

# South Dakota Diabetes State Plan



**2010 – 2013**



Dear South Dakotans:

Diabetes is a serious public health problem in our state and the number of South Dakotans who have the disease or are at-risk for it grows each year. Fortunately, we have the knowledge to combat this trend.

Research has clearly shown that diabetes can be prevented. In fact, lifestyle modifications such as proper nutrition and moderate exercise that leads to a 5-7% weight loss can reduce the risk of developing type 2 diabetes by as much as 60%.

We also know that education and proper care can help people with diabetes live long and healthy lives. Diabetes self-management education can teach people with diabetes to be proactive about their health, resulting in better health status and increased quality of life. Awareness of resources and access to care allows people with diabetes to obtain necessary services and prevent the complications that diabetes can bring.

This 2010-2013 strategic plan provides South Dakota with a blueprint for the collaborative prevention and control of diabetes. The department is grateful to its committed partners and fellow members of the South Dakota Diabetes Coalition who have helped develop this plan. It is our hope that the collaboration will continue as we work together to better manage the diabetes epidemic and improve the quality of life for the individuals and families affected by it.

Sincerely,

Doneen B. Hollingsworth  
Secretary of Health



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March 2010

Dear Fellow South Dakotans;

The South Dakota Diabetes Coalition (SDDC), comprised of organizations and individuals whose collective mission is “partnering to improve health outcomes of those affected by diabetes in South Dakota” has developed this strategic plan. It was a true collaborative effort with many members of differing perspectives coming together to determine how best to collaboratively reduce the burden of diabetes in South Dakota. The Coalition is grateful for the input provided by all those affected by diabetes. We realize it will take many people and many partners to reduce the burden that diabetes places on our state.

This strategic plan focuses on four priorities:

1. Empower the citizens of South Dakota to prevent type 2 diabetes.
2. Prevent the complications of diabetes.
3. Eliminate diabetes-related health disparities in South Dakota.
4. Increase the South Dakota Diabetes Coalition organizational capacity.

The SDDC is grateful for the partners who participate in the Coalition and its four Standing Committees and Coordinating Panel. Their time and expertise have and will continue to touch the lives of South Dakotans at-risk for and with diabetes.

Finally, the SDDC is grateful to the South Dakota Department of Health, particularly its Diabetes Prevention and Control Program, for sustaining funding and facilitating outcomes on behalf of South Dakotans affected by diabetes.

This plan provides an opportunity to impact the burden that diabetes places on South Dakota. Using a coordinated and collaborative approach which maximizes resources, we will create a healthier South Dakota. I wholeheartedly invite you to join us in such a worthy endeavor.

Sue Johannsen, PAC  
Chair, South Dakota Diabetes Coalition

# **South Dakota Diabetes State Plan 2010-2013**

**Published March 2010**

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## EXECUTIVE SUMMARY

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Diabetes is a serious disease that affects young and old, all ethnic backgrounds and both genders. Regardless of the type of diabetes, the disease takes a toll on the body if not self-managed properly. Although type 1 diabetes may come on suddenly, type 2 may take years for signs to become apparent. Regardless of the diagnosis of type, the result has a lifelong impact to the patient and their families.

The South Dakota Diabetes Coalition (SDDC) is a volunteer-based organization comprised of professionals and citizens who are passionate about preventing diabetes and empowering those with diabetes to successfully manage their health. Through the results of the *South Dakota State Diabetes Plan 2010 - 2013*, partners will provide resources and education to all those affected by diabetes. Surveillance shows 6.6% of South Dakotans 18 and older have been diagnosed with diabetes. This translates to 39,967 South Dakota adults with an additional 397 South Dakotans under the age of 18 with diabetes. A significant disparity exists with the Native American population who have higher rates than whites, 13.5% and 6.3% respectively. Equally as important, SDDC hopes to reach the estimated 13,322 South Dakotans who have undiagnosed diabetes and the 149,250 South Dakotans with prediabetes.

The following four strategic priorities poise SDDC and partner organizations to reduce the burden of diabetes in South Dakota.

- A.** Empower the citizens of South Dakota to prevent the development of type 2 diabetes through education, advocacy and partnerships.
- B.** Prevent diabetes-related complications in South Dakotans through provision of self-management tools.
- C.** Eliminate health care access disparities for South Dakotans with diabetes.
- D.** Increase the South Dakota Diabetes Coalition organizational capacity.

The following are core tenets or beliefs in developing the goals and objectives of the South Dakota Diabetes State Plan.

- 1.** Commitment to evidence-based models and materials from the Centers for Disease Control and Prevention (CDC) and other valid sources.
- 2.** Utilization and promotion of the “Recommendations for Management of Diabetes in South Dakota” provided to health care professionals.

Please join us in making a difference in the lives of South Dakotans with or at risk for diabetes.

## WHAT IS DIABETES?

Diabetes is a disorder of metabolism – the way the body uses digested food for growth and energy. Most of the food people eat is broken down into glucose, which is the form of sugar present in the blood. Glucose is the main source of fuel for the body. After digestion, glucose passes into the bloodstream, where it is used by cells for growth and energy. For glucose to get into cells, insulin must be present. Insulin is a hormone produced by the pancreas, a large gland behind the stomach.

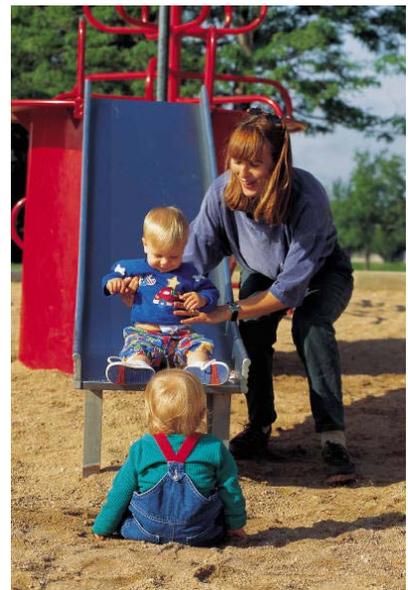


When people eat, the pancreas automatically produces the right amount of insulin to move glucose from blood into our cells. In people with diabetes, however, the pancreas either produces little or no insulin, or the cells do not respond appropriately to the insulin that is produced. Glucose builds up in the blood, overflows into the urine, and passes out of the body in the urine. Thus, the body loses its main source of fuel even though the blood contains large amounts of glucose.<sup>i</sup>

### *Type 1 Diabetes*

Type 1 diabetes is an autoimmune disease. An autoimmune disease results when the body's system for fighting infection (the immune system) turns against a part of the body. In diabetes, the immune system attacks and destroys the insulin-producing beta cells in the pancreas. The pancreas then produces little or no insulin. Since their bodies cannot produce insulin, a person who has type 1 diabetes must take replacement insulin either through injection or insulin pump daily to survive. At present, scientists do not know exactly what causes the body's immune system to attack the beta cells, but they believe that autoimmune, genetic, and environmental factors, possibly viruses, are involved. Type 1 diabetes accounts for about 5 – 10 percent of all diagnosed diabetes in the United States.

Although type 1 diabetes is most apt to develop in children and young adults, it can appear in individuals at any age. Symptoms of type 1 diabetes usually develop over a short period, although beta cell destruction can begin years earlier. Symptoms may include increased thirst and urination, constant hunger, weight loss, blurred vision, and extreme fatigue. If not diagnosed and treated with insulin, a person with type 1 diabetes can lapse into a life-threatening diabetic coma, also known as diabetic ketoacidosis.<sup>ii</sup> Risk factors for type 1 diabetes may include autoimmune, genetic, and environmental factors, possibly viruses.<sup>iii</sup> As these risk factors are not easy to mitigate, primary prevention efforts at present are not effective. Research for a cure is ongoing.



## **Type 2 Diabetes**

Type 2 diabetes results from insulin resistance (a condition in which the body fails to properly use insulin), usually combined with the body not producing enough insulin. Type 2 diabetes most often begins as insulin resistance, a disorder in which the pancreas produces enough insulin but for unknown reasons the body's cells are not using the insulin properly. After several years, as the need for insulin rises, the pancreas gradually loses its ability to produce insulin. Type 2 diabetes accounts for 90 to 95 percent of all diagnosed diabetes cases in the United States.

