The Diabetes Branch addresses the impact of diabetes in Alabama by developing policies, recommendations, and programs about the disease and related issues. The program is funded through a grant from the Centers for Disease Control and Prevention (CDC). According to CDC, in 2009, Alabama adults rank 2nd in the nation in overweight/obesity and 6th in youth overweight/obesity. This correlates to 65% of Alabama adults and 36.1% of Alabama youth. Approximately 31% of Alabama adults are obese. Also, CDC estimates that 24 million adults have diabetes in the United States, approximately 57 million Americans are pre-diabetics, and 25 million of the pre-diabetics may become diabetic within the next 2-6 years. Persons with pre-diabetes have a 70% lifetime risk to develop diabetes with an annual risk of 5%-7%, nearly a 10-fold of the general population.

Those at greater risk for type 2 diabetes are African Americans, American Indians, those of Hispanic descent, the elderly, and those who have family members with diabetes. Other risk factors include being overweight, lack of physical activity, and poor dietary habits.

In order to accomplish the above, the Diabetes Branch utilizes “Systems Thinking” to work toward opportunities to improve the health status of the community. Systems Thinking is a creative, flexible, future oriented problem solving and decision making process. It allows stakeholders to view interrelationships rather than cause-effect chains. It is pro-active, manages the process of change, and anticipates consequences of actions, and responses.

To assist with this effort, the Alabama Diabetes Network (ADN), a group of diabetes advocates and experts from the public and private sectors, advises and supports the ADPH Diabetes Program. Coalition members represent many different organizations, linking the Health Department and diabetes resources across the state. The ADN meets three times each year to assess needs, modify the state plan to improve diabetes prevention and care efforts, and to reduce racial disparities related to incidence, treatment, and complications of diabetes in Alabama. Other partners include Diabetes Today Sites and American Diabetes Associations “Project Power” church affiliated programs. The goal set by the ADN is to “Maximize Organizational Capacity to achieve the National Diabetes Program Goals.” The focus area is “Health Care Systems.”

According to 2008 Behavioral Risk Factor Surveillance System (BRFSS) data, more than 397,350 people in Alabama are aware they have diabetes. In addition, as many as 200,000 more may have diabetes and not know that they have it. Overweight and inactive individuals increase their risk of developing type 2 diabetes.
Approximately 1 in 10 adults have been diagnosed with diabetes. Alabama is ranked fifth in prevalence of diabetes in the United States and its territories.
The 2008 BRFSS and other data sources revealed that Alabama has an extremely high incidence of diabetes and obesity, especially in African Americans. Although only about 24.7% of Alabama’s population is African American, more than 30.0% of diagnosed diabetes cases are reported in that group (2008 BRFSS). Data also show that while 9.6% of white adults report having diabetes, the rate is 15.1% in African Americans. The prevalence of diabetes is highest among those aged 65 and older. This trend has been consistent over the past decade.

2008 Alabama Public Health Area

Diabetes Estimates*

*Estimates calculated from collected data using the 2008 BRFSS Survey: state average 11.2%

The 2007 BRFSS was the first year diabetes data by public health area was available for Alabama.
Only 20 percent of Alabamians met the recommended level of vigorous activity.
Nearly 30 percent of Alabamians met the recommended level of moderate physical activity.

Diet and physical activity are important factors in order to reduce prevalence of diabetes. Across public health areas fruit and vegetable consumption among adults was low. Today Type 2 diabetes is affecting Alabama’s youth.

Approximately 15 percent of Alabama teens reported that they ate the recommended 5 or more servings per day of fruits and/or vegetables. These proportions were substantially below the national averages.

Only 45 percent of Alabama students participate in daily physical education classes, compared to 33 percent nationally. Many teens are categorized as overweight.
Consumption of fruits and vegetables among youth is low in Alabama. Physical activity is also low.
Behaviors such as smoking increase complications suffered by persons with diabetes. According to the 2008 BRFSS, there were 22.1% current smokers in Alabama, 194,957 (25.33%) of current smokers were obese (BMI >30), and 64,022 (17.63%) diabetics were current smokers. In 2008, current diabetic smokers were at 13.2%. Diabetes is the seventh leading cause of death and it may contribute to heart disease, stroke, pneumonia and other causes of death.

We estimated diabetes mortality by county.

The financial burden of diabetes in the United States is more than $132 billion per year.
In 2002, the per capita costs of health care for people with diabetes were $13,243 compared to $2,560 for people without diabetes.

