



Federal Legislative Priorities

Improving the lives of
the nearly 26 million
children and adults
living with diabetes



The American Diabetes Association's Mission

The mission of the American Diabetes Association is to prevent and cure diabetes and to improve the lives of all people affected by diabetes.



Letter from the Chairman of the Board

Every year, more children and adults are being affected by diabetes and its serious complications. With nearly 26 million people living with diabetes and another 79 million people living with prediabetes, this is an epidemic that must be stopped at both the personal and policy level.

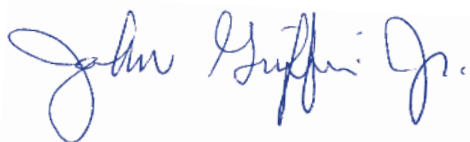
The impact diabetes has on our country — both to individuals and the health care system is astounding. Every 17 seconds, someone is diagnosed with diabetes in the United States. Diabetes is the leading cause of kidney failure and is the leading cause of new cases of blindness among adults aged 20-74. Diabetes is also one of the leading causes of death in the United States, claiming the lives of 231,404 people in 2007.

While these numbers are staggering, there is hope. Prevention programs are helping children and adults to avoid developing type 2 diabetes. Researchers around the country are working to find ways to stave off the deadly complications of diabetes. Hope for a cure remains on the research horizon.

Founded in 1940 by physicians who treated children and adults with diabetes, the American Diabetes Association is leading the fight against the deadly consequences of all types of diabetes while being the voice for those affected by diabetes. We do this through supporting research to prevent, cure and manage diabetes — in 2010, we funded nearly \$34 million in research. We do this through eliminating discrimination and protecting the rights of children with diabetes. We improve lives by delivering services and programs to hundreds of communities to help those affected by diabetes. Finally, we do this through raising awareness about the impact of this disease on individuals, families, our communities and our country.

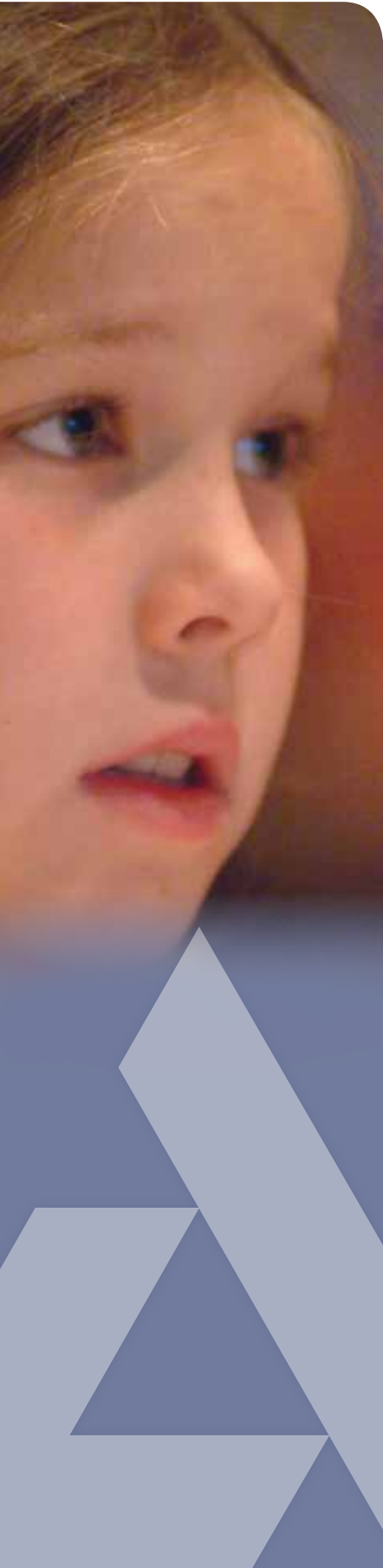
However, much more needs to be done to stop diabetes.

This short summary outlines our key legislative priorities and challenges for the upcoming year. We look forward to working together to make meaningful progress in stopping diabetes and its complications.



