prevention and Control Program in the New Orleans, Shreveport, Baton Rouge, Lafayette, Lake Charles, Monroe, and Alexandria areas. This media campaign involved a 30-second radio PSA, and three 30-second television public service announcements targeting African American, Asian and White families at risk for diabetes. The commercials included information on the prevention and

treatment of diabetes as well as signs and symptoms, risk factors and statistics. The public service announcements aired for the entire month of March and garnered much attention. One commercial in particular, "Sugar", was awarded the Regional ADDY award by the American Advertising Federation. The ADDY is the highest award in advertising and according to the American Advertising Federation's website "represents the true spirit of creative excellence." In conjunction with the media campaign, the Diabetes Prevention and Control Program set up a website, www.DiabetesTheSilentKiller.com, designed to highlight facts and figures related to diabetes in Louisiana. The Diabetes Prevention and Control Program also developed a partnership with the American Diabetes Association (ADA) to promote the use of its 1-800-Diabetes hotline for questions related to the commercials and to diabetes in general.

Additionally, Diabetes Prevention and Control Program staff have been successful in publishing several articles, presentations, and reports. Four articles have been published in the last three years in the Office of Public Health *Louisiana Morbidity Report*. These articles have discussed diabetes prevalence, co-morbidities, mortality, risk factors, and disparities related to diabetes in Louisiana. They also touched on the importance of self-management and preventive measures which can be taken to control the disease.



In 2002, the Diabetes Prevention and Control Program, with the aid of the Louisiana Chronic Disease Epidemiology Unit, produced its first Behavior Risk Factor Surveillance System Diabetes Module Report. The report, based on findings of the 2000 Louisiana Behavior Risk Factor Surveillance System, provided demographic data on several indicators including prevalence of diabetes, risk factors, management, vaccinations and types of diabetes. The report was disseminated to legislators, stakeholders, partners, educators, and other public health professionals. The report was placed on the program's website to be accessed by the general public.

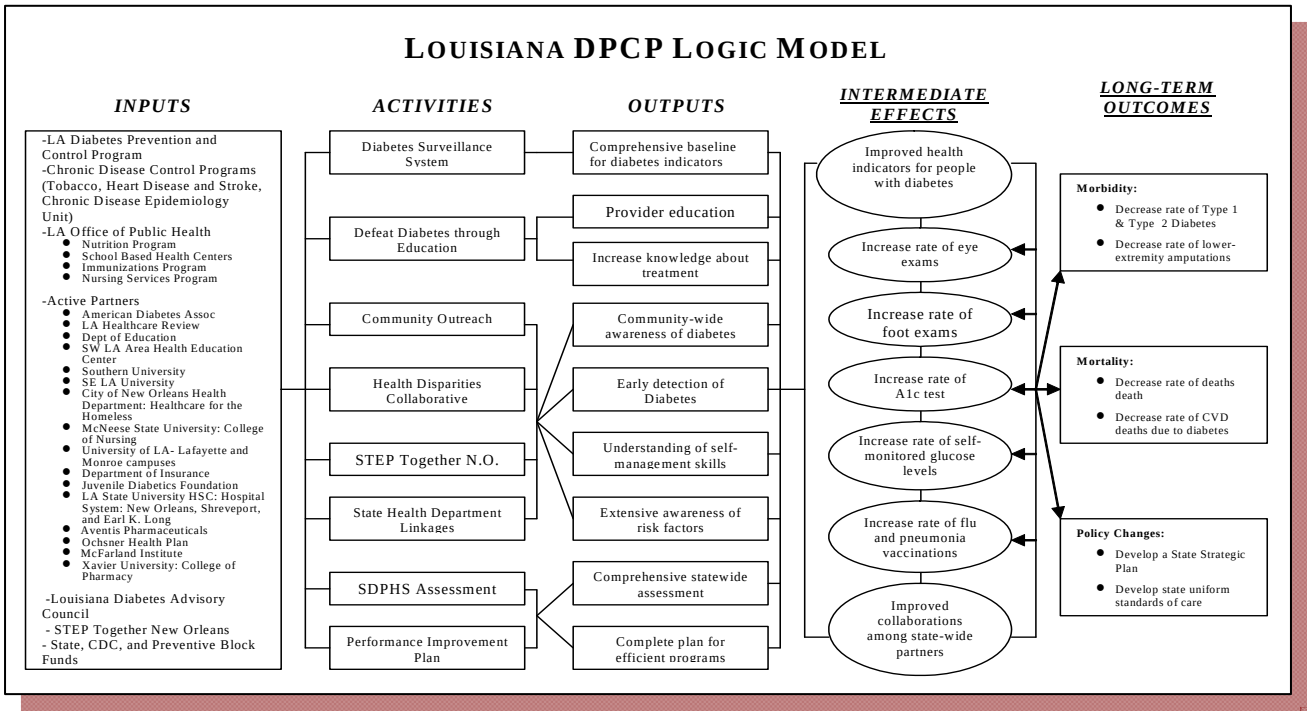
In February 2004, the Diabetes Prevention and Control Program staff epidemiologist made a roundtable presentation at the National Chronic Disease Directors Conference in Washington D.C. This same presentation was then used as a poster at the National Division of Diabetes Translation Conference in May 2004 in Chicago where it was awarded "Best Poster". The presentation focused on disparities in the cost of diabetes related hospitalizations based on data found in the 2002 Louisiana Hospital Inpatient Discharge Database.

Finally, the staff of the Diabetes Prevention and Control Program has worked diligently to develop statewide diabetes surveillance system. The Louisiana Diabetes Indicators of Care Surveillance System collects data on 40 diabetes related indicators including prevalence, risk factors, case management, complications, hospitalizations, and mortality. Presently, data is collected from the Louisiana Vital Statistics Program, the Louisiana Hospital Discharge Database, and from the Behavior Risk Factor Surveillance System. Future potential data sources for this surveillance system include Medicaid and the Health Employer Data Information Set

(HEDIS). Data stored in the Diabetes Indicators of Care Surveillance System is featured in the appendix of this report.

Current Activities

The Louisiana Diabetes Prevention and Control Program has partnered with many agencies and community groups across Louisiana in order to complete activities specified in the cooperative agreement with the Center for Disease Control and Prevention (CDC), and those which are sponsored by the Louisiana Office of Public Health.



Community Health Promotion and Chronic Disease Program Collaborations

The Diabetes Prevention and Control Program (DPCP) is housed under the Office of Public Health's Community Health Promotion and Chronic Disease Program (CHPCDP). Other members of this department are the Tobacco Prevention and Control Program, Heart Disease and Stroke Prevention Program, Asthma Program, Healthy Louisiana 2010, the Louisiana Council for Obesity Prevention and Management and the Chronic Disease Epidemiology Unit. Because most of these program areas have behaviors and risk factors in common, collaboration and teamwork are vital in furthering the message and increasing public awareness about chronic diseases. Therefore, programs must work cohesively to promote the message of healthy living and a better quality of life for our citizens.

It is in this vein that the Chronic Disease Program has begun a department-wide strategic planning process. The purpose of this process is to not only clarify the goals and missions of the department, but also to find new and innovative ways for the chronic disease programs to work

across programs and collaborate on various projects. As a result, Diabetes Prevention and Control Program will continue to strive to incorporate diabetes prevention and control messages, programs, and activities into other chronic disease messages and programs in an effort to pool resources and to increase the impact of prevention efforts.

Recognizing the relationship that exists between diabetes and cardiovascular health, the Diabetes Prevention and Control Program serves on the Heart Disease and Stroke Task Force and assists in the implementation of the Cardiovascular Health State Plan. As a member of the Heart Disease and Stroke Task Force, the Diabetes Prevention and Control Program seeks to aid in the reduction of diabetes-related cardiovascular disease death rates in accordance with Healthy People 2010 objectives.

The Diabetes Prevention and Control Program also works with the Tobacco Prevention and Control Program. One of the many ways that the programs work together is to increase the number of people with diabetes who smoke that are referred to the Freedom from Smoking Clinics and to the 1-800-LUNG-USA Quit line for smoking cessation counseling. In order to monitor the success of this partnership, persons who call the Quit line for counseling are asked if they have ever been told by a doctor that they have diabetes.
In August 2004, Louisiana's Office of Public Health became involved in an innovative campaign to encourage weight loss in Louisiana. *Lighten up Louisiana!*, adapted from a successful program implemented in Iowa, was a statewide contest made up of teams who competed to see who could loose the most weight or participate in the most physical activity. The Diabetes Prevention and Control Program, as well as other Community Health Promotion and Chronic Disease Programs, was instrumental in the development of this project as well as the implementation.

The Diabetes Prevention and Control Program staff also provides technical assistance and support to other Chronic Disease Programs, including the Louisiana Council for Obesity Prevention and Management. The Diabetes Prevention and Control Program actively participates in the Obesity Council's screening initiatives at school-based health centers throughout the state for diabetes and hypertension.

Louisiana Diabetes Initiatives Council and Louisiana Diabetes Advisory Council

As of Summer 2004, there were two statewide councils that are working to reduce the mortality and morbidity associated with diabetes within the state of Louisiana. They are the Louisiana Diabetes Initiatives Council (LDIC) and the Louisiana Diabetes Advisory Council (LDAC).

The Louisiana Diabetes Initiatives Council was created during the 2004 Regular Legislative Session with the passage of Act No 726. The Louisiana Diabetes Initiatives Council consists of 31 members from various state government agencies, volunteer organizations, universities, research centers, professional/ business organizations, and medical institutions. The Council's functions include:

- ✓ Advising the secretary of the Department of Health and Hospitals (DHH) as to the implementation of the council's recommendations.

- ✓ Assisting the secretary of the Department of Health and Hospitals in achieving programmatic goals.
- ✓ Annually assessing the effects of diabetes and the status of education, clinical research, and translation of new diabetes treatment methods in this state.
- ✓ Conducting diabetes surveillance activities.
- ✓ Promoting the development, implementation and programs of professional education, specialized care, and clinical research in diabetes and its complications, including the establishment of a diabetes center of excellence.
- ✓ Overseeing and directing efforts in patient education and primary care.
- ✓ Conducting other activities necessary to carry out the provisions of this Chapter.
- ✓ Developing agendas for the Louisiana Legislative Sessions.

Additionally, the Louisiana Diabetes Advisory Council , which also was a statewide council, meet quarterly. Its mission was to "provide statewide leadership to prevent diabetes, continuously improve the lives of all Louisianans with diabetes and reduce the burden of diabetes." The focus of Louisiana Diabetes Advisory Council is on surveillance, collaboration, provider and patient education, state plan development, evaluation, guideline development, quality of care improvement, diabetes awareness, strategic plan, funding advocacy, service/access advocacy, and legislative or policy advocacy.

The group had several goals. The first is to assure diverse representation on the Louisiana Diabetes Advisory Council that considers geographic, ethnic, age, health care professionals, and consumers. The second is to promote public and private partnerships to help achieve its mission. It advocates, educates, and advises the government, academic centers, health care providers, volunteer agencies, and other community groups on diabetes issues. The third goal is to coordinate its activities with that of the Office of Public Health and supports the efforts of the Diabetes Prevention and Control Program in the implementation of the statewide plan.

Defeat Diabetes... Through Education

In 2002, the Diabetes Prevention and Control Program developed and implemented a continuing education component into the Southwest Louisiana Area Health Education Center's Diabetes Project. The purpose of the program was to improve the diabetes indicators and health of low income rural and urban patients in the Office of Public Health's Regions 3, 4, and 5 by educating students, patients, and providers.

Defeat Diabetes...Through Education involved the coordination of diabetes education and training for the health profession students (nursing, health promotion, health education, LPN, CAN, etc.) at the University of Louisiana at Lafayette, McNeese State University, and Louisiana Technical College campuses. The program also aimed to increase the number of patients served who are living with or are at risk for diabetes in these target geographical areas. The health profession students also provided diabetes education and training to elementary school systems

with students living with or at risk of developing diabetes. Lastly, the program seeks to research and pilot implementation of current programs and strategies for training health care professionals on diabetes education in primary health care settings in Region 4.