Risk factors for type 2 diabetes include:

- older age
- obesity
- family history of diabetes
- history of gestational diabetes
- impaired glucose metabolism
- physical inactivity
- race/ethnicity.



Native Americans, African Americans, Hispanic Americans, Asian Americans and Pacific Islanders are at a higher risk for type 2 diabetes as compared to other ethnicities. Type 2 diabetes is increasingly being diagnosed in children and adolescents.<sup>iv</sup>

The onset of type 2 diabetes is typically gradual, with little or no symptoms initially. Symptoms may include fatigue, increased thirst and hunger, frequent urination, weight loss, blurred vision, and slow healing of wounds or sores. Some people have no symptoms.<sup>v</sup> The risk of developing type 2 diabetes may be reduced through healthy nutrition choices and physical activity to prevent obesity.<sup>vi</sup>

## **Gestational Diabetes**

Gestational Diabetes is a form of glucose intolerance that is diagnosed in some women during pregnancy, even though they have had no known prior history of diabetes. Gestational diabetes is caused by the hormones of pregnancy or a shortage of insulin. As with type 2 diabetes, gestational diabetes occurs more often in some ethnic groups, among women with a family history of diabetes and obese women. If not controlled, gestational diabetes can cause the baby to grow extra large and lead to problems with delivery for the mother and the baby.

Gestational diabetes often can be controlled through diet changes and regular physical activity, but some women with gestational diabetes also must take insulin shots. In general, gestational diabetes requires treatment only during pregnancy. This form of diabetes usually disappears after the birth of the baby. Immediately after pregnancy, 5% to 10% of women with gestational diabetes are diagnosed with type 2 diabetes. Women who have had gestational diabetes have a 40% to 60% chance of developing diabetes in the next 5 – 10 years. The risk can be reduced by maintaining a healthy body weight.<sup>vii</sup>

### *Prediabetes*

Prediabetes is a condition in which individuals have blood glucose levels higher than normal but not high enough to be classified as diabetes. People with prediabetes have an increased risk of developing type 2 diabetes, heart disease, and stroke. Progression to diabetes among those with prediabetes is not inevitable. Studies have shown that people with prediabetes who lose weight and increase their physical activity can prevent or delay diabetes and return their blood glucose levels to normal. The Diabetes Prevention Program, a large prevention study of people at high risk for diabetes, showed that lifestyle intervention reduced developing diabetes by 58% during a 3-year period. The reduction was even greater, 71%, among adults aged 60 years or older. Interventions to prevent or delay type 2 diabetes in individuals with prediabetes can be feasible and cost-effective. Research has found that lifestyle interventions are more cost-effective than medications.<sup>viii</sup>

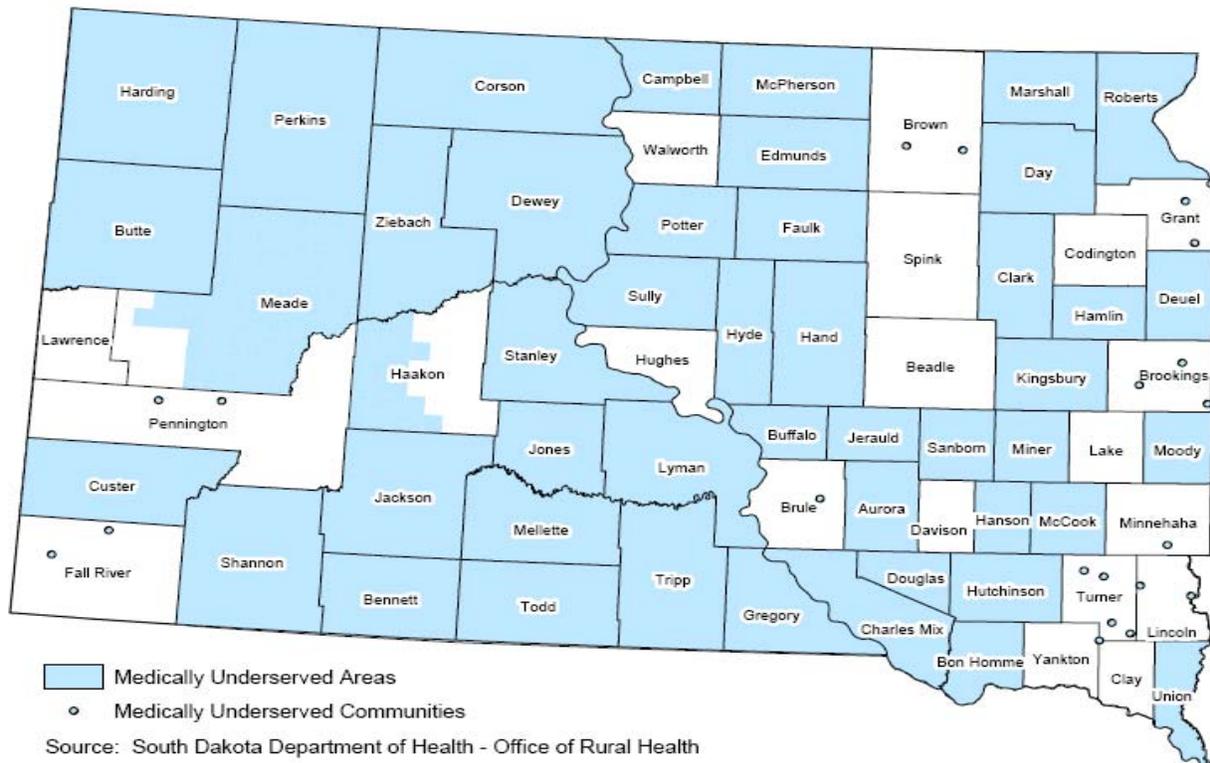


## BURDEN OF DIABETES IN SOUTH DAKOTA

### State Demographics

South Dakota is one of the least densely populated states in the nation with 804,194 people living within its 75,885 square miles for an average population density of 10.6 people per square mile. Nearly 60% of South Dakota's total population lives in small, rural communities of 5,000 or fewer people, with the majority of those communities consisting of less than 500 people. The population of South Dakota is predominantly non-Hispanic white with Native American being the largest minority, 88.2 % and 8.5%, respectively. The remaining 3.3% are classified as another race. Adults age 65 and older comprise 14.4% of the population which is higher than the national average of 12.8%. A total of 12.7% of South Dakotans live below 100% of the federal poverty level<sup>ix</sup> and five of the ten counties in the United States with the lowest per capita income are on South Dakota Indian reservations.<sup>x</sup> Access to primary care providers, diabetes educators and specialists is limited in the state with over two-thirds of the state designated by the federal government as Medically Underserved (Figure 1).<sup>xi</sup>

**Figure 1. Medically Underserved Areas of South Dakota**  
**SOUTH DAKOTA MEDICALLY UNDERSERVED AREAS**  
**March 2, 2009**



As of July 2008, 1,675 physicians practice in the State of South Dakota. Over half (55.3%) practice in an urban community (defined as having a population center of 50,000 or more). Of the remaining physicians, 4.1% practice in frontier communities (defined as having a population density of six or less persons per square mile) and 40.6% practice in a rural community (defined as a population density of more than six persons per square mile but no population centers of 50,000 or more).<sup>xii</sup>

