

# SOUTH DAKOTA

## Chronic Disease State Plan

December 2012



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SOUTH DAKOTA  
DEPARTMENT OF HEALTH

Office of the Secretary

Dear Fellow South Dakotans:

I am pleased to present the first ever statewide Chronic Disease State Plan for South Dakota. This plan was developed by a diverse group of partners to help guide all stakeholders in South Dakota as we work together on cross-cutting efforts to reduce the burden of chronic disease. This plan addresses the burden of chronic disease and provides a roadmap of proven effective strategies for making change.

Coordinated chronic disease prevention efforts in South Dakota can reduce the prevalence of chronic disease across our state's population. Even small decreases in statewide tobacco use or obesity prevalence translate into improved quality of life for thousands of South Dakotans, and millions of dollars saved by preventing cardiovascular disease, cancer, stroke, arthritis, and diabetes.

Heart disease and cancer are the leading causes of death in South Dakota, accounting for nearly half of all deaths (46%) in 2010. In 2009, 30% of South Dakota adults reported they had high blood pressure and 36% of adults screened reported high cholesterol. These factors put about 200,000 South Dakotans at risk of heart disease and stroke.

The Department of Health recognizes that this plan would not be possible without the active participation of many committed partners. We thank everyone who contributed to this important endeavor and hope that working together we can make large-scale systems change that will affect multiple chronic diseases and risk factors. Working together we can reduce chronic disease and improve the quality of life for all South Dakotans.

Sincerely,

Doneen B. Hollingsworth  
Secretary of Health

# Acknowledgements & Intended Audience



The South Dakota Coordinated Chronic Disease State Plan (State Plan) was developed to help guide all stakeholders in South Dakota as we work together on cross-cutting efforts to prevent and lessen the burden of chronic disease. The plan identifies areas for collaboration to reduce both redundant efforts and cost, as well as increase the impact of our efforts to improve the health of South Dakotans. This plan is meant to be a living document for the organizations, agencies and individuals interested in implementing chronic disease prevention and health promotion strategies.

We offer a special thank you to the partners who participated in the writing of this plan for your time and expertise. We were fortunate to have representatives from all of the major health systems, health advocacy organizations, state and tribal agencies, and community and faith-based organizations participate in constructing the State Plan priorities. The strong partnership base of organizations along with the statewide commitment for change makes this document a powerful tool.

We acknowledge participating organizations below and for a full listing of those involved in the development of the plan, please see Appendix A.

American Cancer Society  
American Heart Association  
Avera Health System  
City of Sioux Falls  
Delta Dental of South Dakota  
Great Plains Tribal Chairmen's Health Board  
Missouri Breaks Industries Research Inc.  
Rapid City YMCA  
Regional Health System  
River City Transit  
Sanford Health System  
Sioux Falls Health Department and County Health and Human Services  
South Dakota Department of Education  
South Dakota Department of Game Fish and Parks  
South Dakota Department of Health  
South Dakota Department of Social Services  
South Dakota Department of Transportation  
South Dakota Foundation for Medical Care  
South Dakota State Medical Association  
South Dakota State University  
South Dakota Urban Indian Health  
US Department of Health and Human Services, Region 8

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# Table of Contents

Letter from South Dakota Secretary of Health, Doneen B. Hollingsworth

Acknowledgements & Intended Audience

Table of Contents

Executive Summary ..... 1

South Dakota Chronic Disease State Plan Objectives Summary ..... 2-3

Public Health and Chronic Disease Prevention and Health Promotion ..... 4-9

Goals, Objectives, Data Sources, Strategies/Indicators ..... 10-18

    Healthy and Safe Community Environments ..... 10-12

    Clinical and Community Preventive Services ..... 13-14

    Empowered People ..... 15-16

    Elimination of Health Disparities ..... 17-18

Surveillance and Epidemiology .....19

Evaluation .....19

Health Communication and Chronic Disease .....20

Appendices

    Participants in the Chronic Disease State Planning Process ..... Appendix A

    National Prevention Strategies and Social Determinants of Health ..... Appendix B

    Communication Plan for the State Plan ..... Appendix C

# Executive Summary

In April 2012, statewide health care partners and stakeholders met to develop priorities, objectives and strategies to address the state's chronic disease needs. These stakeholders came from all areas representing our health care-related fields including: health systems, health advocacy organizations, state and tribal agencies, and community and faith-based organizations. As a result of this meeting, the South Dakota Chronic Disease State Plan (herein after referred to as the State Plan) was developed to help guide all stakeholders in South Dakota as we work together on cross-cutting efforts to prevent and lessen the burden of chronic disease. The State Plan has been written so that any stakeholder wanting to move forward with chronic disease prevention programming may utilize the State Plan as a tool in their process by having a clear understanding of the goals, objectives and strategies associated with the state's chronic disease priorities.