Diabetes Resource Guide

The Louisiana Diabetes Advisory Council compiled a list of organizations statewide that provide important services to persons with diabetes. The information collected was used to develop a statewide Resource Guide which will be distributed to statewide community health centers, public health units, hospitals, and dialysis centers. Once released, an electronic version of the Resource Guide will also be available on the Diabetes Prevention and Control Program website.

The information for this report was collected through a network of partnerships and stakeholders throughout Louisiana. While not an exhaustive listing, this report is an effort to connect citizens of Louisiana to local and regional providers for diabetes-related health care services. It is hoped that the report will become a valuable tool for those both providing and receiving diabetes-related care in order to increase the self-management of diabetes statewide.

Due to Hurricanes Katrina and Rita the list is being updated to reflrct the current resources in Orleans, St. Bernard, Palquemines, Cameron, and St. Tammany parishes.

STEP Together New Orleans

STEP Together New Orleans is a community and church based initiative which seeks to identify persons with undiagnosed diabetes. Its purpose is to promote physical activity and healthier food choices. The Diabetes Prevention and Control Program actively participates in the planning, development, and implementation of STEP Together New Orleans initiatives throughout the greater New Orleans community. In particular, the DPCP is an active member of the community based health promotion workgroup of the Step Together New Orleans project. The committee focuses on promoting healthy lifestyles with physical activity and nutrition. In the past the Step Together New Orleans has hosted public forums to discuss the health of citizens of New Orleans, LA and is currently involved is a broad scale media campaign.

Due to displacement of many metropolitan News Orleans residents the STEP Together New Orleans program has expanded its service are to include Baton Rouge and Slidell.

Community Outreach

Community Outreach is a major component of the Louisiana Diabetes Prevention and Control Program. Because Louisiana is mostly a rural state, the Diabetes Prevention and Control Program relies heavily upon community partnerships to reach people with diabetes where they live, work and play.

Louisiana Council of Community Health Centers for Health Disparities

It has been shown that great health disparities exist within population groups affected by diabetes in Louisiana. In Louisiana, African Americans are disproportionately affected by diabetes. A wide range of disparities exist in morbidity, mortality, and preventive care practices in relation to diabetes in Louisiana. These disparities bring with them several challenges that must be addressed and overcome.

The Diabetes Prevention and Control Program and the Heart Disease and Stroke Program have collaborated to establish the Louisiana Council of Community Health Centers for Health Disparities to address the issue of best practices in closing the gap in health care. The purpose of the council is to foster collaboration between community health centers, form a neutral setting for sharing individual accomplishments and lessons learned, encourage participation in the Bureau of Primary Health Care's Health Disparities Collaborative (the Collaborative), and simplify statewide data collection.

Louisiana is home to 18 Federally Qualified Health Center (Federally Qualified Community Health Centers) sites. The Federally Qualified Community Health Centers collect data using the Patient Electronic Charts System (PECS) to track the treatment of active patients (patients seen within the last year) and to ensure that they receive all the elements of treatment recommended for the diseases with which they are diagnosed.
The National Health Disparities Collaborative, a partnership with the Bureau of Primary Health Care, studies self-management and treatment of patients. In Louisiana, Federally Qualified Community Health Centers in the Collaborative focus on patients with Diabetes, Cardiovascular Disease, or Asthma.

National Awareness Observations

Each year for Diabetes Awareness Month in November, the Diabetes Prevention and Control Program sponsors a health information table inside the state office building for all interested visitors and employees. The DPCP has also developed a bookmark which promotes the observance of the month. The bookmark features the names of famous persons who suffer from diabetes. These bookmarks were distributed at the informational table. Lastly, a bulletin board featuring important health facts and information is also available in the state office building's corridor outside of the Community Health Promotion and Chronic Disease Offices. In addition, November is proclaimed by the governor as Diabetes Awareness Month in Louisiana.

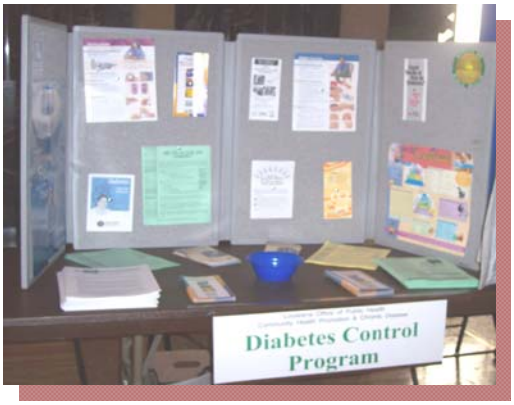
In observation of National Diabetes Alert Day, the Diabetes Prevention and Control Program made several efforts towards increasing awareness. The Diabetes Prevention and Control Program solicited local newspapers statewide to support a media campaign that brought awareness to Diabetes Alert Day. The newspapers were asked to donate space in their publications to highlight Diabetes Alert Day. An advertisement and a public service announcement were developed and sent to the newspapers who agreed to donate space free-of-charge in order to raise public awareness of diabetes throughout the state.

The Diabetes Prevention and Control Program also developed posters advertising National Diabetes Alert Day. These posters were distributed to federally qualified community health centers. The posters were also used for advertisement around the state buildings. Also, the Diabetes Prevention and Control Program developed a bulletin board in observance of the day and sponsored an informational table available to all who entered the state office building.

The Diabetes Prevention and Control Program seeks any opportunity available to promote and highlight the message of prevention, control, and self management of diabetes. Other national awareness month observations that the Diabetes Prevention and Control Program regularly sponsors or participates in events for are: National Kidney Month, National Nutrition Month, National Vision Month, and Public Health Week.

Statewide Health Fairs

The Diabetes Prevention and Control Program participates in various community events year-round. Participation in these activities serves to increase the awareness of the community and its stakeholders. It also serves to increase community awareness of the resources available through the Diabetes Prevention and Control Program, raise the profile of the program in the community, and help in our efforts to improve diabetes indicators within the state.



The Diabetes Prevention and Control Program provides educational materials about diabetes signs, symptoms, complications, nutrition, self management, and Medicare coverage. For example, in the past educational information has been provided for the following events:

- ✓ LA Tobacco Control Program's African American Summit on Tobacco Health and Faith-Based Summit.
- ✓ Office of Public Health's Health Units
- ✓ Health Fairs statewide including the Marrero Housing Development HIV Fair
- ✓ St. Tammany Native American Pow Wow
- ✓ LA Department of Education
- ✓ Public Health Week Observances

The Louisiana Diabetes Advisory Council
Strategic Objectives 2002-2005

Mission:

Provide statewide leadership to prevent diabetes, continuously improve the lives of all Louisianans with diabetes, and reduce the burden of diabetes.

Goals:

1. Assure diverse representation on the Diabetes Advisory Council that considers geographic, ethnic, age, professional health care arenas, consumers, and payers.
2. Promote public/private partnerships to help achieve the Council's mission.
3. Advocate, educate and advise government, academic centers, health care providers, voluntary agencies, and other community groups on diabetes issues.
4. Coordinate the activities of the Council with the activities of OPH and support the efforts of the Louisiana Diabetes Control Program in the implementation of the statewide plan.
5. Encourage participation in an annual statewide diabetes conference.
6. Develop an organizational plan that includes bylaws for the Diabetes Advisory Council.

Secondary Functions:

1. Obtain Louisiana governmental recognition of the Diabetes Advisory Council as an entity.
2. Serve as a forum for the discussion and study of issues related to the public health approach for the delivery of health care services to persons with diabetes.
3. Provide recommendations to the State Health Department and Secretary of the Department of Health and Hospitals regarding the public health aspects of the prevention and control of diabetes.

Strategic Objectives:

The following are the strategic objectives and activities for the Years 2002-2005.

Objective 1: *Educate and advise government, academic centers, health care providers, voluntary organizations, people with diabetes, other appropriate organizations and the public on diabetes prevention and the needs of patients with diabetes and their families.*

Increase Awareness of Diabetes:

- ✓ Request November be declared as Diabetes Awareness month by the Governor
- ✓ Support national health observances and provide guidance to the Diabetes Prevention and Control Program on recognition strategies.
- ✓ Bring together national diabetes organizations for coordinated awareness of diabetes and diabetes months.

- ✓ Establish and participate in Diabetes Education Day at the Capitol.
- ✓ Participate in existing and complementary "Days at the Capitol."
- ✓ Submit a written report at the end of the fiscal year to the Secretary of the Department of Health and Hospitals advising them on emerging diabetes issues and establish ad hoc committees for special issues within the Diabetes community.
- ✓ Provide quarterly meetings minutes to the Secretary on the progress of the Council.

Information Availability to Public:

- ✓ Develop a Diabetes Advisory Council website and other linkages.
- ✓ Recommend diabetes data sets for review and use in state-level planning and evaluation. Work with the Diabetes Control Program in developing targeted distribution lists for statistics, including the Juvenile Diabetes Foundation.

State-wide Education Coordination: Year 1

- ✓ Identify DAC members and interested others to serve as speakers for state-level and local presentations which promote comprehensive disease management.
- ✓ Promote the National Diabetes Education Program as community resources for replication.

State-wide Education Coordination: Year 2-3

- ✓ Organize DAC town hall meetings around the state.
- ✓ Invite community representatives to participate in sponsored events.
- ✓ Use public access TV/radio to promote diabetes awareness.
- ✓ Sponsor a summit for gathering statewide information on diabetes issues, including gestational diabetes.
- ✓ Utilize existing educational activities to further distribute diabetes information, including the State Farm mentoring program.

Objective 2: Strengthen the funding of the Diabetes Control Program, and serve as advisory board to the program

- ✓ Develop funding strategies to augment state resources for achieving Diabetes Advisory Council objectives.
- ✓ Support the Diabetes Control and Prevention Program through letters of support and guidance as needed.

Objective 3: *Assist and advise in developing, establishing, and maintaining a data base system for monitoring the epidemiology of diabetes in Louisiana (Quality Improvement). Year 3*

Assist in establishing a data base system for monitoring the diabetes centers. *Generate accurate data regarding the direct and indirect costs of burden and care of diabetes in Louisiana:*

- ✓ Develop a data retrieval system.
- ✓ Support the development of specialized registries.

- ✓ Offer free, approved educational materials for children through participation in a diabetes registry.

Objective 4: *Promote public and private partnership in the public school system (implementation strategy).*

- ✓ Seek out additional funds for implementing model programs in schools to permit intervention on behalf of all children with diabetes in the school system.
- ✓ Work with school nurses and other personnel to develop guidelines for treating children with diabetes in the schools.

Objective 5: *Stimulate clinical, economical, and epidemiological research, create a clearinghouse, translate the research and make the results of that research accessible to the public*

- ✓ Develop strategies to better disseminate research protocols.
- ✓ Present updates on research at each Diabetes Advisory Council meeting.
- ✓ Establish an on-going bibliography.

Objective 6: *Increase awareness of the Diabetes Advisory Council and maintain diverse representation.*

- ✓ Promote events that increase awareness of the Diabetes Advisory Council.
- ✓ Disseminate information about Diabetes Advisory Council to all agencies interested in diabetes.
- ✓ Create a web page for the Diabetes Advisory Council.
- ✓ Promote the role of Diabetes Advisory Council in educating and advocating.
- ✓ Increase the number and visibility of Diabetes Advisory Council sponsored events.

In April-July 2004, the Louisiana Diabetes Advisory Council conducted a Diabetes Public Health System Assessment. The assessment was undertaken to provide the Diabetes Prevention and Control Program with a thorough and current assessment of statewide diabetes-related health services capacity and performance in order to facilitate continuous quality improvement and strategic planning efforts. The assessment was conducted according to guidelines suggested by the Division of Diabetes Translation at the Centers for Disease Control and Prevention (CDC), as part of a nationwide initiative to strengthen the diabetes public health infrastructure.