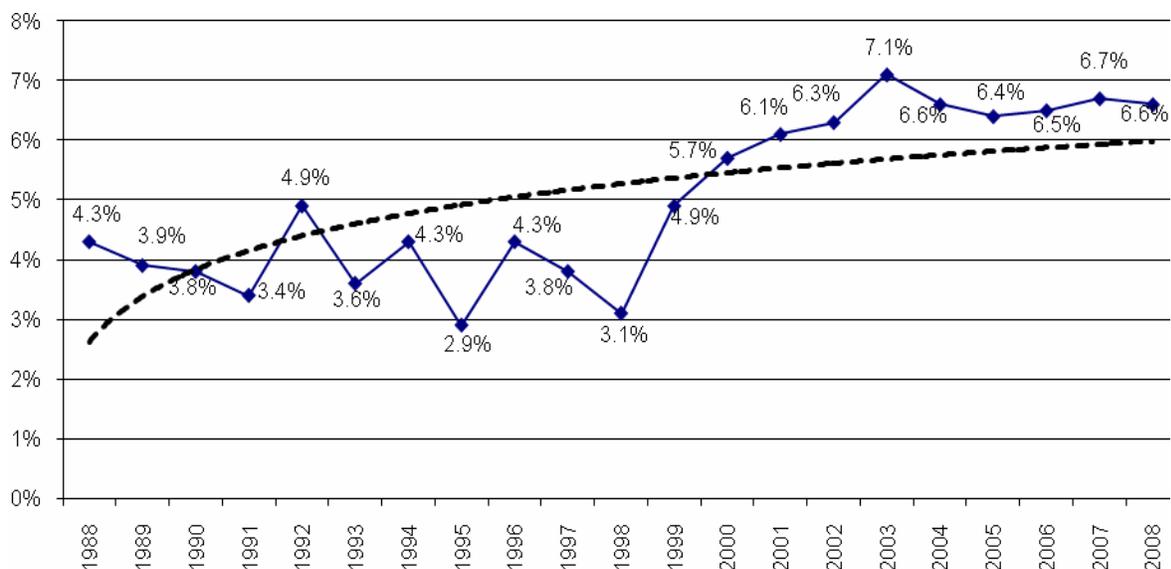
South Dakota has 49 general community hospitals, of which 38 are critical access hospitals, and three Veteran's Administration hospitals. There are also 27 federally qualified health center (FQHC) sites, 60 licensed rural health clinics,<sup>xiii</sup> a multitude of clinics associated with the Avera Health, Rapid City Regional, and Sanford Health systems as well as some private clinics. There are four Indian Health Service hospitals, seven service units,<sup>xiv</sup> and three Urban Indian Health Clinics. There are 27 Diabetes Self-Management Education (DSME) programs recognized by the American Diabetes Association, the Indian Health Service or the South Dakota Department of Health.<sup>xv</sup>

### Prevalence of Diabetes

According to the Centers for Disease Control and Prevention (CDC), 8.3% of the population in the United States (over 25.1 million people) has diabetes. The 2008 Behavioral Risk Factor Surveillance System (BRFSS) shows that 6.6%, or 39,967 of South Dakotans 18 and older, have been diagnosed with diabetes. National surveillance shows about 25% of people with diabetes are undiagnosed. Therefore 13,322 South Dakotans do not know they have diabetes.<sup>xvi</sup>

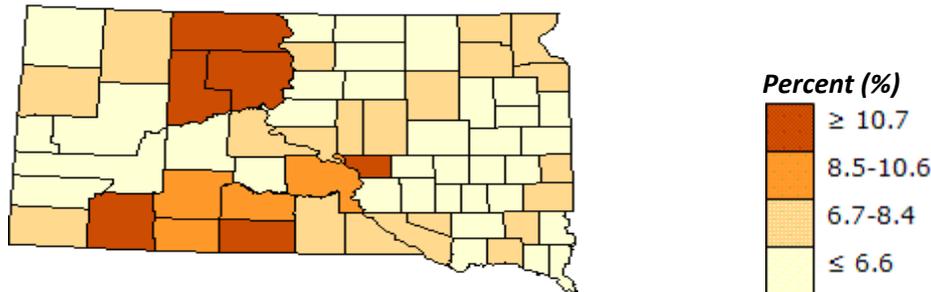
Diabetes prevalence rates in South Dakota, as in the United States, have increased gradually since the late 1980's. The number of people with diagnosed diabetes in South Dakota has increased 2.3 percentage points since 1988.

**Figure 2: Percent of BRFSS Respondents Told They Have Diabetes, 1988 - 2008**



In 2009, the CDC released estimates of diagnosed diabetes for all counties in the United States. Derived from BRFSS and census data, the estimates provide a clearer picture of areas within the state that have higher diabetes rates. See Figure 3.

**Figure 3: County Estimates of Diagnosed Diabetes – Percentage of Adults in SD, 2007**



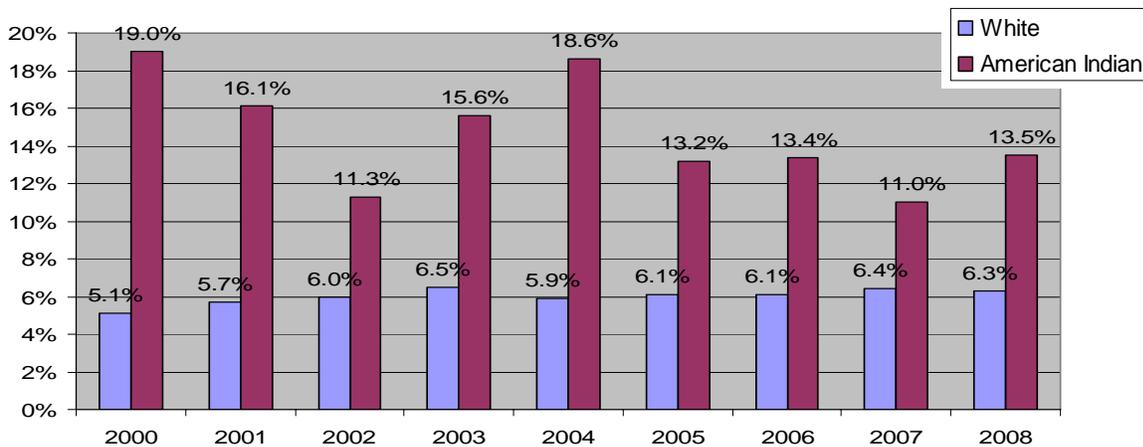
**South Dakota Statistics**

The *Burden of Diabetes in South Dakota*, available at <http://doh.sd.gov/Diabetes/Data.aspx>, is researched and published by the South Dakota Department of Health Diabetes Prevention & Control Program every year. The following is a summary of 2008 statistics<sup>xvii</sup>.

Prevalence of Disease

- Approximately 6.6%, 39,967, of South Dakota adults have been diagnosed with diabetes.
- A significant racial disparity exists as the prevalence of diagnosed diabetes in Native Americans in that 13.5% of the Native American population within the State of South Dakota have been diagnosed with diabetes, compared to 6.3% of whites.

**Figure 4: South Dakota Respondents Who Were Told They Have Diabetes, by Race 2000-2008**

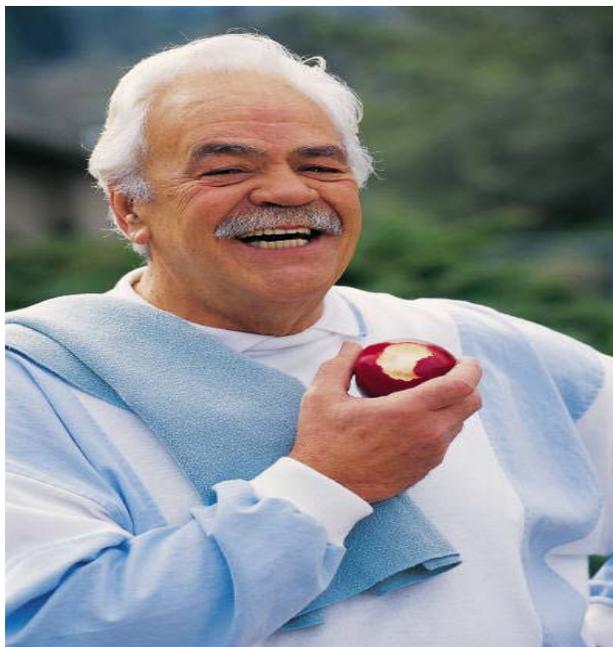


- An estimated 13,322 South Dakotans do not know they have diabetes.
- There are about 397 South Dakotans under 18 with diabetes. Because type 2 diabetes rarely develops in those under 18, the vast majority of these 397 kids have type 1 diabetes.
- South Dakotans aged 65 years or older are almost twice as likely to have been diagnosed with diabetes as persons aged 45 to 64 years.
- Analysis by the Centers for Disease Prevention and Control shows 25.9% of adults aged 20 years or older have prediabetes. Extrapolating this analysis to South Dakota shows about 149,250 adults have prediabetes.
- Of the estimated 25.9% of South Dakota adults with prediabetes, 5.4% have been told of their prediabetes status.