John W. Griffin, Jr.
Chair of the Board
American Diabetes Association





Diabetes: A National Epidemic With Deadly and Costly Complications

Diabetes is a chronic disease in which the body fails to produce or properly use insulin, a hormone needed to convert sugar, starches and other food into energy. In people with diabetes, either the pancreas doesn't produce insulin or the body is unable to use the insulin well. There are three main types of diabetes:

Type 1 Diabetes

Most often diagnosed in children and young adults, type 1 diabetes is an autoimmune disease in which the body does not produce insulin. People with type 1 diabetes must receive insulin to stay alive, which means multiple daily injections or having insulin delivered through a pump. Insulin is critical in managing type 1 diabetes, but is not a cure. Type 1 diabetes accounts for approximately 5% of all cases of diabetes.

Type 2 Diabetes

Type 2 diabetes, the most common form of diabetes, occurs when the body fails to produce enough or properly use insulin. To manage type 2 diabetes, people often need to make major lifestyle changes (such as regular exercise, healthy eating, and healthy weight maintenance) and/or use oral medications and/or insulin injections. Type 2 diabetes accounts for 90-95% of all cases of diabetes. The number of younger adults and children with type 2 diabetes has risen in recent years.

Before people develop type 2 diabetes, they almost always have prediabetes, a condition where the blood glucose levels are higher than normal but not quite high enough to indicate a diabetes diagnosis. Currently, there are approximately 79 million people with **prediabetes** and only 7% of them know it.

Gestational Diabetes

Gestational diabetes is when the body is not able to make and use all the insulin it needs for pregnancy. The rate of gestational diabetes is growing, currently affecting approximately 18% of all pregnant women. Women who have had gestational diabetes have a 35-60 % chances of developing type 2 diabetes in the next 10-20 years. There is also evidence that children born to women who had gestational diabetes are at higher risk of developing type 2 diabetes.

The cause of diabetes is unknown, although both genetics and environmental factors appear to play roles. While the cause remains a mystery, the complications associated with diabetes are dramatically clear:

Heart Disease and Stroke

- Adults with diabetes are two to four times more likely to die of heart disease than adults not affected by diabetes.
- The risk of stroke is two to four times higher among people with diabetes.

High Blood Pressure

- About 67% of adults with diabetes have high blood pressure, also known as hypertension.

Blindness

- Diabetes is the leading cause of new cases of blindness in adults ages 20-74.

Kidney Disease

- Diabetes is the leading cause of kidney failure, accounting for 44% of all new cases.

Nervous System Disease

- About 60%-70% of people with diabetes have mild to severe forms of nervous system damage.

Amputations

- More than 60% of nontraumatic lower-limb amputations occur in people with diabetes.

We All Pay the Price

In 2007, the national cost of diagnosed diabetes in the U.S. exceeded \$174 billion. This estimate includes \$116 billion in excess medical expenditures attributed to diabetes, as well as \$58 billion in lost productivity. People with diagnosed diabetes have average medical expenses that are about 2.3 times higher than people without diabetes.

Additional studies have shown that the costs of prediabetes, undiagnosed diabetes, and gestational diabetes add another \$44 billion in diabetes-related costs, bringing the annual burden of diabetes to \$218 billion.

DIABETES FACT: Nearly 26 million Americans have diabetes. Another 79 million people have prediabetes and are at higher risk of developing diabetes.





Funding for Critical Research and Prevention Programs

If current trends continue, as many as one in three American adults will have diabetes in 2050, The National Institutes of Health (NIH) and the Centers for Disease Control and Prevention (CDC) recognize the growing impact of diabetes. Both agencies work to bring the disease under control and alleviate the burden it places on our health care system and the U.S. economy through valuable research and programming. *However, the work they do cannot continue without adequate funding.*

Research for a Cure: National Institutes of Health (NIH)

The National Institute of Diabetes and Kidney Diseases (NIDDK) at NIH is the primary government agency that conducts research to find a cure and better treatments for diabetes.