The process included an orientation meeting, four team assessment sessions, and a wrap-up meeting. A core team of six persons participated in each session to promote cross-fertilization and enhance consistency of the assessment process. Over 40 stakeholders participated on one or more assessment teams without compensation.

National Public Health Performance Standards Program

The Louisiana State Diabetes Public Health System (SDPHS) Assessment was conducted by an independent consultant from Louisiana State University and was completed in July 2004. Built on the foundation of the National Public Health Performance Standards Program (NPHPSP), the assessment process is based on four concepts. They are: 1) the Ten Essential Public Health Services (EPHS) constitute the framework for assessment, 2) the performance standards focus on the overall state public health system, as opposed to a single organization or entity, 3) the performance standards describe an optimal level of performance, and 4) The assessment process is intended to support and stimulate a process of quality improvement.

The purpose of the Louisiana State Diabetes Public Health System Performance Assessment was to capture the capacity of Louisiana organizations and stakeholders to address the 10 Essential Public Health Services (EPHS) as they relate to diabetes. While the intended outcome of this assessment is not to formally evaluate the system, the assessment process has aided in quality improvement, strategic planning, increased cohesion among stakeholders, and identifying areas of overlap.

The 10 Essential Public Health Services, the framework upon which this assessment was developed, is favorable to this process in that it allows the Diabetes Public Health System Performance Assessment to be examined for infrastructure capability, system performance, and the extent of public health practice available within the state public health system to address diabetes. The 10 Essential Public Health Services are as follows:

1. Monitor health status
2. Diagnose and investigate health problems and hazards in the community
3. Inform, educate, and empower people about health issues
4. Mobilize community partnerships

5. Develop policies and plans that support health efforts
6. Enforce laws and regulations that protect health and ensure safety
7. Link people to needed personal health services and health care
8. Assure a competent workforce
9. Evaluate effectiveness, accessibility, and quality of health services
10. Research solutions to health problems

Assessment Tool

The Louisiana Diabetes Public Health System Performance assessment instrument was adapted by the assessment facilitator from a modified version of the State Diabetes Public Health System Performance Assessment Instrument of the National Public Health Performance Standards Program. The document was originally modified by the Diabetes Council of the Association of State and Territorial Chronic Disease Directors. The final tool was used by approximately 40 participants in the assessment process. Participants were grouped into teams based on job responsibilities and areas of expertise. Teams included Data, Health Care Services, Communication & Partnerships, and Policy, in addition to a core group of participants who were members of all four teams. Each Team was responsible for assessing the Diabetes Public Health System Performance Assessment using a predetermined subset of the 10 Essential Public Health Services.

Each Essential Public Health Service was broken down by four indicators which represent the major components, activities, or practice areas. They include 1) Planning and Implementation, 2) Technical Assistance and Support 3) Evaluation and Quality Improvement, and 4) Resources. In addition, each of these indicators was measured in association to a model, or "gold", standard which defined the optimum performance for that particular indicator. These model standards are intended to encourage as well as to identify the level of performance to which programs should strive.

The main components of EPHS 1 include:

- Assessment of statewide diabetes-related health status and its determinants, including the identification of health risks and the determination of diabetes health service needs.
- Attention to the vital statistics and diabetes-related health status of specific groups that are at higher risk for diabetes than the general population.
- Identification of community assets and resources which support the SDPHS in promoting health and improving quality of life for those affected by diabetes.
- Utilization of technology and other methods to interpret and communicate diabetes-related health information to diverse audiences in different sectors of the population.
- Collaboration in integrating and managing diabetes-related information systems.

Appreciating that the model standards are unlikely to be fulfilled, each Essential Public Health Service was then measured according to various questions that measured performance. Two types of questions were asked of participants. The first set of questions for each Essential Public Health Service component was specific to the attainment of a particular activity or

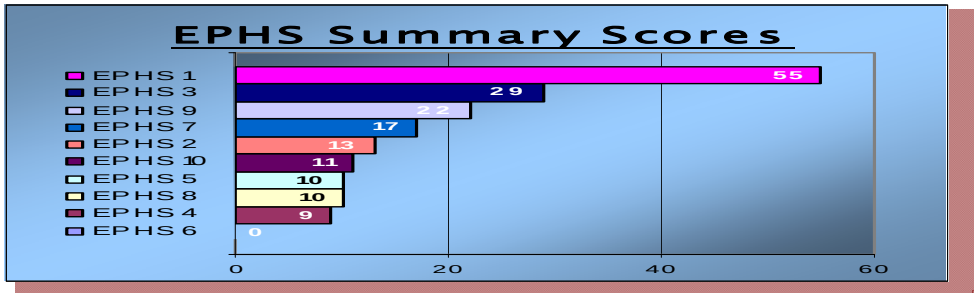
practice. For these questions, a choice of four responses was used to describe the percentage of achievement for this activity according to the model standard. The second set of questions asked participants to rate the percentage of each indicator component that is being achieved as a result of the contribution of the State Health Department.

Yes	***Greater than 75%*** *of the activity described within the question is met within the SDPHS.*
High Partially	***Greater than 50%, but no more than 75%*** *of the activity described within the question is met within the SDPHS.*
Low Partially	***Greater than 25%, but no more than 50%*** *of the activity described within the question is met within the SDPHS.*
No	***No more than 25%*** *of the activity described within the question is met within the SDPHS.*

In accordance with the National Public Health Performance Standards Program scoring methodology, assessment questions were scored and reported on a scale of 0 – 100; 0 signifying that the activity is not met and 100 signifying that the activity is fully met within Louisiana's State Diabetes Public Health System. At the end of each Essential Public Health Service, an average of the scores for the four indicators in that Essential Public Health Service was used to calculated an overall score.

Assessment Results

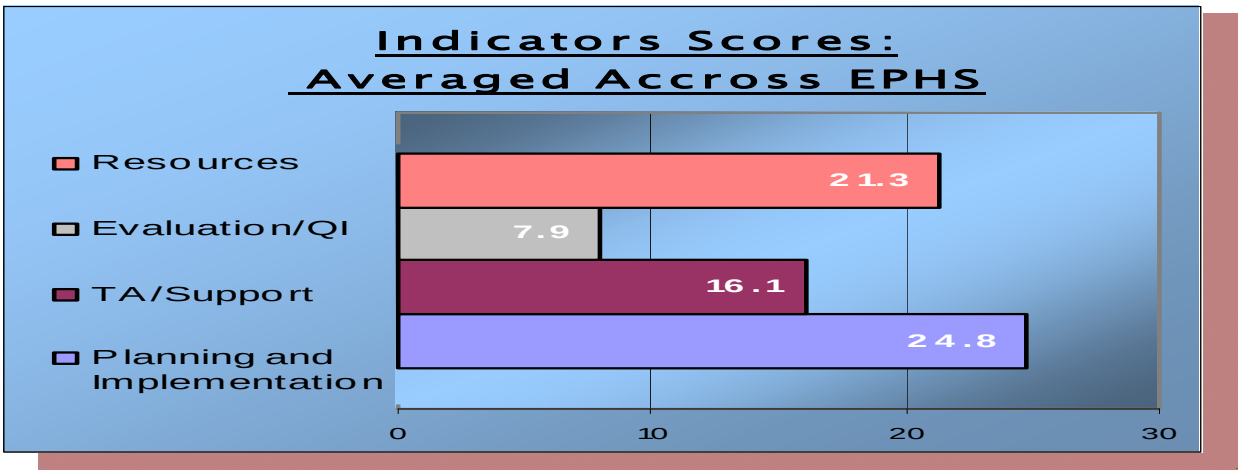
According to the Final Report submitted by the facilitator, assessment scores indicate that Essential Public Health Service 1 (Monitor Health Status to Identify Health Problems) received the highest overall performance score (55 percent), measuring high-partially met in Louisiana's State Diabetes Public Health System. The highest scoring individual components of this indicator included 'enforcement of laws and use of protocol to protect personal health information and data with personal identifiers' and 'identify best practices for monitoring diabetes health', as stated in the modified assessment tool, both measuring 100 percent.



Essential Public Health Service 3 (Inform, Educate, and Empower People About Health Issues) was found to be low-partially met (29 percent) within the Louisiana State Diabetes Public Health System. The indicators pertaining to Louisiana's ability to design and implement

diabetes-related health communication, education, and promotion programs scored the highest within this Essential Public Health Service. Conversely, participants found that resources for diabetes-related health communication, education, and promotion interventions are being met with only 25 percent effectiveness.

For the remaining Essential Public Health Services, results showed Louisiana's State Diabetes Public Health System did not meet the standards identified more than low partially. Essential Public Health Service 6 (Enforce laws and regulations that protect health and ensure safety) received a score of zero. Assessment participants agreed that that this particular Essential Public Health Service has not previously possessed a measure of priority in the State Diabetes Public Health System. Overall, approximately 70 percent of assessment indicators are not met, with 28 percent of indicators being partially met and 2.5 percent of indicators being fully met. A study of all the Essential Public Health Service by indicator component shows that Louisiana rates highest in Planning and Implementation (25 percent) across the board, followed closely by Resources (21 percent). Technical Assistance & Support (16 percent) and Evaluation & Quality Improvement (8 percent) indicators were found to be less effective. Accordingly, it is often necessary to plan and implement State Diabetes Public Health System components prior to all other indicators for optimum performance.



As a result of the Louisiana State Diabetes Public Health System Assessment, stakeholders and other parties involved had the opportunity to discuss many of the weakness of the health care system in Louisiana, but also the strengths. Participants recognized areas of individual achievement, shared concerns, and identified common goals and objectives. The process of the assessment has helped to promote open communication between partners and stakeholders and to increase coordination of key activities and resources, so that the needs of citizens in Louisiana with diabetes can be more fully met.

Performance Improvement Plan

Following the completion of the Louisiana State Diabetes Public Health System Assessment, participants were invited to discuss results across all of the Essential Public Health Services. Stakeholders were asked to provide input on priority areas, barriers, promising practices, and corrective actions to address identified problems. The recommendations that follow have been incorporated into the Diabetes Prevention and Control Program's Cooperative

Agreement with the Centers for Disease Control and Prevention and will also be included in future strategic planning for the Louisiana Diabetes Initiatives Council.

EPHS 1: Monitor health status

- ✓ Improve dissemination of diabetes-related data to consumers and other system partners.

EPHS 2: Diagnose and investigate health problems and hazards in the community

- ✓ Improve the time between data collection, analysis, and reporting to enhance the capacity of the system to respond to diabetes-related threats and risks.
- ✓ Collect, diagnose, and investigate incidence data.

EPHS 3: Inform, educate, and empower people about health issues

- ✓ Need more coordination and cooperation among partners statewide involved in diabetes-related health communication, health education, and health promotion initiatives.

EPHS 4: Mobilize community partnerships

- ✓ Restructure the Louisiana Diabetes Advisory Council.
- ✓ Share resources and practice collaborative decision-making and accountability to address diabetes-related health problems.
- ✓ Formulize communications (e.g. technical assistance initiatives, electronic list serves tailored to specific target groups) to ensure statewide access to and awareness of critical information and to build consensus.

EPHS 5: Develop policies and plans that support health efforts

- ✓ Formalize and coordinate policy development activities.
- ✓ Cultivate a legislative champion to assist in advancing diabetes-related policy issues.

EPHS 6: Enforce laws and regulations that protect health and ensure safety

- ✓ Develop a formal review process to examine existing and proposed diabetes-related laws and regulations.

EPHS 7: Link people to needed personal health services and health care

- ✓ Develop formal system-wide programs to identify and address barriers to care.
- ✓ Coordinate existing complementary existing health care programs to optimize access for Louisiana residents with or at risk for diabetes.

EPHS 8: Assure a competent workforce

- ✓ Develop, implement, and regularly review a formal diabetes workforce development plan.
- ✓ Pursue diabetes workforce assessment statewide in order to target diabetes workforce development programs.