### Risk Factors

- Of South Dakota women who gave birth between August 2008 and January 2009, 0.4% had pre-existing diabetes and 5.1% developed gestational diabetes during the pregnancy.<sup>XIX</sup>
- Being overweight or obese places individuals at an increased risk for type 2 diabetes and other chronic diseases. Among South Dakota adults, 36.9% were overweight and an additional 28.1% were obese.
- Quality of life indicators among South Dakotans show people with diabetes are more likely to report poor physical and mental health as well as significant limitations to their usual activities. They also reported rates of disability with equipment needs three times higher than those without diabetes. Dissatisfaction with life is higher for people with diabetes when compared to those without diabetes, 11.8% versus 3.3%.

### Preventive Care and Disease Management



- In 2008, 65.6% of South Dakotans with diabetes had taken a course to learn about diabetes self-care.
- In 2007, 66.6% of South Dakotans with diabetes had been told by a health professional that they had high blood pressure.
- In 2007, 58.6% of South Dakotans with diabetes had been told they had high cholesterol.
- While South Dakota adults with diabetes are less likely than those without diabetes to be current smokers, 15.0% versus 17.5% respectively, the incidence is still quite high. The rate of South Dakotans with diabetes who use spit tobacco in 2008 was 2%.

- In 2008, 90.9% of South Dakotans with diabetes reported their A1c had been checked one or more times in the previous year.
- In 2008, 73.4% of South Dakotans with diabetes stated a health professional had checked their feet at least once in the previous year.
- In 2008, 75.1% of South Dakotans with diabetes stated they'd had a dilated eye exam in the previous 12 months and 19.0% had been told that diabetes had affected their eyes or they had retinopathy.
- In 2008, 80.6% of South Dakotans aged 65 and older with diabetes reported receiving a flu shot within the previous 12 months and 75.9% reported ever receiving a pneumococcal shot.
- In 2008, 63% of adults aged 18-64 with diabetes reported receiving a flu shot within the previous 12 months and 43% reported ever receiving a pneumococcal shot.

#### Cost of Care

- In 2008, 4.9% of South Dakota adults with diabetes had no health insurance.
- The per capita annual cost of health care for people with diabetes is calculated at \$11,744 a year, of which \$6,649 (57%) is attributed to diabetes.
- Outpatient training to help people self-manage their diabetes prevents hospitalizations. Every \$1 invested in such training can cut health care costs by up to \$8.76.
- Preconception care for women with diabetes leads to healthier mothers and babies. Every \$1 invested in such care can reduce health costs by up to \$5.19 by preventing costly complications.

#### Mortality

- There were 216 deaths directly attributed to diabetes in 2008 compared to 227 in 2004. A total of 1,189 deaths amongst South Dakota residents were attributed to diabetes from 2004-2008.
- Native Americans have a greater rate of potential life lost before the age of 75 per 100,000 than whites, 1,082 years and 129 years, respectively.
- Native Americans have a lower average age at death than whites, 64 years versus 81 years.



## PLAN PROCESS

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The South Dakota Diabetes Coalition (SDDC) initiated the 2010 – 2013 planning process in September 2009 at the annual Partners' Conference in Chamberlain, South Dakota.

*The Coalition standing work groups adopted three strategic priorities from the Centers for Disease Control and Prevention:*

1. Prevent diabetes.
2. Prevent complications from diabetes.
3. Eliminate disparities.

Following the September meeting, an independent consultant conducted an online survey that was distributed to all SDDC members and other key stakeholders. The survey instrument included a series of demographic, closed and open ended questions that prompted respondents to reflect on the state of diabetes education, management, and prevention in South Dakota.

The SDDC and the South Dakota Department of Health Diabetes Prevention and Control Program (DPCP) provided a list of individuals to interview based on their knowledge of the state of public or private health care in South Dakota. Interviews were conducted to assess underserved or un-served populations or service gaps, SDDC strengths and weakness and recommended models and priorities. Ten individuals representing diverse organizations including the Centers for Disease Control and Prevention provided feedback through the interview process.

Data from South Dakota surveys and research projects that were conducted between 2007 and 2009 was compared to the aforementioned survey and interview data to validate the conclusions. These sources include: South Dakota Burden of Diabetes Report, Behavioral Risk Factor Surveillance Survey, Link Survey Report, and South Dakota Diabetes State Plan Strategies Implementation Reports.

Other information from the DPCP and SDDC were also incorporated into the analysis. Strategic plans from Virginia, Kentucky, Michigan, North Carolina and Florida were reviewed and benchmarked against South Dakota. A special thank you is extended to those state representatives who provided advice and guidance.

In January and February 2010, the work groups came back together to develop the objectives, activities, timeline, and budget implications. The work groups will implement the plan beginning in April 2010.

During the course of the planning process, the Coordinating Panel initiated the effort to develop a charitable non-profit organization that would allow greater flexibility to provide services and raise sustainable funding. The South Dakota Department of Health Diabetes Prevention and Control Program has provided funding and provided resources to facilitate outcomes on behalf of the organization. Through the efforts of the SDDC members and partner organizations, SDDC is now ready to transition to a non-profit organization that will grow from its current foundation to an organization that South Dakota health care professionals and citizens can turn to for education, advocacy and awareness.

## SOUTH DAKOTA DIABETES COALITION (SDDC)

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### *SDDC History*

The South Dakota Diabetes Coalition (SDDC) is a group of over 60 diverse partners – health care professionals, advocacy groups, government agencies, tribal health representatives, persons with diabetes and concerned family members, quality improvement and wellness programs and many others. The roots of the SDDC are from the Diabetes Advisory Council founded in mid-1980s by the South Dakota Department of Health and its health care partners.

In 1999, the South Dakota legislature passed a bill providing reimbursement to Diabetes Self Management Education (DSME) programs recognized by the Department of Health or American Diabetes Association. By 2008, 65.6% of South Dakotans diagnosed with diabetes attended DSME, compared to 57.7% nationally. DSME is an evidence-based practice by which people with diabetes learn about the disease and how it can be controlled.

In 2004, the Diabetes Prevention and Control Program contracted with University Partners in Health Promotion at South Dakota State University to conduct an analysis and evaluation of the 10 Essential Public Health Services related to diabetes in South Dakota.



The evaluation determined the need to develop a South Dakota diabetes state plan and involve additional partners to impact diabetes prevention and control services in South Dakota. Stakeholders revealed a readiness to take steps to improve infrastructure, to collaborate with other entities, and to, as a result, reduce the burden of diabetes in South Dakota.

The top priority identified by the assessment was “mobilizing community partnerships and action to identify and solve health problems.” To this end, work groups comprised of more than fifty stakeholders developed the *South Dakota Diabetes State Plan 2007 – 2009* which was released in March 2007. Concurrent to the planning process, the SDDC was formalized. The Coalition set as its mission to “reduce the economic, social, physical, and psychological impact of diabetes in South Dakota by improving access to care and enhancing quality of services.”

While the plan was being developed, Wellmark Foundation, the philanthropic arm of Blue Cross/Blue Shield of Iowa and South Dakota granted a total of \$107,500 to the South Dakota Department of Health Diabetes Prevention and Control Program for the South Dakota Diabetes Coalition collaborative work.

Since 2007, the South Dakota Diabetes Coalition has evolved and is comprised of four work groups: Advocacy, Patient Education, Professional Education and Public Awareness. Operating guidances continue to provide structure for the Coalition and its Coordinating Panel. *SDDC Connections*, a quarterly newsletter, provides updates to the members while the webpage hosted

by the South Dakota Department of Health has links to reliable resources. An annual Partners' Conference has provided a venue for professional development, networking and work group collaboration.

At the Partners' Conference held in September 2009, the SDDC partners celebrated completion of two-thirds of its objectives from the 2007 – 2009 plan. Education tools, surveillance, advocacy, media campaign and capacity improvement were just a few examples of accomplishments. A significant outcome was the understanding that each member impacts the public's health related to diabetes and collaborations can further that impact.

