

# SDPI

SPECIAL  
DIABETES  
PROGRAM FOR  
INDIANS

Together, We Fight **Diabetes**

For Our Ancestors, Our Communities, and Future Generations

# THE REALITY



The growing epidemic of diabetes represents one of our country's greatest public health challenges. According to 2007 Centers for Disease Control and Prevention (CDC) data, nearly 8% of the U.S. population has diabetes which puts them at increased risk for many complications including heart disease, stroke, kidney failure and blindness. In addition to the personal toll, diabetes places an enormous economic strain on our healthcare system. The estimated direct and indirect costs of diabetes in the U.S. in 2007 was \$174 billion [1].

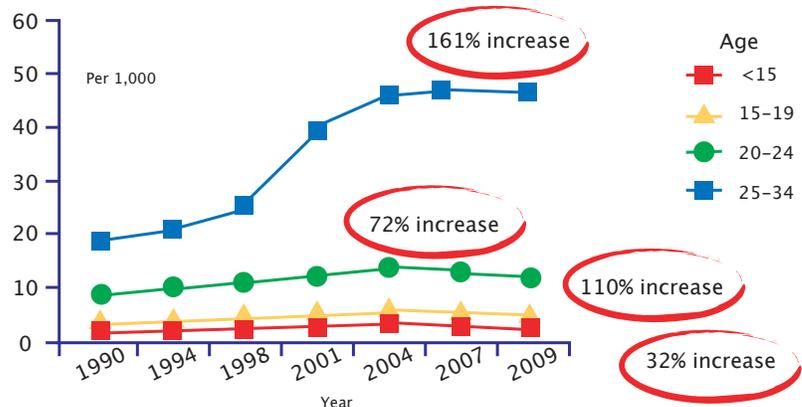
What may not be as widely known is that American Indians and Alaska Natives (AIANs) have the highest prevalence of diabetes among all U.S. racial and ethnic groups [2]. In some AIAN communities, more than half of adults aged 18 and older have diagnosed diabetes, with prevalence rates reaching as high as 60% [3]. Adding to these troubling statistics is the alarming rise of obesity and type 2 diabetes in AIAN young people.

**Between 1990-2009, among American Indians and Alaska Natives there was a 161% increase in diabetes in young people aged 25-34 years and a 110% increase in diabetes in youth aged 15-19 years.**

“Now we are faced with the coming tidal wave of people who got their diabetes at younger ages and who are getting, not one, but multiple complications. We now have many patients who cost the health care system a million dollars before they die of this disease. How much can quality clinical care address this burden? The SDPI gives us the chance to answer that question.”

Ann Bullock, MD, Fond du Lac Band of Ojibwe  
IHS Chief Clinical Consultant  
for Family Medicine  
Cherokee, North Carolina

Prevalence of diagnosed diabetes among AIAN children and young people by age group, 1990-2009



Source: IHS Diabetes Program Statistics

# THE RESPONSE

In response to this growing epidemic, **Congress established the Special Diabetes Program for Indians (SDPI) in 1997** as part of the Balanced Budget Act, with an initial investment of \$30 million per year for five years. The program is currently funded at \$150 million per year through 2011 and supports over 450 Indian Health Service, Tribal and Urban programs in 35 states.

2008	Congress extends SDP for an additional two years for each program at current funding level of \$150 million per year
2007	Congress extends SDP for an additional year for each program at current funding level of \$150 million per year
2004	Congress directs SDPI to initiate demonstration projects focused on diabetes prevention & cardiovascular disease risk reduction
2003	NIH Diabetes Prevention Program Study results provided scientific evidence type 2 diabetes can be prevented or delayed
2002	Congress extends SDP for an additional five years and increases funding for each program to \$150 million per year
2000	IHS establishes best practices based upon SDPI data
1998	Congress extends SDP for an additional three years and increases funding for each program to \$100 million per year Tribal Leaders Diabetes Committee created by Congress to guide IHS in development and administration of SDPI
1997	<b>Special Diabetes Program (SDP) consisting of Special Diabetes Program for Indians and Special Type 1 Diabetes Research Program created by Congress and \$30 million provided for each program for five years</b>
1996	American Diabetes Association created Awakening the Spirit national advocacy team
1986	Indian Health Service Standards of Care developed
1976	Indian Health Service National Diabetes Program created by Congress
1974	Diabetes Mellitus Interagency Coordinating Committee established by Congress
1963	National Institutes of Health (NIH) Pima Indian Study recognized diabetes epidemic among American Indians



“The SDPI is saving lives, saving dollars and turning the tide of diabetes in our communities. We must stay on this healthy path, maintain our momentum and continue to work together toward a diabetes free future.”