EPHS 9: Evaluate effectiveness, accessibility, and quality of health services

- ✓ Develop a formal statewide quality improvement process to identify strengths and weaknesses of diabetes-related health services in the state.

EPHS 10: Research solutions to health problems

- ✓ Develop and implement a formal diabetes research agenda.

The Louisiana Diabetes Prevention and Control Program is looking forward to many exciting and success initiatives, programs, and activities in the future. Several ideas are currently in the planning process including Healthy Vision Eye Clinics, and Diabetes Awareness Expos. In addition, the Diabetes Prevention Control Program will take active involvement in the continuing Strategic Planning Process of the Community Health Promotion and Chronic Disease Program (CHPCDP).

Healthy Vision for Louisiana

Healthy Vision for Louisiana, aimed to reduce visual impairment due to diabetic retinopathy. This was be achieved through the increased awareness of the importance of annual dilated eye exams in low-income and rural populations. The overall goal of the project is to increase the number of diabetics who are receiving annual dilated eye exams, thereby reducing the incidence of diabetic retinopathy.

There are several key elements to this program. The first element is free eye clinics which were held at the East Feliciana Parish Health Unit, St. Gabriel Community health Center, and in Slidell. The next element is diabetes education and screening with a focus on diabetic retinopathy. The third element is educational inserts in diabetic supply orders by community pharmacists. Lastly, there will be increased public awareness through press releases, print media (local papers and outdoor billboards), and radio public service announcements.

The Diabetes Prevention and Control Program partnered with the Optometry Association of Louisiana to provide these free vision screenings in eyes clinics held at all three locations. The second activity focused on the low-income, rural populations that the above serve by conducting diabetes education and screening during the eye clinics. The session participants received educational materials about the importance of annual dilated eye exams and a list of eye care professionals in their area who accept Medicare and Medicaid. These materials promoted the low cost and availability of these exams.

Through a partnership with the Louisiana Independent Pharmacists Association, the Diabetes Prevention and Control Program provided printed educational reminders that were inserted in each patient's diabetes supply order to stress the importance of having annual dilated eye exams.

Strategic Planning

As a result of the Community Health Promotion and Chronic Disease Program's initial strategic planning process, three core teams were developed in order to promote collaboration efforts in chronic disease management and prevention over the course of the next year (July 2005-June 2006). These teams are Media/Marketing, Training/Education, and Surveillance/Evaluation. The Media/Marketing Team is working to develop and publish articles and public service announcements related to each of the chronic diseases that will be featured in statewide newspapers, magazines, and on radio stations. The Training/Education Team is working to provide in-service opportunities to the Regional Offices and Public Health Units across the state in order to inform them about the prevalence, morbidity, and mortality rates for the chronic diseases in their region. These in-services will also be used to raise awareness of the availability of all chronic disease programs as a resource. The Surveillance/Evaluation Team will study the United Health Foundation (UHF) State Rankings Report. Louisiana has consistently been 50th for 14 of the 15 years that the report has been published. The Surveillance/Evaluation team will attempt to address the findings of the United Health Foundation and make recommendations as to how Louisiana can improve its state ranking in the future.

In addition, the Diabetes Prevention and Control Program will also be involved in strategic planning for the program and the two councils with which it partners. The Louisiana Diabetes Advisory Council has previously performed a strategic plan; however, the plan is entering its fifth and final year. Future strategic planning efforts by the Diabetes Prevention and Control Program will involve the scope of work accomplished by the Louisiana Diabetes Initiatives Council.

T a b l e s

Prevalence of diabetes in adults

Percent (%)

The proportions of adults over the age of 18 who have diabetes

Demographic	Population	2002	2003	2004
Louisiana	Total	7.1%	8.6%	8.3%
		(6.2%-8.0%)	(7.7%-9.4%)	(7.6%-9.4%)
Gender	Male	7.3%	8.2%	8.0%
		(5.8%-8.8%)	(6.8%-9.6%)	(7.0%-9.6%)
	Female	7.0%	8.9%	8.6%
		(6.0%-8.0%)	(7.8%-10.0%)	(7.7%-10.0%)
Race	White	6.0%	7.2%	7.0%
		(5.1%-7.0%)	(6.3%-8.2%)	(6.3%-8.2%)
	African American	8.8%	11.9%	10.9%
		(6.8%-10.9%)	(9.9%-14.0%)	(9.4%-14.0%)
	Hispanic	8.4%	7.1%	7.9%
		(3.6%-13.3%)	(2.5%-11.8%)	(3.9%-11.8%)
Age	18-44	2.9%	2.7%	2.4%
		(1.9%-4.0%)	(1.9%-3.5%)	(1.9%-3.5%)
	45-64	10.5%	13.2%	12.6%
		(8.8%-12.3%)	(11.4%-15.0%)	(11.1%-15.0%)
	65	14.6%	18.5%	19.6%
		(12.1%-17.1%)	(15.7%-21.3%)	(17.3%-21.3%)
Income	Less than $15,000	13.8%	15.8%	13.6%
		(10.3%-17.2%)	(12.7%-18.9%)	(11.3%-18.9%)
	$15,000-$24,999	8.0%	11.1%	9.7%
		(5.7%-10.3%)	(8.7%-13.4%)	(8.0%-13.4%)
	$25,000-$49,999	5.8%	7.5%	8.0%
		(4.4%-7.1%)	(6.0%-9.1%)	(6.7%-9.1%)
	$50,000 or more	4.5%	4.8%	4.7%
		(3.0%-6.1%)	(3.5%-6.1%)	(3.7%-6.1%)
Employment	Employed	3.8%	5.5%	4.8%
		(3.1%-4.6%)	(4.6%-6.5%)	(4.1%-6.5%)
	Unemployed	10.5%	8.2%	6.1%
		(3.8%-17.2%)	(4.4%-11.9%)	(3.5%-11.9%)
	Homemaker	5.3%	8.2%	10.4%
		(3.0%-7.5%)	(5.3%-11.1%)	(7.5%-11.1%)
	Retired/Unable to work	16.6%	18.4%	19.3%
		(14.1%-19.0%)	(16.0%-20.8%)	(17.4%-20.8%)
Education	Less than H.S. Grad	12.2%	14.3%	14.4%
		(9.4%-15.0%)	(11.5%-17.1%)	(12.2%-17.1%)
	H.S. Grad or G.E.D	6.9%	8.0%	7.9%
		(5.4%-8.4%)	(6.5%-9.4%)	(6.9%-9.4%)
	Some College	7.5%	6.9%	6.9%
		(5.5%-9.5%)	(5.4%-8.4%)	(5.6%-8.4%)
	College Grad	4.1%	7.1%	6.8%
		(3.0%-5.3%)	(5.5%-8.8%)	(5.4%-8.8%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Moderate physical activity -Secondary Prevention

Percent (%)

The proportion of people with diabetes who engage in 30 minutes of moderate physical activity 5 or more days a week.

Demographic	Population	2002	2003	2004
Louisiana	Total	***	21.9%	***
		***	(17.2%-26.6%)	***
Gender	Male	***	29.6%	***
		***	(21.3%-38.0%)	***
	Female	***	15.4%	***
		***	(10.7%-20.1%)	***
Race	White	***	22.7%	***
		***	(16.7%-28.7%)	***
	African American	***	19.8%	***
		***	(11.6%-28.1%)	***
	Hispanic	***	***	***
		***	(***-***)	***
Age	18-44	***	37.7%	***
		***	(22.8%-52.6%)	***
	45-64	***	22.3%	***
		***	(15.6%-29.0%)	***
	65	***	14.4%	***
		***	(8.5%-20.2%)	***
Income	Less than $15,000	***	12.3%	***
		***	(5.1%-19.4%)	***
	$15,000-$24,999	***	28.5%	***
		***	(17.4%-39.6%)	***
	$25,000-$49,999	***	28.5%	***
		***	(18.4%-38.7%)	***
	$50,000 or more	***	27.2%	***
		***	(14.5%-40.0%)	***
Employment	Employed	***	25.7%	***
		***	(17.2%-34.1%)	***
	Unemployed	***	38.8%*	***
		***	(14.0%-63.5%)	***
	Homemaker	***	13.6%*	***
		***	(0.0%-27.3%)	***
	Retired/Unable to work	***	18.1%	***
		***	(12.3%-24.0%)	***
Education	Less than H.S. Grad	***	16.1%	***
		***	(7.1%-25.0%)	***
	H.S. Grad or G.E.D	***	22.2%	***
		***	(13.4%-31.0%)	***
	Some College	***	20.8%	***
		***	(12.0%-29.5%)	***
	College Grad	***	31.3%	***
		***	(20.0%-42.6%)	***

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Smoking-Secondary Prevention

Percent (%)

The proportion of adults with diabetes who currently smoke

Demographic	Population	2002	2003	2004
Louisiana	Total	17.7%	20.8%	18.4%
		(13.0%-22.3%)	(16.3%-25.3%)	(15.0%-25.3%)
Gender	Male	16.3%	24.9%	20.2%
		(9.6%-23.0%)	(17.0%-32.8%)	(14.4%-32.8%)
	Female	19.0%	17.4%	16.9%
		(12.4%-25.5%)	(12.7%-22.1%)	(12.9%-22.1%)
Race	White	19.7%	19.6%	12.6%
		(12.9%-26.4%)	(14.0%-25.1%)	(9.3%-25.1%)
	African American	13.8%	24.7%	24.9%
		(6.9%-20.7%)	(16.4%-32.9%)	(18.1%-32.9%)
	Hispanic	***	***	15.9%*
		(***-***)	(***-***)	(0.0%-39.6%)
Age	18-44	23.3%	39.0%	24.6%
		(10.1%-36.5%)	(23.9%-54.1%)	(14.3%-54.1%)
	45-64	20.5%	23.5%	21.8%
		(13.5%-27.4%)	(17.4%-29.7%)	(16.6%-29.7%)
	65	10.4%	9.0%	10.0%
		(3.7%-17.1%)	(4.3%-13.6%)	(5.6%-13.6%)
Income	Less than $15,000	18.3%	22.8%	23.5%
		(7.8%-28.8%)	(13.5%-32.1%)	(15.5%-32.1%)
	$15,000-$24,999	23.7%	26.2%	23.0%
		(12.7%-34.7%)	(15.6%-36.8%)	(14.9%-36.8%)
	$25,000-$49,999	17.9%	19.9%	13.0%
		(7.4%-28.3%)	(11.6%-28.2%)	(6.9%-28.2%)
	$50,000 or more	12.8%	9.1%	22.0%
		(2.6%-23.0%)	(1.7%-16.4%)	(12.2%-16.4%)
Employment	Employed	19.4%	23.8%	22.9%
		(11.6%-27.2%)	(15.7%-32.0%)	(16.3%-32.0%)
	Unemployed	15.0%	31.3%*	49.0%*
		(0.0%-33.2%)	(8.0%-54.7%)	(27.6%-54.7%)
	Homemaker	17.4%	14.3%*	10.2%
		(0.0%-35.7%)	(1.9%-26.6%)	(2.8%-26.6%)
	Retired/Unable to work	18.1%	18.5%	14.6%
		(11.1%-25.1%)	(12.8%-24.2%)	(10.5%-24.2%)
Education	Less than H.S. Grad	21.4%	20.0%	17.5%
		(11.1%-31.7%)	(10.6%-29.4%)	(10.8%-29.4%)
	H.S. Grad or G.E.D	19.1%	23.3%	21.1%
		(10.9%-27.3%)	(15.1%-31.5%)	(15.4%-31.5%)
	Some College	16.4%	27.5%	21.3%
		(6.5%-26.3%)	(17.1%-37.9%)	(13.0%-37.9%)
	College Grad	9.9%	12.4%	12.8%
		(1.3%-18.5%)	(5.4%-19.3%)	(5.1%-19.3%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Obese- Primary Prevention

Percent (%)

The proportion of adults eho do not have diabetes and are obese. Obesity defined as having a Body Mass Idex over 30.