### *SDDC Future*

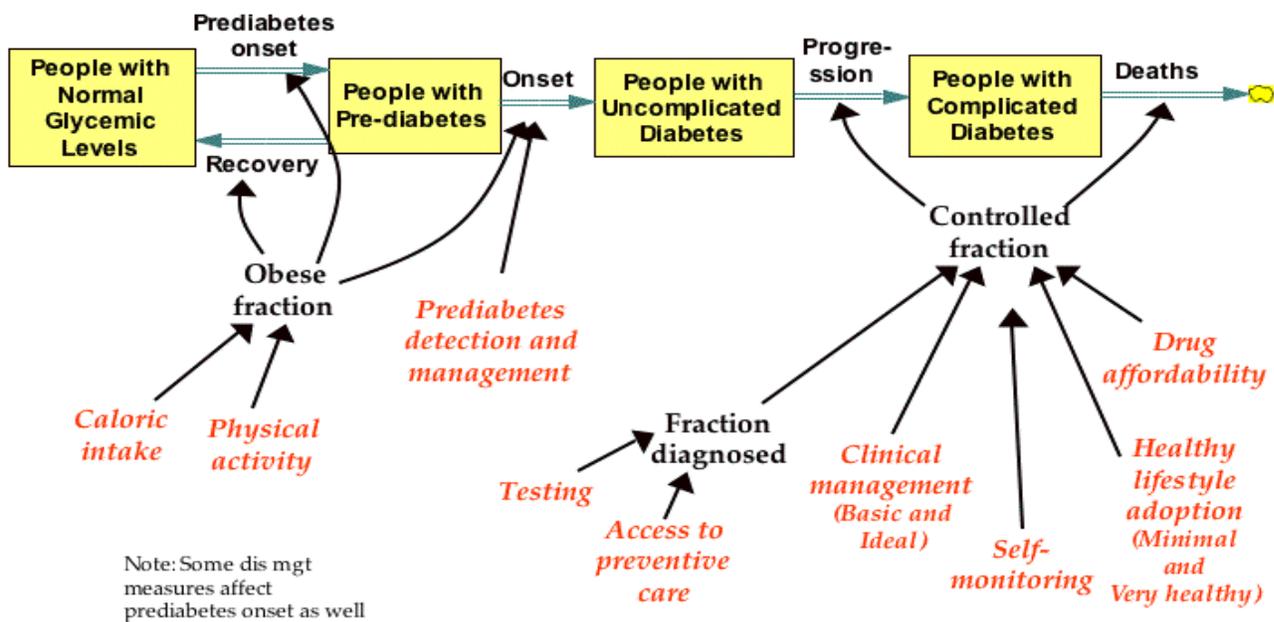
Given the solid foundation built by SDDC and its affiliates, the time is right for SDDC to transition to an organization that South Dakota health care professionals can turn to for diabetes patient and professional education, advocacy and awareness. The *South Dakota State Diabetes Plan 2010 – 2013* positions the organization for success and sustainability.

One of the strategic priorities is to increase the organization's capacity by becoming an independent charitable and educational organization. This new chapter will present challenges to SDDC members and partners. We are confident we will grow through this experience and our audiences will benefit from the flexibility it will allow to provide services and information. In the future, look for a new website with tools and links, professional, patient and public education opportunities, and collaborative efforts with other like-minded organizations such as Healthy South Dakota.

The *South Dakota State Diabetes Plan 2010 – 2013* objectives continue to reflect the mission of “partnering to improve health outcomes of those affected by diabetes in South Dakota.” The plan sustains focus on reducing complications for those who have been diagnosed with diabetes. The plan also introduces two new strategic priorities: prevention of diabetes and elimination of health care disparities. The results of the strategic planning research overwhelmingly emphasized the need to add a prediabetes focus to the Coalition's efforts. Applying Systems Dynamic Modeling (Figure 5) to the findings of the Diabetes Prevention Project shows that intervention at the point of prediabetes will lower the incidence of type 2 diabetes by 58%.<sup>xviii</sup> An additional benefit is reduction in the incidence of heart disease and stroke. Advocacy and awareness capacity to reduce and eliminate health care disparities for South Dakotans with or at risk for diabetes will evolve through education collaborations with state and national organizations.

Figure 5: Diabetes Systems Dynamic Model

## The Diabetes Population Flows Map



## Mission, Vision and Strategic Priorities

<b>SOUTH DAKOTA DIABETES COALITION</b>	
<b>MISSION</b>	
<b>Partnering to improve health outcomes of those affected by diabetes in South Dakota.</b>	
<b>VISION</b>	
<b>A dynamic and sustainable diabetes coalition impacting diabetes in South Dakota.</b>	
<b>WORK GROUP ROLES</b>	<b>STRATEGIC PRIORITIES</b>
<p><b>ADVOCACY:</b> This group actively seeks to support diabetes prevention, control, and policy development. This group provides a voice to persons affected by diabetes in South Dakota.</p> <p><b>PATIENT EDUCATION:</b> This group promotes quality patient education programs, products, and practices to coalition members, health care providers, and communities to establish “best practices” and shared learning opportunities in diabetes education.</p> <p><b>PROFESSIONAL EDUCATION:</b> This group actively seeks to promote access to quality diabetes related knowledge development to healthcare professionals in South Dakota.</p> <p><b>PUBLIC AWARENESS:</b> This group actively seeks to reduce the risk of diabetes by promoting public awareness of healthy lifestyle choices, identification of risk factors and preventive health screenings.</p>	<p>A. Empower the citizens of South Dakota to prevent the development of type 2 diabetes through education, advocacy and partnerships.</p> <p>B. Prevent complications of South Dakotans who have been diagnosed with diabetes by providing them self-management tools.</p> <p>C. Eliminate health care access disparities for people who have diabetes in South Dakota.</p> <p>D. Increase the South Dakota Diabetes Coalition organizational capacity.</p> <p style="text-align: center;"><b>TENETS</b></p> <p>The following are core tenets and beliefs in developing the goals and objectives of the South Dakota Diabetes State Plan.</p> <ol style="list-style-type: none"> <li>1. Commitment to evidence-based models and materials from the Centers for Disease Control and Prevention and other valid sources.</li> <li>2. Utilization and promotion of the “Recommendations for Management of Diabetes in South Dakota” provided to health care professionals.</li> </ol>

**Figure 6:** South Dakota Diabetes Coalition Mission & Vision

## STRATEGIC PRIORITIES



**PRIORITY A – Prevent Diabetes**  
**Empower the citizens of South Dakota to prevent the development of type 2 diabetes through education, advocacy and partnerships.**

**Objective A.1. Increase public awareness of prediabetes risk factors and how nutrition and physical activity can mitigate the onset of type 2 diabetes. Disseminate 25 “workshops-in-a-box” by September 2011 to adult audiences.**

**Activities:**

A.1.1	Develop a presentation template and take-home materials to be delivered to public audiences.	September 2010
A.1.2	Test the literacy level and cultural sensitivity of the presentation and take-home materials.	November 2010
A.1.3	Conduct three dry run focus groups with gender, age and ethnic background diversity to test content. Incorporate feedback into materials.	March 2011
A.1.4	Design the “workshop-in-a-box” package which includes master high quality presentation slides, trainer script, and take-home materials.	April 2011
A.1.5	Recruit trainers to present materials.	April 2011
A.1.6	Identify the target audiences to disseminate workshops such as service organizations, county extension agents, public libraries, non-profit service groups and other venues to distribute public health education.	April 2011
A.1.7	Market “workshops-in-a-box” in the context of Objective D.2.	June 2011
A.1.8.	Conduct at least 25 workshops for public audiences defined in A.1.6.	September 2011
A.1.9.	Disseminate “workshop-in-a-box” packages per requests and through Coalition members.	Ongoing
A.1.10	Produce a script for a DVD that can be used in public venues to increase awareness of prediabetes risk factors.	September 2011
A.1.11	Test the literacy level and cultural sensitivity of the script.	November 2011
A.1.12	Conduct three dry run focus groups with gender, age and ethnic background diversity. Incorporate feedback into materials.	March 2011
A.1.13	Work with a video producer to produce the DVD to be included in the workshop-in-a-box materials to replace presentation materials.	April 2011
A.1.14	Assess if the workshops are effective. Determine if more workshops should be updated and continued.	February 2012

**Objective A.2. Increase health care professionals' capacity to recognize signs of prediabetes and diabetes and subsequently assist patients to manage their health.**