NIH researchers have already learned a great deal about the biology of diabetes; and have made great strides toward prevention and improved treatment. In the 1950s, 20% of those diagnosed with type 1 diabetes died within 20 years of the diagnosis. Thanks to research at NIDDK, diabetes patients now have a variety of insulin formulations to control their blood glucose. By finding the genes and environmental factors that contribute to diabetes, researchers could develop ways to prevent or reverse the destruction of the cells that produce insulin. **NIDDK research is our best hope for a cure.**

Making Progress

NIDDK researchers have made some dramatic discoveries about the genes involved in promoting and preventing type 2 diabetes. Scientists have also found a potential link between a specific gene and type 1 diabetes. Their discoveries provide new avenues for exploration and bring us closer to establishing causes and developing new treatments for both type 1 and type 2 diabetes. Dramatic advances in the fight against diabetes have resulted from the research at NIDDK.

Examples include:

- Progress on predicting risk of developing type 1 diabetes;
- Lowering the risk of diabetes in patients with prediabetes;
- Advances in halting/reversing diabetic complications; and
- Breakthroughs in islet cell transplantation and development of a platform for future cell therapies.

Special Diabetes Program for Type 1

The Special Diabetes Program for Type 1 (SDP-Type 1) is a unique federal research program dedicated exclusively to type 1 diabetes research. It currently provides a significant percentage of all federally supported type 1 diabetes research. The SDP-Type 1 program has led to real advances in many areas of type 1 diabetes research, and serves as a critical part of all diabetes research funding. The Association thanks Congress for its most recent reauthorization of SDP-Type 1, which provides essential research funding through September, 2013.

Investing in Prevention: Centers for Disease Control and Prevention (CDC)

While diabetes is one of the most costly health problems in America, much of the expense could be reduced through diabetes prevention programs for those at risk and increasing awareness of how to manage diabetes in people who have the disease.

The Division of Diabetes Translation (DDT) at the CDC leads the government's effort to provide comprehensive prevention and treatment programs in communities throughout the country. Its mission is to eliminate the preventable burden of diabetes through leadership, research, programs, and policies that translate science into practice. The Division's strategy has three major components:

- **Define the diabetes burden through public health surveillance:** The DDT works with states to monitor the diabetes epidemic through the nationwide, state-based diabetes surveillance system, the Behavioral Risk Factor Surveillance System (BRFSS), and is initiating surveillance systems within managed care organizations.
- **Conduct applied translational research:** The DDT focuses on translating research findings into clinical and public health practices. Areas of research include (1) access to quality care for diabetes; (2) early detection of undiagnosed diabetes; (3) cost-effectiveness of diabetes prevention and management activities; (4) effectiveness of health practices to address risk factors for diabetes; and (5) demonstration of primary prevention of type 2 diabetes.
- **Develop state-based Diabetes Prevention and Control Programs (DPCPs):** The DDT provides funding for 59 state and territorial based DPCPs across the nation. Developing state health department expertise in diabetes management, the DPCPs focus on community interventions, health communications, and health systems changes to prevent diabetes complications and to improve the health and quality of life for all people with diabetes. DPCPs translate promising science into practice to prevent the devastating complications of diabetes, especially in high risk and disproportionately affected populations.

Fighting Back with Education: The National Diabetes Education Program (NDEP)

NDEP is a public-private partnership sponsored by the NIH and CDC, with more than 200 member organizations. This joint initiative is designed to improve treatment and outcomes for people with diabetes and prevent diabetes in those at risk. NDEP provides information and education to the general public, people with diabetes and their families, health care providers, payers and purchasers of health care and health care policymakers.

DPCPs are making a positive impact:

Diabetes is the number one leading cause of adult onset blindness. Yet, many people with diabetes who are members of health plans are not able to receive frequent eye exams. If people with diabetes do not receive eye exams, they could suffer damage to the eye, leading ultimately to blindness.

The Utah DPCP partnered with nine health care plans to improve the quality of diabetes care for state residents, which includes implementing programs to measure diabetes complication testing, better identifying patients with diabetes, and providing diabetes patients with reminders to obtain clinical exams. Under the program, diabetes patient care has improved; and eye exam rates have increased more than the national rates. In addition to the eye exam intervention, participating plans have worked with the support of the Utah DPCP to successfully improve measures related to A1C, lipid, and hypertension in patients with diabetes.