In Alabama, the annual economic cost of diabetes is estimated to be over $2 billion.

In 2008, 12.4% of persons with diabetes reported that they were not covered by any health plan.

16.5% indicated that at some time within the past 12 months they had not been able to afford a visit to the doctor. This is consistent with the national average of 16.6%.

What is the Burden of Diabetes in Alabama?

55 counties do not have an endocrinologist.
42 counties do not have a diabetes educator.
The Office of Disease Prevention and Health Promotion, US Department of Health and Human Services’ national **Healthy People 2010** goal for Alabama includes:

- Reducing Alabama’s diabetes death rate to 14.5 percent per 100,000 persons; and
- Increasing to 75 percent or more the percentage of adults aged 18 and older with diabetes who have had a dilated eye exam within the past year.

The Alabama Diabetes Prevention and Control Program works with the Alabama Diabetes Network to promote systems change and create healthy communities. Our focus has been placed on improving education, access to care, and quality of life through the following areas:

- Reducing the incidence and complications of diabetes and obesity
- Reducing health disparities in racial and ethnic populations impacted by diabetes
- Identifying and implementing the best prevention practices
- Improving public awareness and patient understanding of diabetes and its control
- Promoting educational opportunities to provide better self-management of diabetes
- Improving access to diabetes information
- Improving health care providers' understanding of diabetes and the control and adoption of best practices
- Advocating for policies that promote the prevention of diabetes and improve the quality and access to diabetes care

**Activities**

**Communications**

- Using our Speakers Bureau, radio, print, TV, media announcements, and Web site as resources
- Including the state diabetes resource directory and burden report at www.adph.org/diabetes
- Offering health literacy information to healthcare providers

**Schools**

- Supporting healthy snacks and physical activity initiatives
- Providing educational materials and technical assistance during collaboration meetings

**Community**

- Emphasizing diabetes health promotion, prevention, and protection activities
- Utilizing the American Diabetes Association’s *Project Power* to engage faith-based organizations in diabetes prevention activities
- Encouraging the establishment of *Diabetes Today* coalition building activities in communities throughout the state
- Supporting ADN community involvement in rural areas such as the Black Belt region of Alabama
- Encouraging partners to promote worksite wellness, smoking cessation, nutrition and physical activity initiatives
- Partnering with cooperative extension systems, parks and recreation, and faith-based organizations to build healthy communities
- Promoting National Diabetes Education Program community resources:

Health Care

- Training health care providers to improve patient caregiver communications
- Conducting satellite conferences for health care providers

Evaluation

- Utilizing existing data sources, such as the Behavioral Risk Factor Surveillance System and the Youth Risk Behavior Surveillance System, to identify and measure program outcomes and assess progress toward program goals
- Encouraging the use of local systems which allow providers to interface assessments of HbA1c testing, foot exams, influenza and pneumonia vaccinations

Partnerships

- Continuing to add to the existing list of over 200 partners, and provide training and opportunities for networking

Current Practices

Concerning the general public, the chart below shows changes in diabetes indicators between 2001 and 2008 for doctors and patients completed activities among diabetics. According to the 2008 BRFSS, 71.20% of diabetics conducted personal foot checks in 2008, 61.20% completed daily blood sugar checks, 45.70% had pneumonia vaccinations, 58.20% had flu shots, 80.30% had eye exams, 64.90% had their feet checked by healthcare providers, 71.80% received HbA1c tests, and 50.10% received diabetes education.

![Doctor and Patient Completed Activities 2008 BRFSS](image)

Of the 232 callers to the Alabama Smoking Quitline, 171 identified themselves as diabetic, 41 were pre-diabetic, and 20 had gestational diabetes.
The results from the Behavioral Risk Factor Surveillance System (BRFSS) questionnaire in 2008 and Tobacco Prevention and Control Smoking Quitline data will be utilized when creating future projects and goals for the program.

The objectives of the Diabetes Branch are to expand partnerships and encourage partners to work together. Everyone should feel ownership of community initiatives and accomplishments. Emphasis is placed on the establishment of community awareness and evidence-based programs to create viable diabetes related health prevention and promotion activities. The goal is to influence all people to make and sustain appropriate lifestyle changes. We invite all agencies, communities, organizations, policy makers, and individuals to join us in the effort to create a healthier Alabama!

What Do We Need To Do?

For more information contact:

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