**Activities:**

A.2.1	Develop learning objectives for professional education programs including but not limited to signs of prediabetes, diabetes, prevention/control measures such as behavior modification/medication use for weight loss, preventive service acquisition and complication avoidance, and health care cost impact. Tie to collaborative opportunities with Healthy South Dakota and other partners.	October 2010 and yearly thereafter
A.2.2	Complete professional meeting inventory with dates and locations of target provider educational sessions.	October 2010 and yearly thereafter
A.2.3	Secure qualified speakers.	October 2010 and yearly thereafter
A.2.4	Investigate webinar options and if feasible, coordinate webinar logistics.	October 2010 and yearly thereafter
A.2.5	Deliver a minimum four presentations per year to health care providers.	Annually
A.2.6	Develop and implement qualitative and quantitative evaluation tools to measure learning.	Annually



**Objective A.3. Collaborate with partner and synergistic organizations to reduce prediabetes risk factors such as obesity, poor nutrition and lack of physical activity by providing resource materials or speakers at their events or for their projects. Develop 2 - 4 working collaboration(s) by year-end 2013.**

**Activities:**

A.3.1	Identify potential collaborative partners. Contact and determine synergistic activities.	September 2010
A.3.2	Collaborate with the HealthySD program and partners to implement objectives and determine synergistic activities. <ul style="list-style-type: none"> <li>- Provide resource materials regarding risk of prediabetes as a result of lack of physical activity, poor nutrition and obesity.</li> <li>- Through professional education, connect the health care community with preventive efforts of Healthy South Dakota.</li> </ul>	April 2011

**The South Dakota Department of Health’s HealthySD Program and its partners work to promote and increase opportunities for physical activity and healthy eating to prevent and obesity and other chronic diseases. The 2010-2015 *State Plan for Nutrition and Physical Activity to Prevent Obesity and Other Chronic Diseases*, available at [www.HealthySD.gov](http://www.HealthySD.gov), focuses on five key goals:**

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- ✓ Provide healthy environments for children and promote physical activity and healthy eating.
- ✓ Provide opportunities for youth to learn and practice skills which lead to a lifetime of physical activity and healthy eating.
- ✓ Promote healthy lifestyles and reduce chronic disease in South Dakota workplaces through healthy eating and physical activity.
- ✓ Promote healthy lifestyles and reduce chronic disease in South Dakota communities through healthy eating and physical activity.
- ✓ Increase support for physical activity and healthy eating within South Dakota health care systems and among health care providers in order to achieve a healthy Body Mass Index (BMI) for all South Dakotans.



## **PRIORITY B – Prevent Complications**

**Prevent complications in South Dakotans who have been diagnosed with diabetes by providing them self-management tools.**

**Objective B.1. *Research evidence-based educational materials and models that teach patients how to self-manage their disease and mitigate the risk of complications. Develop impactful, easy-to-understand, and consistent messages that will be deployed through the SDDC website, physician offices and through public service announcements.***

### **Activities:**

B.1.1	Agree on consistent messages and target audiences.	July 2010
B.1.2	Post links and tools on the SDDC web site.	August 2010
B.1.3	Develop third party literature guidelines to assist clinicians to determine what literature is evidence-based to give to their patients. Post on the SDDC website.	August 2010
B.1.4	Develop one to three templates for public service announcements.	October 2010
B.1.5	Produce a script for a DVD that can be used in physician offices to coach patients on diabetes self-management and health checks required to mitigate the risk of complications.	September 2010
B.1.6	Test all materials and scripts to determine if it is culturally and linguistically appropriate for limited English proficient populations.	November 2010
B.1.7	Conduct three dry run focus groups to review materials. Incorporate feedback into materials.	March 2011
B.1.8	Work with a video producer to produce the DVD.	April 2011
B.1.9	Develop and employ a marketing strategy in conjunction with the Public Awareness workgroup. See objective D.2.	April 2011
B.1.10	Assess if the DVD and public service announcements are effective. Establish a plan to continue development of resource materials.	February 2012

**Objective B.2. Increase professional knowledge regarding all forms of diabetes and provide tools through at least one website and one base presentation so they may deliver consistent messages regarding self-management and preventive services.**

**Activities:**

B.2.1	Develop learning objectives for professional education programs including but not limited to signs of prediabetes, diabetes, prevention/control measures such as behavior modification/medication use for weight loss, preventive service acquisition, medication, complication avoidance, and health care cost impact.	October 2010 and yearly thereafter
B.2.2	Complete professional meeting inventory with dates and locations of target provider educational sessions.	October 2010 and yearly thereafter
B.2.3	Complete a needs assessment to determine opportunities to improve professional education related to prevention and control of complications by examining preventive service data and identifying target areas.	October 2010 and yearly thereafter
B.2.4	Secure qualified speakers.	October 2010 and yearly thereafter
B.2.5	Investigate webinar options and if feasible, coordinate webinar logistics.	October 2010 and yearly thereafter
B.2.6	Deliver a minimum four presentations per year to health care providers.	Annually
B.2.7	Engage endocrinologists by providing opportunities to have them address their peers.	Ongoing Begin Q4 2010
B.2.8	Support evidence-based practice by ensuring materials produced and endorsed by the Coalition are consistent with the evidence-base.	Ongoing Begin Q4 2010
B.2.9	Work with South Dakota Department of Health Diabetes Prevention and Control Program to update educational material links and resources on their website.	Ongoing Begin Q4 2010
B.2.10	Develop and employ a marketing strategy in conjunction with Public Awareness. See objective D.2.	April 2011



**PRIORITY C – Eliminate Disparities**

**Eliminate diabetes related health care disparities for people with diabetes in South Dakota.**

**Objective C.1. Track legislation, regulation, and insurance reforms to anticipate effect on people with diabetes and health care provision. Inform Coalition members at least quarterly and provide providers and public updates via website.**

**Activities:**

C.1.1	Track the health care reform and other applicable regulations and their impact to diabetes providers and patients. Update target audiences via website.	Ongoing Begin Q4 2010
C.1.2	Benchmark other states to determine how they advocate for those diagnosed from diabetes and health care providers.	March 2011
C.1.3	Examine South Dakota’s relationship with the American Diabetes Association (ADA) and Juvenile Diabetes Research Foundation (JDRF). Determine plan forward.	September 2010
C.1.4	Report on compliance of American Diabetic Association guidelines of preventive care such as A1c, dilated eye examinations, foot examinations, lipid panel check and kidney check. Compare insurance claims to the national standards. Validate self-reported measures such as the Behavioral Risk Factor Surveillance Survey.	Ongoing Begin Q3 2010
C.1.5	Drive patient behavior to increase preventive care measures by informing them what testing their insurance or Medicare/Medicaid will reimburse.	July 2011





**PRIORITY D – Increase Capacity**

**Increase the South Dakota Diabetes Coalition organizational capacity.**

**Objective D.1. Investigate the requirements and consequences of becoming a 501(c)3 charitable organization. Report a summary and action plan to the Coalition. File for a 501(c)3 status by December 2010.**

**Activities:**

D.1.1	Investigate the requirements and consequences of becoming a 501(c)3 charitable organization.	July 2010
D.1.2	Complete analysis of other states’ organizational designs to determine best options for organizational design to meet intentions of coalition partners.	July 2010
D.1.3	Poll Coalition partners to determine level of interest to engage in leadership and development of a nonprofit organization.	May 2010
D.1.4	Assess - through interviews, consultations, and direct interviews - the level of interest of organizations, provider groups, healthcare industry groups, state government, individuals, and businesses to provide active support for formalized organizational groups.	August 2010
D.1.5	Complete a search for any national advocacy/education groups targeting diabetes related issues to assess affiliation options. Coordinate with Activity C.1.3.	September 2010
D.1.6	Report a summary and action plan to the Coalition at the September 2010 meeting. Go/no go decision.	September 2010

**Objective D.2. *Develop a recognizable branding and marketing strategy that is known by South Dakotans with diabetes, their families, and health care providers. Develop a ‘go-to’ website where resources developed via above objectives can be stored and utilized. Produce print and video tools the Coalition can utilize to market its services to public, patient, and provider target audiences.***