→ **DIABETES FACT:** Between 1990 and 2001, diabetes prevalence in the U.S. increased by more than 60%.



Health Reform and Diabetes

Historically, it has been difficult for an individual to obtain health insurance when he or she has a pre-existing condition like diabetes. Before the passage of the Patient Protection and Affordable Care Act (PPACA) in 2010, it was perfectly legal to deny health insurance to people with diabetes or force them to pay more for coverage simply because they had diabetes. Even for people who had insurance coverage, plans did not always cover the most basic diabetes needs, leaving large expenses in addition to the cost of insurance.

Lack of access to affordable care, coupled with the possibility of being denied insurance altogether, led many patients with diabetes to forgo the care and medications needed to prevent or delay the progression of their disease – resulting in dangerous and costly complications, such as heart disease, amputation, blindness, and kidney disease.

PPACA represents a true milestone in diabetes care for people of all ages. For the first time, insurance companies are now prohibited from denying coverage or rescinding coverage because an individual has diabetes. It also allows young adults with diabetes, who are often forced to make important education or career decisions based on their opportunity to obtain insurance, to remain on their parents' insurance plans until age 26. Finally, it will define an essential package of health benefits that health plans will be required to offer to participate in the health care exchanges.

Implementation of PPACA will take the next several years. It is essential that the provisions of this landmark bill be maintained and that full implementation result in improved benefits at an affordable cost for all Americans with or at risk for diabetes.





Health Reform Making a Difference in the Lives of People with Diabetes

Sugene Tatman's son **Ryan**, age 21, was diagnosed with type 1 diabetes more than two years ago. He spent a week in the hospital after his diagnosis but was fortunately covered by his parents' insurance provided through his father's employer. Less than a year later, the employer terminated Ryan's health insurance, stating that coverage was only offered to children under the age of 18 or young adults who were full-time students. The family was able to get COBRA insurance for Ryan, but at \$600 per month it was quite expensive. Ryan's COBRA benefits ended last May, leaving him completely uninsured. Sugene called at least ten insurance companies, but says, "As soon as we said type 1 diabetes, they said 'we can't help you.'" Ryan went without health insurance until last August when his father's employer reinstated Ryan's insurance due to health reform. The law requires that children be permitted to stay on their parents' insurance until age 26. Sugene says, "Without the health care law, our son would not be able to go back on our insurance plan and we would be paying high costs for insulin and other supplies."

→ **DIABETES FACT:** If present trends continue, one in every three American adults will have diabetes in 2050.



Diabetes Can be Prevented or Delayed

National Diabetes Prevention Program

The Diabetes Prevention Program (DPP), a groundbreaking clinical trial performed by NIDDK found that individuals with prediabetes who engage in regular physical activity and lose 5-7% of their body weight can reduce their risk of developing type 2 diabetes by 58%. Further research done in coordination with Indiana University and the YMCA demonstrated that the results of the DPP can be replicated at the community level with much lower costs.

PPACA authorized a nationwide network of these community programs, now known as the National Diabetes Prevention Program (NDPP). Funding the NDPP will allow CDC to invest in the expansion of these community programs so they can reach more of the 79 million Americans with prediabetes.

This is a wise investment that not only stands to improve the health and quality of life for millions of people at risk for a deadly disease, but will provide significant long-term savings to our nation's health care system. In 2009, the Urban Institute reported that if the U.S. makes a substantial investment in this type of program, we can save an estimated \$191 billion over ten years in health care costs.

The Prevention Fund

PPACA also included a significant investment in chronic disease prevention by establishing a prevention fund to expand health and wellness programs and reduce the incidence of disease. The prevention fund, which provides \$15 billion over 10 years for proven disease prevention programs, is an opportunity to fund evidence-based prevention programs like the NDPP.