Demographic	Population	2002	2003	2004
Louisiana	Total	23.6%	22.5%	23.9%
		(22.1%-25.1%)	(21.1%-23.9%)	(22.6%-23.9%)
Gender	Male	23.6%	22.1%	24.2%
		(21.2%-26.1%)	(19.8%-24.3%)	(22.3%-24.3%)
	Female	23.6%	22.9%	23.5%
		(21.7%-25.4%)	(21.1%-24.7%)	(22.0%-24.7%)
Race	White	20.0%	19.6%	21.2%
		(18.3%-21.7%)	(18.0%-21.1%)	(19.9%-21.1%)
	African American	32.7%	30.4%	30.0%
		(29.3%-36.1%)	(27.0%-33.8%)	(27.3%-33.8%)
	Hispanic	***	***	23.6%
		(***-***)	(***-***)	(15.2%-32.1%)
Age	18-44	21.5%	20.3%	23.6%
		(19.3%-23.6%)	(18.3%-22.2%)	(21.8%-22.2%)
	45-64	28.2%	28.8%	25.8%
		(25.5%-30.8%)	(26.2%-31.4%)	(23.7%-31.4%)
	65	22.6%	18.5%	20.9%
		(19.3%-25.9%)	(15.5%-21.6%)	(18.0%-21.6%)
Income	Less than $15,000	30.4%	28.8%	30.1%
		(25.7%-35.1%)	(24.4%-33.3%)	(26.4%-33.3%)
	$15,000-$24,999	25.1%	25.6%	24.2%
		(21.6%-28.6%)	(22.1%-29.2%)	(21.4%-29.2%)
	$25,000-$49,999	24.3%	22.2%	24.5%
		(21.5%-27.0%)	(19.5%-24.8%)	(22.2%-24.8%)
	$50,000 or more	20.6%	19.3%	22.2%
		(17.7%-23.5%)	(16.8%-21.7%)	(19.9%-21.7%)
Employment	Employed	24.7%	22.5%	24.0%
		(22.6%-26.7%)	(20.6%-24.3%)	(22.4%-24.3%)
	Unemployed	18.1%	22.6%*	28.3%
		(12.4%-23.8%)	(16.6%-28.6%)	(22.6%-28.6%)
	Homemaker	21.5%	21.7%*	24.3%
		(16.6%-26.3%)	(17.0%-26.4%)	(20.3%-26.4%)
	Retired/Unable to work	25.8%	26.1%	25.3%
		(22.7%-28.9%)	(23.1%-29.1%)	(22.7%-29.1%)
Education	Less than H.S. Grad	30.6%	26.7%	28.7%
		(26.2%-35.0%)	(22.5%-30.8%)	(25.2%-30.8%)
	H.S. Grad or G.E.D	25.0%	23.8%	25.8%
		(22.4%-27.6%)	(21.3%-26.2%)	(23.8%-26.2%)
	Some College	24.3%	23.0%	25.0%
		(21.1%-27.5%)	(20.1%-25.9%)	(22.4%-25.9%)
	College Grad	17.4%	17.7%	17.6%
		(14.9%-19.9%)	(15.3%-20.2%)	(15.5%-20.2%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Obese-Secondary Prevention

Percent (%)

The proportion of adults with diabetes who are obese. Obesity as having a Body Mass Index over 30.

Demographic	Population	2002	2003	2004
Louisiana	Total	50.6%	48.1%	57.0%
		(43.6%-57.5%)	(42.7%-53.6%)	(52.7%-53.6%)
Gender	Male	52.2%	43.7%	53.2%
		(40.6%-63.8%)	(35.0%-52.4%)	(46.3%-52.4%)
	Female	48.9%	52.1%	60.5%
		(41.3%-56.5%)	(45.4%-58.8%)	(55.3%-58.8%)
Race	White	46.6%	46.9%	54.7%
		(38.1%-55.0%)	(39.9%-53.8%)	(48.8%-53.8%)
	African American	59.2%	49.8%	58.2%
		(45.6%-72.9%)	(40.2%-59.3%)	(51.0%-59.3%)
	Hispanic	***	***	60.3%*
		(***-***)	(***-***)	(32.6%-87.9%)
Age	18-44	41.4%	59.4%	75.5%
		(21.1%-61.6%)	(44.0%-74.8%)	(65.7%-74.8%)
	45-64	61.8%	56.4%	61.4%
		(53.1%-70.5%)	(48.7%-64.1%)	(55.0%-64.1%)
	65	40.7%	31.4%	42.9%
		(31.3%-50.1%)	(23.4%-39.4%)	(36.3%-39.4%)
Income	Less than $15,000	61.3%	50.1%	58.3%
		(48.1%-74.5%)	(39.2%-61.0%)	(49.5%-61.0%)
	$15,000-$24,999	45.7%	35.1%	56.2%
		(31.0%-60.4%)	(24.5%-45.7%)	(46.7%-45.7%)
	$25,000-$49,999	53.6%	51.2%	61.5%
		(41.1%-66.2%)	(40.4%-62.0%)	(53.3%-62.0%)
	$50,000 or more	52.7%	61.0%	62.8%
		(35.1%-70.3%)	(47.7%-74.2%)	(51.5%-74.2%)
Employment	Employed	54.7%	52.6%	63.5%
		(44.4%-65.0%)	(43.3%-61.8%)	(56.1%-61.8%)
	Unemployed	59.4%	51.0%*	54.7%*
		(16.8%-100.0%)	(26.8%-75.2%)	(33.4%-75.2%)
	Homemaker	24.1%	46.0%*	53.0%
		(6.7%-41.6%)	(26.4%-65.7%)	(36.9%-65.7%)
	Retired/Unable to work	47.9%	44.1%	53.4%
		(39.4%-56.5%)	(36.6%-51.5%)	(47.6%-51.5%)
Education	Less than H.S. Grad	56.2%	52.0%	58.0%
		(44.0%-68.4%)	(41.0%-63.0%)	(49.8%-63.0%)
	H.S. Grad or G.E.D	51.1%	46.6%	57.6%
		(39.5%-62.6%)	(36.8%-56.4%)	(50.6%-56.4%)
	Some College	44.7%	49.3%	53.9%
		(29.9%-59.4%)	(38.2%-60.5%)	(43.8%-60.5%)
	College Grad	49.1%	45.1%	59.8%
		(34.5%-63.7%)	(32.9%-57.3%)	(49.6%-57.3%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

High Blood Pressure in persons with diabetes

Percent (%)

The proportion of persons with diabetes who have been told by a doctor, nurse, or other health professional that they have high blood pressure.

Demographic	Population	2002	2003	2004
Louisiana	Total	***	70.2%	69.3%
		***	(65.3%-75.0%)	(65.2%-75.0%)
Gender	Male	***	68.0%	68.2%
		***	(59.9%-76.0%)	(61.4%-76.0%)
	Female	***	72.0%	70.1%
		***	(66.3%-77.7%)	(65.4%-77.7%)
Race	White	***	64.2%	67.2%
		***	(57.6%-70.7%)	(61.6%-70.7%)
	African American	***	80.6%	74.6%
		***	(73.3%-87.9%)	(68.4%-87.9%)
	Hispanic	***	***	64.7%*
		***	(***-***)	(41.5%-87.9%)
Age	18-44	***	54.2%	65.5%
		***	(39.7%-68.7%)	(54.4%-68.7%)
	45-64	***	74.7%	66.2%
		***	(68.2%-81.2%)	(60.1%-81.2%)
	65	***	71.7%	75.5%
		***	(63.9%-79.6%)	(69.6%-79.6%)
Income	Less than $15,000	***	76.2%	79.4%
		***	(66.5%-85.9%)	(72.3%-85.9%)
	$15,000-$24,999	***	74.5%	74.5%
		***	(64.9%-84.1%)	(66.9%-84.1%)
	$25,000-$49,999	***	62.1%	69.5%
		***	(51.9%-72.2%)	(61.9%-72.2%)
	$50,000 or more	***	65.0%	46.8%
		***	(52.4%-77.7%)	(35.7%-77.7%)
Employment	Employed	***	64.9%	56.6%
		***	(56.4%-73.4%)	(49.0%-73.4%)
	Unemployed	***	61.9%*	56.0%*
		***	(39.2%-84.6%)	(35.2%-84.6%)
	Homemaker	***	91.5%*	59.1%
		***	(82.1%-100.0%)	(42.4%-100.0%)
	Retired/Unable to work	***	72.3%	80.0%
		***	(65.7%-78.9%)	(75.6%-78.9%)
Education	Less than H.S. Grad	***	77.3%	79.2%
		***	(68.6%-86.0%)	(72.8%-86.0%)
	H.S. Grad or G.E.D	***	72.7%	68.7%
		***	(64.2%-81.2%)	(62.3%-81.2%)
	Some College	***	64.7%	67.6%
		***	(54.1%-75.2%)	(58.1%-75.2%)
	College Grad	***	64.4%	59.2%
		***	(53.2%-75.7%)	(48.8%-75.7%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Annual A1c

Percent (%)

The proportion of adults with diabetes who have at least 2 or more A1c tests.

Demographic	Population	2002	2003	2004
Louisiana	Total	65.8%	61.9%	61.1%
		(60.0%-71.7%)	(56.1%-67.6%)	(56.4%-67.6%)
Gender	Male	65.7%	57.8%	59.2%
		(56.6%-74.9%)	(48.1%-67.5%)	(51.3%-67.5%)
	Female	66.0%	65.2%	62.9%
		(58.4%-73.5%)	(58.6%-71.9%)	(57.3%-71.9%)
Race	White	69.8%	58.3%	64.7%
		(62.3%-77.3%)	(50.9%-65.7%)	(58.6%-65.7%)
	African American	67.6%	64.3%	54.8%
		(56.7%-78.5%)	(54.2%-74.4%)	(46.5%-74.4%)
	Hispanic	***	***	65.6%*
		(***-***)	(***-***)	(35.9%-95.3%)
Age	18-44	71.0%	55.0%	60.1%
		(56.9%-85.0%)	(38.8%-71.2%)	(47.9%-71.2%)
	45-64	62.2%	60.6%	58.4%
		(53.2%-71.2%)	(52.8%-68.5%)	(51.6%-68.5%)
	65	69.0%	69.0%	65.5%
		(59.6%-78.5%)	(59.8%-78.2%)	(57.9%-78.2%)
Income	Less than $15,000	53.8%	66.7%	65.0%
		(38.0%-69.6%)	(55.3%-78.0%)	(54.9%-78.0%)
	$15,000-$24,999	77.4%	57.3%	58.2%
		(66.3%-88.6%)	(45.0%-69.5%)	(48.1%-69.5%)
	$25,000-$49,999	67.3%	55.5%	58.4%
		(55.8%-78.7%)	(43.9%-67.2%)	(49.1%-67.2%)
	$50,000 or more	72.3%	75.7%	66.3%
		(58.2%-86.5%)	(63.4%-87.9%)	(55.2%-87.9%)
Employment	Employed	60.5%	59.8%	55.0%
		(50.3%-70.6%)	(50.0%-69.6%)	(46.9%-69.6%)
	Unemployed	65.1%	43.4%*	55.5%*
		(33.7%-96.5%)	(19.5%-67.2%)	(30.5%-67.2%)
	Homemaker	75.3%	64.6%*	50.4%
		(57.7%-92.8%)	(45.6%-83.6%)	(33.0%-83.6%)
	Retired/Unable to work	66.1%	65.9%	68.4%
		(57.5%-74.7%)	(58.0%-73.8%)	(62.2%-73.8%)
Education	Less than H.S. Grad	64.1%	47.5%	65.0%
		(50.7%-77.6%)	(35.4%-59.5%)	(55.4%-59.5%)
	H.S. Grad or G.E.D	65.1%	68.4%	60.3%
		(54.9%-75.4%)	(58.2%-78.5%)	(52.7%-78.5%)
	Some College	74.2%	66.5%	58.8%
		(61.9%-86.4%)	(55.5%-77.6%)	(48.0%-77.6%)
	College Grad	57.6%	63.6%	61.0%
		(42.6%-72.5%)	(52.0%-75.3%)	(49.9%-75.3%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Annual dilated eye exams

Percent (%)

The proportion of adult diabetics who have had an annual dilated eye exam.