Following the structure of the National Prevention Strategy, State Plan objectives are organized under four Strategic Directions:

- Healthy and Safe Community Environments
- Clinical and Community Preventive Services
- Empowered People
- Elimination of Health Disparities

These directions help to guide stakeholders as they pursue addressing chronic disease needs. South Dakota's needs are great as evidenced by recent Centers for Disease Control and Prevention and vital statistics data:

- In 2010, 46% of all deaths in the state were due to heart disease and cancer.
- In 2009, 30% of adults had high blood pressure and 36% of adults had high cholesterol.
- In 2011, nearly 10% of adults had been diagnosed with diabetes.
- In 2011, 28% of adults were obese.
- In 2011, 23% of adults were current smokers.
- In 2009, the age-adjusted prevalence of adult diabetes was three times higher in the state's American Indian population than the white population.
- Mortality data from 2000-2010 shows that American Indians died from diabetes at an age-adjusted rate 5.5 times higher than whites.
- From 2000-2010, American Indians between 30-59 years died from heart disease at a rate 2.7 times higher than whites.
- In 2009, South Dakota had the lowest consumption of vegetables in the nation and Sioux Falls had the lowest consumption of fruits and vegetables among all cities in the nation.

Coordinated chronic disease prevention efforts in South Dakota can reduce the prevalence of chronic disease across the state population. Even small decreases in statewide tobacco use or obesity prevalence translate into both improving the quality of life for thousands of South Dakotans, as well as saving millions of dollars by preventing cardiovascular disease, cancer, stroke, arthritis and diabetes. The State Plan prioritizes the coordinated approach to addressing chronic disease needs in order to build the capacity of our individuals, communities, health care providers and related professionals in the receipt and delivery of chronic disease-related services.

# South Dakota Coordinated Chronic Disease State Plan Objectives Summary



The National Prevention Strategy’s four Strategic Directions have been selected as the framework for the South Dakota Coordinated Chronic Disease State Plan. These Strategic Directions provide the latest public health guidance concerning the prevention and management of chronic disease (National Prevention Council, *National Prevention Strategy*, U.S. Department of Health and Human Services, 2011). Organizations that have committed to supporting a specific objective are listed under each objective in red.

## Strategic Direction: Healthy and Safe Community Environments

### Goal 1: Utilize technology to enhance coordinated chronic disease prevention and health promotion.

- Objective 1.1* By 2013, develop a centralized, online calendar hosted on the SDDOH website to promote and track online chronic disease prevention and health promotion professional training opportunities.  
 American Cancer Society • Black Hills Special Services Cooperative • Great Plains Tribal Chairmen’s Health Board • Sanford Health Plan • South Dakota Department of Health • South Dakota Diabetes Coalition • St. Mary’s Healthcare Center
- Objective 1.2* By 2017, conduct an environmental scan and then develop and implement five sector-specific plans for the areas of communities, schools, worksites, tribes and health care in which to deliver public health messaging.  
 Alliance for a Healthier Generation • American Cancer Society • Great Plains Tribal Chairmen’s Health Board • Howalt McDowell Insurance • Sanford Health Plan • South Dakota Diabetes Coalition
- Objective 1.3* Through 2017, enhance our existing interactive/query-able online system to link chronic disease plans (strategic and state plans, both internal and external to SDDOH).  
 Sanford Health Plan • South Dakota Diabetes Coalition
- Objective 1.4* By 2015, develop and implement an interactive online system for customizing public health messaging (i.e. a make-it-your-own system where a “wizard-based” setup allows you to create printed materials).  
 Black Hills Special Services Cooperative • Great Plains Tribal Chairmen’s Health Board • LifeCircle SD: Partners Improving End-of-Life Care • Sanford Health Plan • South Dakota Department of Health • South Dakota Diabetes Coalition • South Dakota State University Extension