Obesity and Diabetes

Being overweight or obese is a leading modifiable risk factor for type 2 diabetes and rates of obesity are rising among adults and children. Recent data shows that 72% of men and 64% of women are overweight or obese, with a total of one-third of adults considered obese. Among children and adolescents, 32% of individuals ages 2-19 are overweight or obese, with a total of 17% of children considered obese. With healthy diets and active lifestyles, people can reduce their risks for obesity and type 2 diabetes.

The Preventive Health Partnership

The American Diabetes Association has joined the American Cancer Society and the American Heart Association to raise public awareness about what people need to do to achieve healthier lives. This preventive health partnership provides information and motivation about how overall wellness, better diet and regular exercise, can lead to the prevention of type 2 diabetes, heart disease and some forms of cancer.

Physical Activity and Education

Sedentary lifestyles contribute greatly to the burden of chronic diseases, including type 2 diabetes. In fact, scientific evidence shows a link between regular physical activity and long-term health benefits, including a reduced risk of type 2 diabetes.

In 2008, the U.S. Department of Health and Human Services (HHS) released its first physical activity recommendations. The guidelines recommend that adults get two and a half hours of moderate exercise every week to achieve health benefits and reduce the risk of type 2 diabetes, heart disease, stroke, and high blood pressure.

The guidelines also recommend children be active for at least one hour per day to achieve similar health benefits. Despite these clear recommendations, physical education programs are still being reduced or eliminated in many schools where children spend a large portion of their day. Schools should help children meet these health goals through strong physical education programs and opportunities for physical activity throughout the school day. Schools should also provide transparency for parents and government by reporting on how their programs compare to the recommended guidelines.

Nutrition

Healthy eating is essential for both children and adults in order to curb obesity and avoid type 2 diabetes and its many related complications. According to the most recent Dietary Guidelines for Americans, people who are most successful at maintaining a healthy weight consume only enough calories from foods and beverages to meet their needs and lead an active lifestyle. However, many Americans' diets exceed the recommended number of calories per day and lack the recommended number of nutrients. The Association is especially concerned that our children's diets are putting them at risk. Through our advocacy for the Healthy, Hunger Free Kids Act of 2010, legislation to reauthorize federal child nutrition programs, we worked to ensure that more school systems offer meals that meet nutritional standards and that schools provide more nutritious snacks and beverages. Our goal is for all children to have access to the foods that allow them to get the recommended daily nutrients.

Nutrition is important outside of schools as well. A provision within the PPACA requires chain restaurants to include calorie counts on menus and menu boards. Restaurants are also required to make other nutritional information, including carbohydrates, available upon request. This information allows people to make more informed, healthier food choices. Moreover, consumers with diabetes can make appropriate choices for managing their disease.

The Faces of Diabetes

Anni, unfortunately, represents one of the future faces of diabetes. Unless she and her parents make some dramatic changes in her lifestyle, Anni has a very high probability of developing diabetes. Since moving from China to the U.S. a decade ago, Anni has adopted an "American diet" of fast food, processed foods, and high-calorie treats. Even at school, the cafeteria relies heavily on foods high in fats, sugars and calories.

Asian Americans are acutely susceptible to type 2 diabetes. They develop it at far lower weights than people of other races; and at any weight are 60% more likely to get the disease than Caucasians. The fact that Anni's American lifestyle is far more sedentary is adding another risk factor for diabetes. The problem is compounded because her American school is one of many that has cut spending on physical education. Her fourth grade class has physical education just once a week.

DIABETES FACT: Every 17 seconds someone is diagnosed with diabetes.



Stem Cell Research Holds Great Promise for a Cure

Scientists from across the United States and throughout the world — including those at the American Diabetes Association — believe that stem cell research, especially human embryonic stem cell research, holds great promise in the search for a cure and better treatments for diabetes. Stem cell research allows scientists to better explore ways to control and direct stem cells so they can grow into other cells, such as insulin-producing cells.

There has already been great progress in this area. Important advances have already been made through human embryonic and adult stem cell research. For example, many of the genes involved in pancreatic development have been identified, and recent discoveries have allowed scientists to overcome the difficult task of getting stem cells to produce the necessary proteins in the correct sequence that will allow them to become insulin-producing islet cells. This research could lead to a cure for type 1 diabetes and power new tools for controlling type 2 diabetes. The Association supports all forms of stem cell research within a strong ethical framework.