**Activities:**

D.2.1	Set up a South Dakota Diabetes Coalition website to be utilized by patients, professionals and Coalition members.	September 2010
D.2.2	Complete a brand study to determine current trademarks, brands, and identities currently being used in South Dakota.	September 2010
D.2.3	Using established mission, vision, values and goals of the organization, develop a branding strategy for the organization detailing the key “area of presence” the organization wishes to exploit.	April 2011
D.2.4	Seek approval to link to CDC, state government, major health systems, and other systems to broaden electronic access to program related goals for South Dakotans.	September 2011
D.2.5	Develop a comprehensive marketing plan for the organization outlining goals, activities, and budget for marketing plan implementation. See objective B.2	April 2011



**Objective D.3. *By September 2010, secure a sustainable funding base and identify project-based funding sources.***

**Activities:**

D.3.1	Develop a proposal for membership dues on a “tier level” basis. Consideration for individual, consumer, organizational, systems, and related membership offerings should be made.	September 2010
D.3.2	Develop a detailed marketing/sales tool outlining member benefits.	September 2010
D.3.3	Develop a detailed grants/donor/sponsor search to support mission, values, and programs of the organization.	September 2010
D.3.4	Develop a start-up budget for infrastructure development and sustainability planning.	September 2010
D.3.5	Design and create a comprehensive development plan for ongoing operations to include funding for support staff.	February 2011
D.3.7	In concert with branding and marketing strategy, develop membership recruitment materials and systems including electronic registration and donor giving.	June 2011
D.3.6	Invest in needed donor software and membership management software to support the development strategy.	September 2011
D.3.8	Structure goals and evaluation strategies for measuring success of development efforts.	September 2011
D.3.9	Develop a grants strategy and plan for the organization to support ongoing program development and implementation efforts.	September 2011



## IMPACT MEASURES

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Progress will be evaluated using the measures listed below. The baseline represents the latest statistic or status available at the time of the planning process. The goal is the desired outcome by the end of the planning period, 2013.

### STRATEGIC PRIORITY A – *Prevent Diabetes*

#### Objective

<b>A.1/A.2</b>	<i>Goal:</i> Increase prediabetes screening. <i>Baseline:</i> Approximately 25.9% South Dakota adults have prediabetes and 5.4% know their prediabetic status (2008 BRFSS).
<b>A.3</b>	<i>Goal:</i> Decrease the percentage of South Dakota adults that are overweight or obese. <i>Baseline:</i> 36.9% of South Dakota adults are overweight and an additional 28.1% are obese (2008 BRFSS).
<b>A.3</b>	<i>Goal:</i> Decrease the percentage of South Dakota children that are overweight or obese. <i>Baseline:</i> 17.0% of South Dakota children are overweight and an <i>additional</i> 16.6% are obese (2008-2009 School Height/Weight Report).
<b>A.3</b>	<i>Goal:</i> Increase the percentage of South Dakota adults that engage in leisure time physical activity. <i>Baseline:</i> 26.9% of South Dakota adults engaged in leisure moderate physical activity (2008 BRFSS).

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## STRATEGIC PRIORITY B – *Prevent Complications*

### Objective

#### B.1/B.2

*Goal:* Sustain rates of preventive service rates at 2008 rates.

*Baseline:* In 2008, 66.6% of people with diabetes had taken a course to learn about diabetes self-care.

In 2008, 90.9% of adults with diabetes reported their A1c had been checked one or more times

In 2008, 73.4% of adults with diabetes stated a health professional had checked their feet at least once in the previous year.

In 2008, 75.1% of adults with diabetes stated they had a dilated eye exam in the previous 12 months and 19.0% had been told that diabetes had affected their eyes or had retinopathy.

In 2008, 80.6% of adults aged 65 and older with diabetes reported receiving a flu shot within the previous 12 months and 75.9% reported ever receiving a pneumococcal shot.

In 2008, 63% of adults aged 18 – 64 with diabetes reported receiving a flu shot within the previous 12 months and 43% reported ever receiving a pneumococcal shot.

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## STRATEGIC PRIORITY C – *Eliminate Disparities*

### Objective

#### C.1

*Goal:* Increase the percentage of South Dakotans with diabetes who are insured.

*Baseline:* 4.9% of South Dakotans with diabetes do not have health insurance.





## **STRATEGIC PRIORITY D – *Increase Organizational Capacity***

### **Objective**

<b>D.1</b>	<p><i>Goal:</i> Establish organizational structures with authority to develop resources, build and execute plans and programs, and actively advocate for access to resources in the state.</p>
	<p><i>Baseline:</i> A coalition with informal membership, established work groups working together to identify and meet needs in three important areas of diabetes: prevention, education, and supports.</p>
<b>D.2</b>	<p><i>Goal:</i> Establish an intentional commitment and execution of diabetes related awareness, education, and support provided to South Dakotans using a variety of electronic, direct access, and print resources.</p>
	<p><i>Baseline:</i> Loosely-formed coalition delivering awareness, education, and related supports for South Dakotans at-risk-for and with diabetes.</p>
<b>D.3</b>	<p><i>Goal:</i> Secure sustainable funding to support the infrastructure and key program goals of a free-standing advocacy organization addressing diabetes issues in South Dakota.</p>
	<p><i>Baseline:</i> A commitment to deliver awareness, education, and supports in the area of diabetes.</p>

## APPENDIX A – DEFINITION OF TERMS

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**A1c:** (Hemoglobin A1c or HbA1c) A blood test that measures a person's average blood glucose (sugar) level for the 2-3 month period before the test. Because it provides an indication of blood glucose management over time, this test is very valuable in determining overall diabetes management effectiveness.

**Behavioral Risk Factor Surveillance System (BRFSS):** The BRFSS is a cross-sectional random-digit dialed telephone survey of a sample of non-institutionalized adults (age 18 years and older) conducted annually in all 50 states, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands, in collaboration with the Centers for Disease Control and Prevention (CDC). This ongoing data collection effort examines the health behaviors of adults and provides national and state data on trends on a wide variety of health-related topics, including diabetes, tobacco and alcohol use, physical activity, diet, weight control, health insurance, and the use of preventive and other health care services. More information is available online at <http://www.state.sd.us/doh/Stats>.

**Benchmark:** A point of reference or standard by which something can be measured, compared, or judged, as in “benchmarks of performance.”

**Blood Glucose:** The main sugar that the body makes from food we eat. Glucose is carried through the bloodstream to provide energy to all of the body’s living cells. The cells cannot use glucose without the help of insulin.

**Blood Pressure:** The force of the blood against the artery walls. Two levels of blood pressure are measured: the highest, or systolic, occurs when the heart pumps blood into the blood vessels, and the lowest, or diastolic occurs when the heart rests.

**Centers for Disease Control and Prevention, Division of Diabetes Translation:** The Division is part of the National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services (DHHS). The mission of the Division of Diabetes Translation is to eliminate the preventable burden of diabetes through leadership, research, programs, and policies that translate science into practice.

**Community:** Defined in this document as a social unit usually encompassing a geographic area (such a town, neighborhood or housing complex), shared characteristics (such as ethnicity, age, gender, occupation, culture or history), or common interest (such as an activity or health condition) typically convened for the purpose of benefiting members while addressing a need or providing a service.

**Complications:** Conditions that can result from diabetes that is not controlled. Complications can also be considered secondary health problems. The most common are lower extremity amputations, kidney failure, blindness, premature death, stroke, heart disease, congenital malformations, perinatal death, and long- and short-term disability.

**Diabetes:** The short name for the disease called diabetes mellitus. Diabetes results when the body cannot use blood glucose as energy because of having too little insulin or being unable to use insulin properly.

**Diabetes Self-Management Education:** Instruction about nutrition, exercise, medications, blood glucose monitoring, and emotional adjustment to help people control their diabetes and make healthy lifestyle choices.

**Gestational Diabetes:** A form of glucose intolerance that is diagnosed in some women during pregnancy, even though they have had no known prior history of diabetes.

**Health Care Provider:** Physicians, physician assistants, nurse practitioners, Certified Diabetes Educators, nurses, and other allied health professionals.

**Health Care System:** A system comprised of the organizations, institutions, and resources that are devoted to producing a health action, whether in personal health care or in public health services, whose primary purpose is to improve the health of the general population or a specified and recognized segment of the general population. In South Dakota, the primary health care systems are Avera, Community Health Centers, Indian Health Service, Rapid City Regional, Sanford, and the Veteran's Health Administration.