# South Dakota Coordinated Chronic Disease State Plan Objectives Summary

## Goal 2: Encourage the adoption of policies that make health a priority.

- Objective 2.1* By 2015, develop a set of 10 model policies related to chronic disease.  
Alliance for a Healthier Generation • American Cancer Society • Arthritis Foundation • City of Sioux Falls Health Department • Sanford Health Plan • South Dakota Department of Health • South Dakota Diabetes Coalition • St. Mary's Healthcare Center • YMCA of Rapid City
- Objective 2.2* By 2017, increase the number of new health-related policies being adopted in SD settings (communities, worksites, schools, tribes, child care and health care) from zero to 20.  
Alliance for a Healthier Generation • American Cancer Society • City of Sioux Falls Health Department • Great Plains Tribal Chairmen's Health Board • Howalt McDowell Insurance • River Cities Public Transit • Sanford Health Plan • South Dakota Department of Health • South Dakota Diabetes Coalition • South Dakota Foundation for Medical Care • South Dakota State Parks • YMCA of Rapid City
- Objective 2.3* By 2016, document and disseminate 10 success stories related to health policies in SD settings (communities, worksites, schools, tribes, child care and health care).  
Alliance for a Healthier Generation • American Cancer Society • Arthritis Foundation • Great Plains Tribal Chairmen's Health Board • Sanford Health Plan • South Dakota Department of Health • South Dakota Urban Indian Health

## Goal 3: Make local data and evidence-based best practices readily available to community leaders.

- Objective 3.1* By 2014, develop and promote a web-based data query system that includes local data related to chronic disease.  
Sanford Health Plan • South Dakota Department of Health
- Objective 3.2* Through 2016, develop and disseminate quarterly informational briefs highlighting chronic disease prevention data and action recommendations to statewide community leaders and stakeholders.  
Sanford Health Plan • South Dakota Dental Association • South Dakota Department of Health • South Dakota Diabetes Coalition
- Objective 3.3* Through 2017, in partnership with local community leaders and stakeholders, provide local chronic disease data and action recommendations to at least three [one large (10,000+ population), one small (<10,000 population) and one tribal] communities per year.  
Alliance for a Healthier Generation • American Cancer Society • Arthritis Foundation • Great Plains Tribal Chairmen's Health Board • Sanford Health Plan • South Dakota Dental Association • South Dakota Department of Health • South Dakota State Parks • YMCA of Rapid City

## Strategic Direction: Clinical and Community Preventive Services

## Goal 4: Implement evidence-based programs for individuals to prevent and manage their chronic diseases.

- Objective 4.1* By 2016, increase the number of sites offering evidence-based chronic disease lifestyle change programs in community settings from two to 20.  
American Cancer Society • Arthritis Foundation • Great Plains Tribal Chairmen's Health Board • Sanford Health Plan • South Dakota Department of Health • South Dakota State University Extension • St. Mary's Healthcare Center
- Objective 4.2* Through 2017, promote comprehensive chronic disease patient navigation services by providing annual training and technical assistance.  
American Cancer Society • Arthritis Foundation • Black Hills Special Services Cooperative • Great Plains Tribal Chairmen's Health Board • Sanford Health Plan

## Goal 5: Increase access to chronic disease prevention, screening and treatment.

- Objective 5.1* By 2015, the Chronic Disease Coalition will develop a white paper describing cost savings related to prevention.  
American Cancer Society • Arthritis Foundation • City of Sioux Falls Health Department • Howalt McDowell Insurance • Sanford Health Plan • South Dakota Dental Association
- Objective 5.2* Through 2017, promote the adoption of evidence-based team-centered approaches to chronic disease treatment and prevention by providing annual training.  
American Cancer Society • Arthritis Foundation • Sanford Health Plan • South Dakota Diabetes Coalition