Buford Rolin, Chairman, Poarch Band of Creek Indians  
Co-Chairman, Tribal Leaders Diabetes Committee  
Atmore, Alabama

# THE RESULTS: CLINICAL

The results of the SDPI have been remarkable. Key clinical outcome measures - such as blood sugar control, cholesterol levels, and kidney function - have improved among AIAN populations. Best practices have been established in 19 topics that enable clinicians to implement programs in their communities that are based on findings from the latest scientific research, outcomes studies, and successful experiences of SDPI-supported programs. **Renewal of the SDPI will provide the resources for AIAN communities to continue to make clinical improvements and increase access to quality diabetes care.**



## Improved blood sugar levels

The mean blood sugar level (A1c) decreased 11% - from 9.0% in 1996 to 7.98% in 2009. The scientific research shows that a one-unit decrease in the A1c translates into a 40% reduction in diabetes-related complications such as blindness, kidney failure, nerve disease and amputations [3].

## Reduction in risk of cardiovascular disease

The mean total cholesterol level has decreased by 16% from 1997-2009, and mean LDL cholesterol ("bad" cholesterol) has been reduced 20%. Research has shown that lowering cholesterol levels may help reduce the chance of developing cardiovascular complications associated with diabetes such as heart attacks, stroke or heart failure [3].

## Slowed progression of diabetes-related kidney disease

The prevalence of protein in the urine (a sign of kidney dysfunction) was reduced by 32% between 1997-2009 [4]. New cases of diabetes-related dialysis in AIANs decreased 31% between 1999 and 2007, while remaining relatively unchanged in whites and blacks [5]. Preventing kidney failure is critical to preventing people with diabetes from needing dialysis or kidney transplants.

# THE RESULTS: COMMUNITY

Type 2 diabetes, once thought to be an adult disease, is increasing at an alarming rate in AIAN young people. The SDPI has enabled native communities to address this emerging public health crisis by providing critical resources for school and community-based interventions that focus on prevention early in life and continue throughout the lifespan, resulting in healthier environments for children and their families. **With ongoing support, the SDPI can continue to address the serious threat of type 2 diabetes to future generations by replicating successful programs in additional communities.**



## **Increased primary prevention and weight management programs for children and youth**

More than 80% of the SDPI grant programs use recommended public health strategies to provide diabetes prevention activities and services for AIAN children and youth. This represents a 73% increase in primary prevention and a 56% increase in weight management activities targeting children and youth.



## **Increased emphasis on adopting healthy lifestyle behaviors**

SDPI has resulted in a significant increase in the promotion of healthy lifestyle behaviors. Communities with SDPI-funded programs have seen a 57% increase in nutrition services, a 72% increase in community walking and running programs and a 65% increase in adult weight management programs.



## **Enhanced focus on American Indian and Alaska Native traditions**

SDPI has enabled tribal communities to demonstrate the effectiveness of the use of traditional beliefs and practices in the prevention and treatment of diabetes. Greater than 90% of grant programs report implementation of culturally appropriate diabetes education activities.

**R**enewal of the SDPI will enable the knowledge and expertise gained over the past 12 years to be disseminated and implemented throughout all American Indian and Alaska Native communities, and ensure continued measurable improvements in the prevention and treatment of diabetes.



“The SDPI is transforming the relationship between tribal communities and the federal government. This focused effort is enabling tribal communities to determine what is needed in their communities and implement science-based programs to effectively treat and prevent diabetes.”

H. Sally Smith, Yup'ik Eskimo  
Alaska Area Representative, National Indian Health Board  
Chair, Board of Directors, Bristol Bay Area Health Corporation  
Dillingham, Alaska



“This program taught me that my stroke in 2007 put me at high risk for another stroke. I’m really thankful for the Diabetes Program because it helps keep me focused on managing my diabetes and helps me to maintain a normal life.”

Glendine Blanchard, Absentee Shawnee Tribe of Oklahoma  
SDPI Healthy Heart Program Participant  
Shawnee, Oklahoma



“I have a sense of well being that I didn’t have before. I was diagnosed with pre-diabetes in 2007 and have a strong family history of diabetes and heart disease. This program has given me the education and support to know I’m not doomed to walk that path. I get to choose my own path.”

Arne Vainio, MD, Mille Lacs Band of Ojibwe  
SDPI Diabetes Prevention Program Participant  
Fond du Lac Human Services Diabetes Prevention Program  
Cloquet, Minnesota



[www.diabetes.org](http://www.diabetes.org)

National Indian  
Health Board



[www.nihb.org](http://www.nihb.org)

References:

[1] CDC National Estimates on Diabetes, 2007; [2] ADA website; [3] IHS Report to Congress, 2007; [4] IHS, DDTP Fact Sheet; [5] 2009 USRDS Atlas