Demographic	Population	2002	2003	2004
Louisiana	Total	73.3%	67.7%	71.2%
		(67.3%-79.4%)	(62.6%-72.8%)	(67.4%-72.8%)
Gender	Male	76.7%	67.2%	66.8%
		(66.9%-86.4%)	(58.6%-75.8%)	(60.2%-75.8%)
	Female	70.3%	68.2%	75.0%
		(63.2%-77.4%)	(62.1%-74.2%)	(70.8%-74.2%)
Race	White	72.2%	65.8%	70.1%
		(64.8%-79.6%)	(59.2%-72.4%)	(64.8%-72.4%)
	African American	76.3%	71.8%	70.5%
		(64.9%-87.6%)	(63.1%-80.5%)	(64.0%-80.5%)
	Hispanic	***	***	83.8%*
		(***-***)	(***-***)	(67.1%-100.0%)
Age	18-44	74.5%	63.8%	50.4%
		(60.6%-88.3%)	(49.1%-78.6%)	(38.5%-78.6%)
	45-64	69.9%	65.0%	72.7%
		(61.0%-78.9%)	(57.8%-72.3%)	(67.0%-72.3%)
	65	77.9%	73.8%	78.3%
		(69.7%-86.2%)	(66.1%-81.6%)	(73.3%-81.6%)
Income	Less than $15,000	68.5%	66.7%	68.8%
		(54.6%-82.4%)	(56.0%-77.4%)	(61.1%-77.4%)
	$15,000-$24,999	80.3%	59.9%	68.3%
		(70.9%-89.7%)	(48.8%-71.1%)	(59.6%-71.1%)
	$25,000-$49,999	76.9%	70.1%	75.3%
		(65.3%-88.4%)	(60.4%-79.9%)	(68.0%-79.9%)
	$50,000 or more	71.1%	76.6%	76.1%
		(55.7%-86.5%)	(65.0%-88.3%)	(66.2%-88.3%)
Employment	Employed	68.0%	65.0%	66.9%
		(58.3%-77.6%)	(56.0%-74.0%)	(59.9%-74.0%)
	Unemployed	88.4%	63.2%*	54.1%*
		(73.7%-100.0%)	(41.8%-84.6%)	(32.3%-84.6%)
	Homemaker	77.9%	57.6%*	63.1%
		(59.8%-96.0%)	(38.7%-76.6%)	(47.1%-76.6%)
	Retired/Unable to work	73.2%	71.8%	76.6%
		(64.9%-81.5%)	(65.0%-78.6%)	(72.0%-78.6%)
Education	Less than H.S. Grad	68.2%	56.4%	66.8%
		(54.9%-81.5%)	(45.6%-67.3%)	(59.1%-67.3%)
	H.S. Grad or G.E.D	74.8%	73.9%	70.8%
		(65.8%-83.8%)	(65.7%-82.0%)	(64.5%-82.0%)
	Some College	73.1%	67.6%	68.6%
		(61.3%-84.9%)	(57.2%-78.0%)	(59.1%-78.0%)
	College Grad	78.4%	71.0%	79.5%
		(67.0%-89.8%)	(59.6%-82.4%)	(71.4%-82.4%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Annual influenza vaccination

Percent (%)

The proportion of diabetics who have had an influenza vaccination in the previous 12 months.

Demographic	Population	2002	2003	2004
Louisiana	Total	48.0%	51.9%	58.7%
		(41.6%-54.4%)	(46.6%-57.2%)	(54.5%-57.2%)
Gender	Male	51.6%	49.7%	59.5%
		(40.6%-62.5%)	(41.0%-58.4%)	(52.7%-58.4%)
	Female	44.7%	53.8%	58.0%
		(37.5%-51.8%)	(47.4%-60.1%)	(52.9%-60.1%)
Race	White	53.6%	55.6%	64.5%
		(45.6%-61.6%)	(48.8%-62.4%)	(59.2%-62.4%)
	African American	44.8%	45.8%	51.1%
		(31.8%-57.7%)	(36.9%-54.8%)	(44.0%-54.8%)
	Hispanic	***	***	64.8%*
		(***-***)	(***-***)	(42.2%-87.4%)
Age	18-44	26.4%	21.8%	34.2%
		(8.6%-44.2%)	(10.0%-33.5%)	(22.8%-33.5%)
	45-64	45.2%	47.6%	53.5%
		(36.2%-54.1%)	(40.1%-55.1%)	(47.4%-55.1%)
	65	65.6%	71.8%	77.5%
		(56.4%-74.7%)	(64.0%-79.5%)	(72.2%-79.5%)
Income	Less than $15,000	45.4%	60.1%	61.1%
		(32.2%-58.7%)	(49.6%-70.5%)	(52.8%-70.5%)
	$15,000-$24,999	47.6%	51.5%	54.7%
		(32.4%-62.8%)	(40.4%-62.6%)	(45.6%-62.6%)
	$25,000-$49,999	44.9%	49.8%	59.4%
		(33.0%-56.8%)	(39.2%-60.4%)	(51.0%-60.4%)
	$50,000 or more	52.5%	45.8%	58.5%
		(35.0%-70.0%)	(31.9%-59.8%)	(47.5%-59.8%)
Employment	Employed	39.7%	42.9%	45.6%
		(29.8%-49.6%)	(34.1%-51.8%)	(38.1%-51.8%)
	Unemployed	42.0%	27.6%*	53.2%*
		(4.4%-79.6%)	(7.5%-47.8%)	(32.2%-47.8%)
	Homemaker	38.8%	58.0%*	46.1%
		(18.3%-59.3%)	(39.7%-76.2%)	(31.2%-76.2%)
	Retired/Unable to work	53.6%	60.6%	69.6%
		(45.3%-61.9%)	(53.5%-67.8%)	(64.6%-67.8%)
Education	Less than H.S. Grad	49.3%	51.8%	63.0%
		(37.1%-61.4%)	(41.5%-62.2%)	(55.4%-62.2%)
	H.S. Grad or G.E.D	54.6%	50.3%	56.5%
		(43.9%-65.4%)	(40.8%-59.8%)	(49.8%-59.8%)
	Some College	38.7%	54.3%	50.6%
		(24.8%-52.7%)	(43.2%-65.4%)	(40.9%-65.4%)
	College Grad	45.4%	52.3%	63.9%
		(31.3%-59.5%)	(40.3%-64.3%)	(53.6%-64.3%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Pneumonia vaccination

Percent (%)

The proportion of adult diabetics who have ever had a Pneumonia vaccination

Demographic	Population	2002	2003	2004
Louisiana	Total	45.9%	43.7%	51.9%
		(39.4%-52.5%)	(38.5%-48.9%)	(47.6%-48.9%)
Gender	Male	45.6%	42.4%	51.0%
		(34.3%-57.0%)	(33.9%-50.9%)	(44.0%-50.9%)
	Female	46.2%	44.8%	52.6%
		(38.9%-53.5%)	(38.4%-51.1%)	(47.5%-51.1%)
Race	White	53.2%	48.7%	58.0%
		(45.4%-60.9%)	(41.9%-55.6%)	(52.4%-55.6%)
	African American	40.9%	35.5%	44.8%
		(27.4%-54.3%)	(27.1%-43.8%)	(37.6%-43.8%)
	Hispanic	***	***	52.3%*
		(***-***)	(***-***)	(26.3%-78.3%)
Age	18-44	27.6%	19.8%	19.7%
		(7.8%-47.4%)	(8.0%-31.6%)	(10.2%-31.6%)
	45-64	41.8%	35.8%	48.5%
		(32.9%-50.7%)	(28.8%-42.8%)	(42.3%-42.8%)
	65	61.9%	65.1%	71.6%
		(52.7%-71.1%)	(56.8%-73.5%)	(65.8%-73.5%)
Income	Less than $15,000	41.0%	55.1%	55.6%
		(27.8%-54.2%)	(44.5%-65.6%)	(46.9%-65.6%)
	$15,000-$24,999	46.8%	52.0%	50.0%
		(31.5%-62.1%)	(40.8%-63.3%)	(40.9%-63.3%)
	$25,000-$49,999	45.0%	41.1%	47.2%
		(33.0%-56.9%)	(30.8%-51.3%)	(38.8%-51.3%)
	$50,000 or more	39.4%	23.4%	48.9%
		(24.3%-54.4%)	(12.2%-34.5%)	(37.8%-34.5%)
Employment	Employed	31.6%	29.0%	32.0%
		(22.4%-40.9%)	(21.2%-36.8%)	(25.0%-36.8%)
	Unemployed	70.0%	10.8%*	36.9%*
		(42.7%-97.3%)	(0.0%-23.4%)	(16.3%-23.4%)
	Homemaker	59.6%	60.0%*	34.4%
		(37.3%-81.9%)	(41.8%-78.2%)	(21.1%-78.2%)
	Retired/Unable to work	49.8%	55.3%	69.0%
		(41.4%-58.1%)	(48.0%-62.6%)	(63.9%-62.6%)
Education	Less than H.S. Grad	50.5%	41.0%	50.4%
		(38.1%-62.8%)	(31.3%-50.7%)	(42.2%-50.7%)
	H.S. Grad or G.E.D	51.2%	48.2%	52.7%
		(40.3%-62.1%)	(38.7%-57.7%)	(45.9%-57.7%)
	Some College	34.7%	45.8%	51.4%
		(23.1%-46.3%)	(34.7%-57.0%)	(41.6%-57.0%)
	College Grad	42.7%	39.9%	53.2%
		(28.7%-56.7%)	(28.5%-51.3%)	(42.9%-51.3%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Daily Blood Glucose Self-Monitoring

Percent (%)

The proportion of diabetics who report that they self monitor their glucose levels daily.

Demographic	Population	2002	2003	2004
Louisiana	Total	59.8%	63.7%	62.5%
		(53.1%-66.6%)	(58.5%-68.9%)	(58.4%-68.9%)
Gender	Male	54.4%	62.6%	55.9%
		(42.8%-66.0%)	(54.0%-71.3%)	(49.0%-71.3%)
	Female	64.8%	64.6%	68.2%
		(57.7%-71.9%)	(58.5%-70.8%)	(63.2%-70.8%)
Race	White	61.6%	62.2%	63.3%
		(53.1%-70.0%)	(55.3%-69.1%)	(57.9%-69.1%)
	African American	61.9%	68.1%	59.4%
		(49.1%-74.7%)	(59.6%-76.5%)	(52.2%-76.5%)
	Hispanic	***	***	74.1%*
		(***-***)	(***-***)	(49.1%-99.0%)
Age	18-44	55.4%	61.1%	66.3%
		(35.8%-75.1%)	(46.5%-75.7%)	(55.0%-75.7%)
	45-64	59.4%	63.1%	60.7%
		(50.1%-68.7%)	(55.7%-70.4%)	(54.6%-70.4%)
	65	64.5%	65.2%	63.0%
		(55.4%-73.6%)	(56.9%-73.6%)	(56.4%-73.6%)
Income	Less than $15,000	55.5%	61.0%	67.9%
		(41.2%-69.9%)	(50.2%-71.8%)	(59.4%-71.8%)
	$15,000-$24,999	57.8%	61.3%	65.7%
		(43.6%-72.1%)	(49.8%-72.7%)	(56.9%-72.7%)
	$25,000-$49,999	57.9%	66.0%	56.3%
		(46.1%-69.8%)	(56.1%-76.0%)	(47.7%-76.0%)
	$50,000 or more	68.1%	61.2%	60.9%
		(48.1%-88.0%)	(47.6%-74.9%)	(49.9%-74.9%)
Employment	Employed	52.4%	57.3%	56.6%
		(42.2%-62.5%)	(48.2%-66.4%)	(49.0%-66.4%)
	Unemployed	54.1%	48.4%*	67.5%*
		(20.5%-87.8%)	(24.0%-72.8%)	(46.2%-72.8%)
	Homemaker	65.3%	78.1%*	75.5%
		(44.6%-86.0%)	(63.6%-92.5%)	(62.9%-92.5%)
	Retired/Unable to work	66.5%	68.8%	64.3%
		(58.2%-74.9%)	(61.9%-75.6%)	(58.8%-75.6%)
Education	Less than H.S. Grad	59.1%	65.4%	62.5%
		(46.3%-71.9%)	(55.2%-75.6%)	(54.4%-75.6%)
	H.S. Grad or G.E.D	59.5%	62.9%	60.5%
		(48.9%-70.0%)	(53.4%-72.4%)	(53.7%-72.4%)
	Some College	60.4%	53.7%	65.5%
		(45.6%-75.2%)	(42.5%-65.0%)	(56.4%-65.0%)
	College Grad	60.9%	70.7%	64.7%
		(47.0%-74.8%)	(59.6%-81.9%)	(54.8%-81.9%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Daily consumption of fruit and vegetables