## Goal 6: Increase access to quality chronic disease prevention and screening.

- Objective 6.1* By 2017, increase the percentage of sites that provide chronic disease prevention and screening in nontraditional settings by 5%.  
American Cancer Society • Arthritis Foundation • City of Sioux Falls Health Department • Great Plains Tribal Chairmen's Health Board • Sanford Health Plan • St. Mary's Healthcare Center
- Objective 6.2* By 2016, increase the number of employers sponsoring worksite wellness programs from 150 to 350.  
Alliance for a Healthier Generation • American Cancer Society • Arthritis Foundation • Avera Health Plan • Avera McKennan • Black Hills Special Services Cooperative • Howalt McDowell Insurance • River Cities Public Transit • Sanford Health Plan • South Dakota Department of Health • South Dakota Diabetes Coalition • South Dakota State Parks • South Dakota State University Extension

# South Dakota Coordinated Chronic Disease State Plan Objectives Summary

## ■ Strategic Direction: Empowered People

### **Goal 7: Create local community coalitions to develop and implement plans to address chronic disease.**

- Objective 7.1* By 2014, increase by 5% from baseline the number of communities who have conducted needs assessments related to chronic disease prevention.  
Great Plains Tribal Chairmen's Health Board • Sanford Health Plan • South Dakota Department of Health
- Objective 7.2* By 2017, increase the number of communities that have at least one community coalition or task force working on chronic disease prevention from 24 to 45.  
Arthritis Foundation • Great Plains Tribal Chairmen's Health Board • HRSA Regional Office • Sanford Health Plan • Dakota Department of Health • South Dakota State University Extension
- Objective 7.3* Through 2017, host at least five annual opportunities for communities to share local chronic disease strategy best practices and lessons learned (such as conferences, coordinated meetings, and planning meetings).  
Alliance for a Healthier Generation • HRSA Regional Office • Sanford Health Plan • South Dakota Dental Association • South Dakota Department of Health

### **Goal 8: Develop unified health communication strategies to reduce chronic disease risk factors.**

- Objective 8.1* Through 2016, develop and implement an integrated chronic disease communication plan.  
American Cancer Society • Arthritis Foundation • Great Plains Tribal Chairmen's Health Board • Sanford Health Plan • South Dakota Department of Health • South Dakota Diabetes Coalition • YMCA of Rapid City
- Objective 8.2* Through 2016, host an annual chronic disease state partners meeting focusing on coordination within chronic disease prevention and health promotion.  
Alliance for a Healthier Generation • American Cancer Society • Sanford Health Plan • South Dakota Diabetes Coalition • South Dakota State Parks • YMCA of Rapid City
- Objective 8.3* By 2017, reach at least four tribal communities with chronic disease prevention and health promotion messaging through earned and paid media.  
American Cancer Society • Great Plains Tribal Chairmen's Health Board • Sanford Health Plan • South Dakota Foundation for Medical Care

## ■ Strategic Direction: Elimination of Health Disparities

### **Goal 9: Engage organizations serving disparate populations to increase the focus on prevention.**

- Objective 9.1* Through 2017, annually provide evidence-based and promising practice prevention education to 15 organizations serving disparate youth.  
Alliance for a Healthier Generation • American Cancer Society • Sanford Health Plan • South Dakota State University Extension
- Objective 9.2* By 2014, develop/update and disseminate at least four culturally appropriate educational resources that are tailored to disparate populations.  
American Cancer Society • Arthritis Foundation • College of Nursing, South Dakota State University • Great Plains Tribal Chairmen's Health Board • Sanford Health Plan • South Dakota Dental Association • South Dakota State University Extension

### **Goal 10: Enhance the infrastructure connecting chronic disease partners and tribal organizations.**

- Objective 10.1* By 2014, co-host an annual chronic disease educational opportunity, conference or training with statewide partners and tribal organizations.  
American Cancer Society • College of Nursing, South Dakota State University • HRSA Regional Office • Sanford Health Plan • South Dakota Department of Health • South Dakota Diabetes Coalition • South Dakota State Parks
- Objective 10.2* By 2017, develop a minimum of one formal agreement between tribes and state-based chronic disease program(s) targeting chronic disease prevention and health promotion.  
Arthritis Foundation • Great Plains Tribal Chairmen's Health Board • Sanford Health Plan • South Dakota Foundation for Medical Care • South Dakota State University Extension