**Incidence:** How often a disease occurs; the number of new cases of a disease among a certain group of people over a specific period of time (e.g., one year).

**Insulin:** A hormone produced by the pancreas that helps the body use glucose (sugar) for energy.

**Morbidity:** A descriptive measurement of sickness. Morbidity rates are generally given in one of two ways (see corresponding definitions): incidence or prevalence.

**Mortality:** A descriptive measurement of death. A mortality rate is the number of deaths per unit of population over a specified period of time.

**Obesity:** In Body Mass Index measurements, obesity is defined as a BMI equal to or greater than 30.0 in adults and equal to or greater than 95th percentile in children and adolescents.

**Overweight:** In Body Mass Index measurements, overweight is defined as a BMI between 25.0 and 29.9 in adults. For children two to twenty years, overweight is defined as BMI-forage equal to or greater than the 85th percentile and less than the 95th percentile.

**Prevalence:** The number of known cases at any given time. Diabetes prevalence is expressed as a percentage.

**Prediabetes:** A condition in which individuals have blood glucose levels higher than normal but not high enough to be classified as diabetes. People with prediabetes have an increased risk of developing type 2 diabetes, heart disease, and stroke. Progression to diabetes among those with prediabetes is not inevitable. The Diabetes Prevention Program and Diabetes Prevention Program Outcomes Study have shown that people with prediabetes who lose weight can prevent or delay diabetes.

**Preventive Services:** An intervention (activity) that prevents disease or injury or promotes health. In relation to diabetes, these include dilated eye exams, monofilament foot exams, flu and pneumonia shots, and others.

**Risk Factor:** Characteristic of individuals that increase the probability that they will experience disease or death compared to the rest of the population. Risk factors for developing diabetes include genetics, environmental exposures, and socio-cultural living conditions. Risk factors for complications of diabetes include the same factors as above and more importantly, uncontrolled blood glucose, blood lipid or blood pressure levels.

**South Dakota Diabetes Coalition (SDDC):** People and organizations who share in the mission of “partnering to improve health outcomes of those affected by diabetes in South Dakota”. The Coalition has 4 Standing Committees:

**Advocacy** - This group actively seeks to support diabetes prevention, control, and policy development. This group provides a voice to persons affected by diabetes in SD.

**Patient Education** - This group promotes quality patient education programs, products, and practices to coalition members, health care providers, and communities to establish “best practices” and shared learning opportunities in diabetes education.

**Professional Education** - This group actively seeks to promote access to quality diabetes-related knowledge development to healthcare professionals in SD.

**Public Awareness** - This group seeks to reduce the risk of diabetes by promoting public awareness of healthy lifestyle choices, identification of risk factors, and preventive health screenings.

**South Dakota Diabetes Prevention and Control Program:** A unit of the South Dakota Department of Health located under the Office of Health Promotion. The Program receives the majority of its funding from the CDC. The program is dedicated to improving the health of people at risk for, or with, diabetes.

**Years of Potential Life Lost (YPLL):** A widely-used estimate of premature mortality, defined as the number of years of life lost among persons who die before age 75. YPLL is the sum of the differences between age 75 and the age at death for everyone who died before age 75.



## CALL TO ACTION

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The *South Dakota Diabetes State Plan 2010 – 2012* provides a framework for professionals and patients to address goals and objectives to prevent diabetes, prevent diabetes complications and eliminate health care disparities. The South Dakota Diabetes Coalition will positively affect people's health and quality of life through teamwork from individuals, organizations and communities across the State of South Dakota. Here are some ways you can help:

1. Join the South Dakota Diabetes Coalition as a member to address diabetes strategic priorities.
2. Use the South Dakota Diabetes Coalition resources to guide actions in your organization or local community.
3. Communicate your programs and your successes with the South Dakota Diabetes Coalition so we may benefit from your progress and collaborate on initiatives.
4. Share data to enhance information about the burden of diabetes and diabetes prevention efforts in South Dakota and our progress in reducing the burden.
5. Make a tax-deductible donation to the South Dakota Diabetes Coalition to support implementation of the South Dakota Diabetes Plan.

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## ENDNOTES

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- <sup>i</sup> National Diabetes Information Clearinghouse. (November 2008). *Diabetes Overview*. Retrieved February, 2010, from <http://diabetes.niddk.nih.gov/dm/pubs/overview/index.htm#what>.
- <sup>ii</sup> National Diabetes Information Clearinghouse. (November 2008). *Diabetes Overview*. Retrieved February, 2010, from <http://diabetes.niddk.nih.gov/dm/pubs/overview/index.htm#what>.
- <sup>iii</sup> Centers for Disease Control. (June 2008). *2007 National Diabetes Fact Sheet*. Retrieved February 2010 from <http://www.cdc.gov/diabetes/pubs/general.htm#what>
- <sup>iv</sup> Centers for Disease Control. (June 2008). *2007 National Diabetes Fact Sheet*. Retrieved February 2010 from <http://www.cdc.gov/diabetes/pubs/general.htm#what>
- <sup>v</sup> National Diabetes Information Clearinghouse. (November 2008). *Diabetes Overview*. Retrieved February, 2010, from <http://diabetes.niddk.nih.gov/dm/pubs/overview/index.htm#what>.
- <sup>vi</sup> American Diabetes Association. (n.d.) *Diabetes Basics*. Retrieved February 2010 from <http://www.diabetes.org/diabetes-basics/prevention/>
- <sup>vii</sup> Centers for Disease Control. (June 2008). *2007 National Diabetes Fact Sheet*. Retrieved February 2010 from <http://www.cdc.gov/diabetes/pubs/general.htm#what>
- <sup>viii</sup> Centers for Disease Control. (June 2008). *2007 National Diabetes Fact Sheet*. Retrieved February 2010 from <http://www.cdc.gov/diabetes/pubs/general.htm#what>.
- <sup>ix</sup> United States Census Bureau. (October 2009). *State and County Quick Facts, South Dakota*. Retrieved February 2010 from <http://quickfacts.census.gov/qfd/states/46000.html>.
- <sup>x</sup> Statistics derived from U.S. Census Bureau Data; U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business; and DataQuick Information Systems, a public records database company located in LaJolla, San Diego, CA. Retrieved October 2, 2009 from [http://en.wikipedia.org/wiki/Lowestincome\\_counties\\_in-the\\_United\\_States](http://en.wikipedia.org/wiki/Lowestincome_counties_in-the_United_States)
- <sup>xi</sup> South Dakota Department of Health. (May 2008). *South Dakota Medically Underserved Areas*. Retrieved February 2010 from <http://doh.sd.gov/ruralhealth/documents/mua.pdf>.
- <sup>xii</sup> South Dakota Department of Health, Office of Data, Statistics and Vital Records. 2007. Unpublished data.
- <sup>xiii</sup> South Dakota Department of Health, Office of Rural Health.
- <sup>xiv</sup> Aberdeen Area Indian Health Service [United States Department of Health and Human Services Indian Health Service]. (June 2007). *Tribes and Facilities Today*. Retrieved February 2010 from <http://www.ihs.gov/facilitiesServices/areaoffices/aberdeen/aberdeen-tribes-facilities-today.asp>.
- <sup>xv</sup> South Dakota Department of Health, Diabetes Prevention and Control Program. (July 2008). *South Dakota Diabetes Education Recognition Program*. Accessed July 7, 2008.
- <sup>xvi</sup> Centers for Disease Control (June 2008). *Number of People with Diabetes Continues to Increase*. Retrieved June 28, 2008, from <http://www.cdc.gov/Features/DiabetesFactSheet/>.
- <sup>xvii</sup> South Dakota Department of Health, Office of Data, Statistics and Vital Records. 2008. Unpublished data.
- <sup>xviii</sup> National Diabetes Education Program. (n.d.) *Small Steps. Big Rewards. Prevent Type 2 Diabetes*. Retrieved February 2010 from [www2.niddk.nih.gov/Research/ClinicalResearch/DPPOS](http://www2.niddk.nih.gov/Research/ClinicalResearch/DPPOS).
- <sup>xix</sup> South Dakota Department of Health, Office of Family Health. 2010. Unpublished data.



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