Percent (%)

The proportion of diabetics who eat the recommended daily servings of Fruits and Vegetables

Demographic	Population	2002	2003	2004
Louisiana	Total	20.4%	22.1%	***
		(15.9%-24.9%)	(17.9%-26.3%)	***
Gender	Male	13.4%	19.6%	***
		(7.3%-19.4%)	(12.9%-26.4%)	***
	Female	27.0%	24.2%	***
		(20.6%-33.5%)	(18.9%-29.5%)	***
Race	White	19.0%	24.0%	***
		(13.3%-24.6%)	(18.1%-29.9%)	***
	African American	21.3%	16.9%	***
		(13.4%-29.2%)	(10.9%-23.0%)	***
	Hispanic	***	***	***
		(***-***)	(***-***)	***
Age	18-44	16.5%	17.8%	***
		(5.6%-27.4%)	(7.4%-28.1%)	***
	45-64	20.9%	22.2%	***
		(14.2%-27.7%)	(16.0%-28.4%)	***
	65	22.7%	24.5%	***
		(15.3%-30.1%)	(17.4%-31.5%)	***
Income	Less than $15,000	29.1%	19.0%	***
		(17.2%-41.0%)	(11.0%-27.1%)	***
	$15,000-$24,999	28.5%	19.4%	***
		(17.0%-40.0%)	(11.1%-27.8%)	***
	$25,000-$49,999	14.3%	29.1%	***
		(6.2%-22.5%)	(19.8%-38.4%)	***
	$50,000 or more	9.3%	26.0%	***
		(2.1%-16.4%)	(13.6%-38.4%)	***
Employment	Employed	21.5%	20.3%	***
		(13.7%-29.3%)	(13.3%-27.3%)	***
	Unemployed	6.0%	20.0%*	***
		(0.0%-18.0%)	(2.5%-37.6%)	***
	Homemaker	34.0%	34.5%*	***
		(12.9%-55.2%)	(16.3%-52.6%)	***
	Retired/Unable to work	21.7%	22.1%	***
		(15.2%-28.3%)	(16.2%-27.9%)	***
Education	Less than H.S. Grad	20.2%	14.8%	***
		(10.7%-29.8%)	(8.5%-21.0%)	***
	H.S. Grad or G.E.D	20.3%	19.4%	***
		(12.6%-28.1%)	(12.2%-26.5%)	***
	Some College	22.5%	28.2%	***
		(12.9%-32.2%)	(18.3%-38.1%)	***
	College Grad	17.3%	30.8%	***
		(6.5%-28.0%)	(19.7%-41.9%)	***

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Self-management education for diabetes

Percent (%)

The proportion of diabetics who have ever received diabetes Self-management education

Demographic	Population	2002	2003	2004
Louisiana	Total	54.1%	55.3%	52.0%
		(47.4%-60.8%)	(50.1%-60.5%)	(47.8%-60.5%)
Gender	Male	51.5%	53.7%	46.9%
		(40.1%-62.8%)	(45.0%-62.3%)	(39.9%-62.3%)
	Female	56.6%	56.7%	56.4%
		(49.2%-64.0%)	(50.4%-63.0%)	(51.4%-63.0%)
Race	White	48.2%	49.4%	48.1%
		(40.1%-56.4%)	(42.5%-56.3%)	(42.4%-56.3%)
	African American	62.2%	64.6%	56.2%
		(49.6%-74.8%)	(56.3%-72.8%)	(49.1%-72.8%)
	Hispanic	***	***	55.2%*
		(***-***)	(***-***)	(29.5%-80.8%)
Age	18-44	59.0%	58.2%	62.9%
		(39.4%-78.6%)	(43.7%-72.8%)	(51.4%-72.8%)
	45-64	64.9%	64.5%	54.3%
		(55.9%-74.0%)	(57.4%-71.6%)	(48.1%-71.6%)
	65	36.7%	41.8%	43.3%
		(27.7%-45.6%)	(33.4%-50.2%)	(36.8%-50.2%)
Income	Less than $15,000	50.0%	50.6%	51.6%
		(36.3%-63.6%)	(40.0%-61.2%)	(43.0%-61.2%)
	$15,000-$24,999	57.7%	50.6%	48.4%
		(43.5%-71.9%)	(39.4%-61.8%)	(39.2%-61.8%)
	$25,000-$49,999	59.0%	57.9%	53.4%
		(46.9%-71.0%)	(47.5%-68.4%)	(45.0%-68.4%)
	$50,000 or more	59.0%	65.1%	58.2%
		(40.3%-77.8%)	(51.9%-78.3%)	(47.0%-78.3%)
Employment	Employed	70.1%	63.2%	55.9%
		(61.1%-79.2%)	(54.5%-71.9%)	(48.4%-71.9%)
	Unemployed	75.1%	40.4%*	62.4%*
		(51.6%-98.7%)	(17.7%-63.0%)	(41.4%-63.0%)
	Homemaker	60.6%	63.8%*	51.7%
		(39.2%-81.9%)	(46.4%-81.1%)	(36.4%-81.1%)
	Retired/Unable to work	42.6%	50.1%	48.4%
		(34.6%-50.6%)	(42.8%-57.3%)	(42.8%-57.3%)
Education	Less than H.S. Grad	42.4%	43.7%	48.3%
		(30.6%-54.2%)	(33.4%-54.0%)	(40.2%-54.0%)
	H.S. Grad or G.E.D	57.1%	61.1%	44.9%
		(46.5%-67.7%)	(51.8%-70.3%)	(38.2%-70.3%)
	Some College	56.1%	51.9%	47.9%
		(42.0%-70.2%)	(40.7%-63.1%)	(38.6%-63.1%)
	College Grad	63.7%	64.4%	72.2%
		(50.3%-77.2%)	(52.8%-76.0%)	(62.8%-76.0%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Prevalence of cardiovascular disease complications in persons with diabetes

Percent (%)

The proportion of diabetics who have ever had Coronary Heart Disease, a Heart Attack, or a Stroke.

Demographic	Population	2002	2003	2004
Louisiana	Total	***	25.7%	21.8%
		***	(21.2%-30.1%)	(18.5%-30.1%)
Gender	Male	***	26.0%	20.9%
		***	(18.9%-33.1%)	(15.6%-33.1%)
	Female	***	25.4%	22.6%
		***	(19.9%-30.9%)	(18.4%-30.9%)
Race	White	***	32.1%	23.6%
		***	(25.7%-38.5%)	(18.8%-38.5%)
	African American	***	17.8%	19.6%
		***	(11.4%-24.1%)	(14.3%-24.1%)
	Hispanic	***	***	16.6%*
		***	(***-***)	(1.5%-31.7%)
Age	18-44	***	8.9%	8.1%
		***	(0.6%-17.1%)	(1.5%-17.1%)
	45-64	***	23.0%	22.1%
		***	(17.0%-28.9%)	(17.1%-28.9%)
	65	***	37.8%	27.7%
		***	(29.5%-46.1%)	(22.0%-46.1%)
Income	Less than $15,000	***	29.8%	34.5%
		***	(20.3%-39.3%)	(26.3%-39.3%)
	$15,000-$24,999	***	26.4%	14.4%
		***	(17.3%-35.6%)	(8.8%-35.6%)
	$25,000-$49,999	***	17.7%	19.2%
		***	(10.1%-25.4%)	(12.5%-25.4%)
	$50,000 or more	***	25.3%	17.9%
		***	(13.3%-37.4%)	(9.3%-37.4%)
Employment	Employed	***	17.8%	10.0%
		***	(11.3%-24.4%)	(5.4%-24.4%)
	Unemployed	***	15.9%*	20.7%*
		***	(0.0%-32.9%)	(1.6%-32.9%)
	Homemaker	***	35.8%*	12.6%
		***	(17.2%-54.5%)	(5.1%-54.5%)
	Retired/Unable to work	***	31.7%	31.4%
		***	(25.1%-38.3%)	(26.3%-38.3%)
Education	Less than H.S. Grad	***	30.5%	32.3%
		***	(21.3%-39.7%)	(25.0%-39.7%)
	H.S. Grad or G.E.D	***	20.6%	17.4%
		***	(13.5%-27.6%)	(12.2%-27.6%)
	Some College	***	27.5%	20.4%
		***	(17.7%-37.3%)	(13.1%-37.3%)
	College Grad	***	24.7%	18.8%
		***	(14.5%-34.9%)	(11.0%-34.9%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Prevalence of Heart Attack in persons with diabetes

Percent (%)

The proportion of adults with diabetes who have ever had a heart attack or myocardial infarction.

Demographic	Population	2002	2003	2004
Louisiana	Total	***	14.5%	11.5%
		***	(10.8%-18.1%)	(8.9%-18.1%)
Gender	Male	***	17.2%	14.2%
		***	(11.0%-23.5%)	(9.5%-23.5%)
	Female	***	12.3%	9.3%
		***	(8.0%-16.5%)	(6.5%-16.5%)
Race	White	***	17.5%	13.2%
		***	(12.2%-22.7%)	(9.4%-22.7%)
	African American	***	9.6%	8.9%
		***	(4.5%-14.8%)	(4.9%-14.8%)
	Hispanic	***	***	6.5%*
		***	(***-***)	(0.0%-15.8)
Age	18-44	***	6.7%	4.2%
		***	(0.0%-14.3%)	(0.0%-14.3%)
	45-64	***	14.9%	12.0%
		***	(9.6%-20.2%)	(8.0%-20.2%)
	65	***	18.0%	14.2%
		***	(11.5%-24.4%)	(10.0%-24.4%)
Income	Less than $15,000	***	17.6%	17.9%
		***	(9.8%-25.4%)	(10.8%-25.4%)
	$15,000-$24,999	***	16.1%	9.7%
		***	(8.4%-23.8%)	(4.9%-23.8%)
	$25,000-$49,999	***	11.5%	10.1%
		***	(4.5%-18.5%)	(4.8%-18.5%)
	$50,000 or more	***	14.5%	7.5%
		***	(4.7%-24.2%)	(2.5%-24.2%)
Employment	Employed	***	10.2%	3.5%
		***	(4.8%-15.5%)	(0.8%-15.5%)
	Unemployed	***	11.2%*	16.2%*
		***	(0.0%-26.3%)	(0.0%-26.3%)
	Homemaker	***	19.7%*	4.8%
		***	(3.8%-35.6%)	(0.1%-35.6%)
	Retired/Unable to work	***	17.5%	17.7%
		***	(12.1%-23.0%)	(13.5%-23.0%)
Education	Less than H.S. Grad	***	19.8%	20.9%
		***	(11.5%-28.0%)	(14.1%-28.0%)
	H.S. Grad or G.E.D	***	12.1%	7.0%
		***	(6.2%-17.9%)	(3.4%-17.9%)
	Some College	***	10.7%	11.6%
		***	(4.6%-16.9%)	(5.5%-16.9%)
	College Grad	***	16.2%	8.6%
		***	(7.1%-25.4%)	(3.5%-25.4%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Prevalence of stroke complications in persons with diabetes

Percent (%)

The proportion of aduls with diabetes who have ever had a stroke.