As detailed in the April 2008 *Nature Biotechnology*, research has produced definitive evidence that human embryonic stem cells can generate a renewable supply of insulin-secreting cells.

In 2009, President Obama issued an Executive Order expanding federal funding of human embryonic stem cell research and establishing strict ethical guidelines for these studies. While the Executive Order significantly broadened opportunities for stem cell research, it is not set in federal statute, and is currently the subject of an ongoing court case challenging the expansion of funding for these studies. The Association supports legislation and proposals that protect and enhance funding for stem cell research.

With so many advances on the horizon, federal funding for stem cell research not only provides hope for a cure to patients with type 1 diabetes, but can yield improved treatment options for all people with diabetes as well.



Diabetes Disparities

Racial minorities have a higher prevalence of diabetes and are often less able to obtain the care they need to manage their disease. The American Diabetes Association supports legislation with the goal of eliminating health disparities and improving diabetes research, treatment and prevention in minority populations. With better knowledge of the causes and complications of diabetes, those at risk may be able to avoid this debilitating disease.

- 4.9 million African American adults, or 18.7 percent of all African Americans aged 20 years or older, have been diagnosed with diabetes.
- 11.8 percent of Hispanic Americans have been diagnosed with diabetes. Hispanic Americans have a 66% higher risk of diabetes compared to non-Hispanic whites.
- In Hawaii, Asian-Americans, Native Hawaiians and other Pacific Islanders, aged 20 years or older, are more than twice as likely to have diagnosed diabetes as whites after adjusting for population age differences.

American Indians and Alaska Natives (AIANs) have a diabetes mortality rate that is THREE TIMES HIGHER than that of the general U.S. population. This epidemic was first noticed in the 1970s; and despite the good efforts of the Indian Health Service (IHS), the prevalence of diabetes continued to rise in the 1980s and 1990s. 16.1 % of the adult population served by IHS has diagnosed diabetes.

Almost ten years ago, Congress showed foresight and commitment to the health of the AIAN population when it first authorized the Special Diabetes Program for Indians (SDPI) under the Balanced Budget Act of 1997. SDPI is an extremely important effort that has resulted in significant improvements in prevention and control within the AIAN population. The SDPI has given Indian health programs and tribal communities the resources and tools they need to prevent and treat diabetes. It funds more than 450 community-directed programs, allowing local tribes and health programs to set priorities that meet the needs of their people. SDPI also funds 66 projects on diabetes prevention, education and case management to reduce the risk for cardiovascular disease in diabetes patients. The program has played a major role in the fight against the diabetes epidemic in Indian communities; and it must continue and grow to meet the demands of the disease. The SDPI requires periodic joint congressional reauthorization. The American Diabetes Association extends its thanks to Congress for extending SDPI until September 2013.

Working to Eliminate Disparities: Our Minority Group Action Councils

The Association works with its minority diabetes action councils, known collectively as the Tri-Council to improve research, prevention and treatment of diabetes in minority populations. The African American Diabetes Action Council, Latino Diabetes Action Council and Asian Pacific American Action Council are distinguished panels of national and regional leaders, including health professionals, legislators, community leaders, and health industry representatives, who seek to assess and address the health disparities related to diabetes and provide qualified input and expertise to the Association on diabetes as it relates to and effects these minority communities.

DIABETES FACT: There were nearly 231,404 deaths attributed to diabetes and its complications in 2007. The age-adjusted incidence of diabetes increased 90% from 4.8 per 1,000 in 1995-1997 to 9.1 in 2005-2007.





For More Information About Diabetes

For more general information about diabetes, please call the American Diabetes Association at **1-800-DIABETES (1-800-342-2383)** or visit **www.diabetes.org**. Information from both these sources is available in English and Spanish. For more information about the ADA's legislative initiatives please contact 703-549-1500 ext. 2323.



 American Diabetes Association.

Join the millions.SM Together we can stop diabetes.[®]
Help us work to find a cure, improve access to health
care and protect the rights of people with diabetes.

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