Demographic	Population	2002	2003	2004
Louisiana	Total	***	8.9%	8.8%
		***	(5.9%-12.0%)	(6.4%-12.0%)
Gender	Male	***	5.2%	6.5%
		***	(1.5%-8.9%)	(3.1%-8.9%)
	Female	***	11.9%	10.8%
		***	(7.4%-16.5%)	(7.3%-16.5%)
Race	White	***	9.8%	9.3%
		***	(5.5%-14.1%)	(5.8%-14.1%)
	African American	***	9.2%	9.0%
		***	(4.1%-14.3%)	(5.1%-14.3%)
	Hispanic	***	***	7.8%*
		***	(***-***)	(0.0%-18.9%)
Age	18-44	***	2.7%	2.6%
		***	(0.0%-8.0%)	(0.0%-8.0%)
	45-64	***	7.9%	8.9%
		***	(3.9%-11.8%)	(5.3%-11.8%)
	65	***	13.4%	11.3%
		***	(7.2%-19.6%)	(6.9%-19.6%)
Income	Less than $15,000	***	12.0%	12.4%
		***	(4.8%-19.1%)	(6.3%-19.1%)
	$15,000-$24,999	***	9.0%	6.1%
		***	(2.5%-15.4%)	(2.5%-15.4%)
	$25,000-$49,999	***	5.6%	6.5%
		***	(1.3%-9.9%)	(1.5%-9.9%)
	$50,000 or more	***	2.2%	5.8%
		***	(0.0%-5.6%)	(0.7%-5.6%)
Employment	Employed	***	4.3%	2.1%
		***	(0.7%-7.9%)	(0.0%-7.9%)
	Unemployed	***	4.9%*	4.3%*
		***	(0.0%-14.3%)	(0.0%-14.3%)
	Homemaker	***	15.6%*	6.5%
		***	(0.0%-31.3%)	(0.5%-31.3%)
	Retired/Unable to work	***	12.1%	14.2%
		***	(7.2%-16.9%)	(10.0%-16.9%)
Education	Less than H.S. Grad	***	13.1%	14.0%
		***	(6.1%-20.1%)	(8.4%-20.1%)
	H.S. Grad or G.E.D	***	7.8%	7.4%
		***	(2.5%-13.0%)	(3.7%-13.0%)
	Some College	***	10.6%	8.7%
		***	(3.4%-17.9%)	(2.7%-17.9%)
	College Grad	***	1.2%	5.1%
		***	(0.0%-3.0%)	(0.8%-3.0%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Prevalence of Retinopathy

Percent (%)

The proportion of adults with diabetes who have ever been told by a doctor that diabetes has affected their eyes.

Demographic	Population	2002	2003	2004
Louisiana	Total	34.0%	28.5%	28.2%
		(27.6%-40.3%)	(23.5%-33.5%)	(24.4%-33.5%)
Gender	Male	33.6%	29.6%	31.0%
		(22.6%-44.6%)	(21.3%-38.0%)	(24.6%-38.0%)
	Female	34.3%	27.6%	25.7%
		(27.1%-41.6%)	(21.6%-33.5%)	(21.4%-33.5%)
Race	White	32.1%	20.7%	26.6%
		(23.6%-40.6%)	(14.9%-26.6%)	(21.6%-26.6%)
	African American	41.7%	37.2%	28.4%
		(28.5%-54.8%)	(28.2%-46.1%)	(22.3%-46.1%)
	Hispanic	***	***	53.4%*
		(***-***)	(***-***)	(28.5%-78.4%)
Age	18-44	42.5%	21.9%	28.3%
		(25.1%-59.9%)	(9.7%-34.1%)	(17.3%-34.1%)
	45-64	31.8%	30.5%	30.3%
		(23.4%-40.2%)	(23.2%-37.9%)	(24.7%-37.9%)
	65	32.0%	29.4%	25.5%
		(23.2%-40.9%)	(21.1%-37.8%)	(19.8%-37.8%)
Income	Less than $15,000	40.2%	40.9%	34.5%
		(27.3%-53.1%)	(29.9%-52.0%)	(26.1%-52.0%)
	$15,000-$24,999	34.1%	24.8%	29.4%
		(17.4%-50.9%)	(14.5%-35.1%)	(20.9%-35.1%)
	$25,000-$49,999	33.3%	23.2%	25.4%
		(21.3%-45.3%)	(13.9%-32.5%)	(18.3%-32.5%)
	$50,000 or more	28.6%	20.0%	18.6%
		(8.8%-48.4%)	(8.2%-31.8%)	(9.8%-31.8%)
Employment	Employed	21.6%	25.1%	24.5%
		(12.7%-30.5%)	(16.6%-33.6%)	(17.9%-33.6%)
	Unemployed	47.0%	19.0%*	25.5%*
		(10.9%-83.1%)	(2.8%-35.2%)	(5.9%-35.2%)
	Homemaker	19.0%	22.2%*	15.5%
		(2.3%-35.8%)	(6.0%-38.5%)	(6.3%-38.5%)
	Retired/Unable to work	39.3%	33.2%	33.4%
		(31.3%-47.3%)	(26.0%-40.3%)	(28.0%-40.3%)
Education	Less than H.S. Grad	46.3%	36.8%	35.4%
		(34.2%-58.4%)	(26.7%-46.9%)	(27.5%-46.9%)
	H.S. Grad or G.E.D	38.1%	30.6%	29.7%
		(26.6%-49.6%)	(21.2%-40.0%)	(23.1%-40.0%)
	Some College	28.7%	19.6%	18.8%
		(13.5%-43.9%)	(10.7%-28.6%)	(12.2%-28.6%)
	College Grad	10.6%	25.1%	27.4%
		(3.5%-17.7%)	(13.9%-36.4%)	(18.5%-36.4%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Disability from or with diabetes

Percent (%)

The proportion of diabetics who are limited in any way or in any activities because of physical, mental, or emotional problems.

Demographic	Population	2002	2003	2004
Louisiana	Total	***	34.4%	37.0%
		***	(29.4%-39.4%)	(32.8%-39.4%)
Gender	Male	***	29.4%	35.0%
		***	(21.4%-37.3%)	(28.1%-37.3%)
	Female	***	38.6%	38.6%
		***	(32.4%-44.9%)	(33.6%-44.9%)
Race	White	***	35.6%	36.4%
		***	(28.8%-42.3%)	(30.8%-42.3%)
	African American	***	31.0%	40.3%
		***	(22.8%-39.2%)	(33.2%-39.2%)
	Hispanic	***	***	13.6%*
		***	(***-***)	(0.2%-26.9%)
Age	18-44	***	27.9%	22.4%
		***	(14.1%-41.8%)	(12.7%-41.8%)
	45-64	***	39.4%	44.0%
		***	(32.2%-46.6%)	(37.7%-46.6%)
	65	***	30.2%	33.4%
		***	(22.2%-38.3%)	(27.1%-38.3%)
Income	Less than $15,000	***	47.9%	52.5%
		***	(37.3%-58.5%)	(43.7%-58.5%)
	$15,000-$24,999	***	30.1%	37.0%
		***	(19.6%-40.6%)	(27.6%-40.6%)
	$25,000-$49,999	***	31.6%	35.8%
		***	(22.1%-41.1%)	(27.4%-41.1%)
	$50,000 or more	***	17.6%	19.7%
		***	(7.1%-28.1%)	(10.7%-28.1%)
Employment	Employed	***	16.4%	20.5%
		***	(10.3%-22.6%)	(13.7%-22.6%)
	Unemployed	***	41.5%*	31.5%*
		***	(17.3%-65.7%)	(14.6%-65.7%)
	Homemaker	***	45.6%*	32.4%
		***	(26.4%-64.8%)	(18.3%-64.8%)
	Retired/Unable to work	***	46.2%	49.7%
		***	(38.9%-53.5%)	(44.0%-53.5%)
Education	Less than H.S. Grad	***	43.2%	42.3%
		***	(33.0%-53.4%)	(34.1%-53.4%)
	H.S. Grad or G.E.D	***	31.6%	34.5%
		***	(22.8%-40.3%)	(27.9%-40.3%)
	Some College	***	35.5%	36.7%
		***	(24.8%-46.2%)	(27.2%-46.2%)
	College Grad	***	28.4%	36.3%
		***	(17.6%-39.2%)	(26.2%-39.2%)

SOURCE: LA BRFSS, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

Mortality rates associated with diabetes

Age-Adjusted Rate per 100,000

The proportion of hospitalizations to persons with diabetes where diabetes or cardiovascular disease is the principal diagnosis or End-Stage Renal Disease is principal or secondary diagnosis.

Demographic	Population	Diabetes	Cardiovascular	ESRD
Louisiana	Total	9.4%	32.3%	8.4%
		(9.2%-9.6%)	(32.0%-32.6%)	(8.2%-8.6%)
Gender	Male	8.9%	30.5%	9.0%
		(8.6%-9.1%)	(30.1%-30.9%)	(8.7%-9.3%)
	Female	10.3%	35.0%	8.0%
		(9.9%-10.6%)	(34.5%-35.5%)	(7.8%-8.2%)
Race	White	6.4%	33.8%	7.7%
		(6.2%-6.6%)	(33.4%-34.3%)	(7.4%-7.9%)
	African American	11.1%	30.7%	10.3%
		(10.7%-11.4%)	(30.2%-31.3%)	(9.9%-10.6%)
	Other	13.3%	31.3%	***
		(12.9%-13.8%)	(30.7%-32.0%)	***
Age	0-17	79.2%	0.7%	0.6%
		(76.2%-82.3%)	(0.1%-1.4%)	(0.0%-1.2%)
	18-44	23.5%	12.8%	7.6%
		(22.7%-24.4%)	(12.2%-13.5%)	(7.0%-8.1%)
	45-64	9.4%	33.5%	9.0%
		(9.1%-9.7%)	(33.0%-34.0%)	(8.7%-9.3%)
	65	5.7%	35.6%	8.3%
		(5.5%-6.0%)	(35.2%-36.0%)	(8.1%-8.5%)

SOURCE: LA 2001 LAHIDD, Office of Public Health

*Data unreliable due to small sample *** Data not available

Confidence Intervals

The diabetes related mortality rate where diabetes is listed as the principle or underlying cause or as a contributing cause of death, cardiovascular disease mortality rate of persons with diabetes and end stage renal disease mortality rate of person with diabetes. NOTE:age groups are not age-adjusted

Demographic	Population	Diabetes Related	Cardiovascular	End Stage Renal Disease
Louisiana	Total	75.9	332.93	***
		(73.3-78.6)	(310.33-355.52)	***
Gender	Male	80.1	298.52	***
		(75.9-84.3)	(268.51-328.54)	***
	Female	72.4	396.33	***
		(69-75.7)	(359.87-432.79)	***
Race	White	60.5	358.4	***
		(57.7-63.2)	(327.26-389.54)	***
	African American	127.2	361.66	***
		(120.2-134.1)	(321.46-401.86)	***
	Hispanic	48.2	37.61	***
		(32.4-63.9)	(7.52-67.7)	***
Age*	0-24	1.1	***	***
		(0.5-1.8)	(***-***)	***
	25-44	6	36.61	***
		(4.9-6.5)	(19.7-53.52)	***
	45-64	73.7	170.55	***
		(68.4-74.9)	(145.49-195.6)	***
	65	442.8	861.4	***
		(424.7-445.1)	(794.61-928.19)	***

SOURCE: LA 2002 Vital Statistics, Office of Public Health
*Data unreliable due to small sample *** Data not available
Confidence Intervals