### **Goal 11: Expand programs for communities to improve access to healthy foods.**

- Objective 11.1* By 2016, increase the percentage of census tracts that have healthier food retailers located within the tract or within ½ mile of tract boundaries from 55.7% to 60%.  
American Cancer Society • City of Sioux Falls Health Department • Sanford Health Plan • South Dakota Department of Health • South Dakota State University Extension
- Objective 11.2* By 2017, increase the percentage of farmers markets that accept electronic benefits transfer (EBT) from 0% to 5%.  
City of Sioux Falls Health Department • Sanford Health Plan • South Dakota Head Start State Collaboration Office • South Dakota State University Extension



# Public Health and Chronic Disease Prevention and Health Promotion

Nearly 100 years ago, leading public health expert, C.E.A. Winslow, M.S., defined public health as “the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals”.<sup>1</sup> In more recent years, the “Ten Essential Public Health Services” have guided public health and helped to define the role of chronic disease prevention and health promotion. First developed in 2003 by the Institute of Medicine, these ten functions were reaffirmed in the Public Health Steering Committee Recommendations published by the U.S. Department of Health and Human Services, Health Resources and Services Administration in 2011.<sup>2</sup>

1. *Monitor health status to identify community health problems.* Accurate assessment and surveillance of chronic disease health risks and behaviors are major public health functions, led primarily by the Department of Health. All communities and partners have a role in monitoring chronic disease and health behaviors. Activities include: tracking vital statistics; assessing key behavioral risk factors; school height and weight surveillance; identification of health disparate populations; and maintaining the cancer registry.

2. *Diagnose and investigate health problems and health hazards in the community.* Identifying and responding to chronic disease problems and risky unhealthy behaviors are also key public health functions. Local communities as well as their local and statewide partners can assist in identifying ways to combat identified public health concerns. A current example of a statewide public health focus is the investigation of the low levels of fruit and vegetable consumption in South Dakota. This investigation has included data collection and analysis by Department of Health epidemiologists as well as state university faculty in addition to input from numerous stakeholders in determining strategies to increase consumption.

3. *Inform, educate and empower people about health issues.* Health education and communication strives to build knowledge, shape attitudes, and develop skills and behavior for healthy living. This is a major role for nearly all involved in the Chronic Disease State Plan. Efforts to inform, educate and empower South Dakotans to be proactive in addressing their health and chronic disease needs can be found throughout the State Plan.

4. *Mobilize community partnerships to identify and solve health problems.* Community coalitions are increasing across the state in municipalities of all sizes. Statewide coalitions work to solve specific chronic disease and risk factor issues. Partnerships for health improvement, both formal and informal, stand to

increase individuals’ and communities’ access to chronic disease information and resources.

5. *Develop policies and plans that support individual and community health efforts.* Local and state public health policies and strategic plans are living guidance for local and state public health practice. Such plans and policy development generate a coordinated effort by diverse partners to address public health concerns. The State Plan, and the process to develop it, stands as an excellent example of a statewide coordinated effort to address public health goals.

6. *Enforce laws and regulations that protect health and ensure safety.* Diverse partners help review and revise legal authority, laws, and regulation based upon their areas of health-related expertise. Examples include indoor smoking bans and requiring mammography screening to be covered by health insurance plans.

7. *Link people to needed personal health services and assure the provision of health care when otherwise unavailable.* While public health efforts focus on population needs and assuring a coordinated system of clinical and community care for all, it can also fill gaps by providing direct service to targeted at-risk individuals. Examples of these measures include the tobacco quit line or free clinics offered by healthcare organizations.



<sup>1</sup> C.E.A. Winslow, “The Untilled Fields of Public Health.” Science 9 January 1920: Vol. 51 no. 1306 pp.23-33. <http://www.sciencemag.org/content/51/1306/23>

<sup>2</sup> [http://www.naccho.org/topics/HPDP/upload/PHSC-Report\\_FINAL.PDF](http://www.naccho.org/topics/HPDP/upload/PHSC-Report_FINAL.PDF) , p.22.

8. *Assure competent public health and personal health care workforce.* Experienced partners from both the fields of pre-professional and professional public health education were included in the development of this plan. Quality improvement through leadership development and maintaining cultural competence is also emphasized as an important priority for our health care and public health workforce.

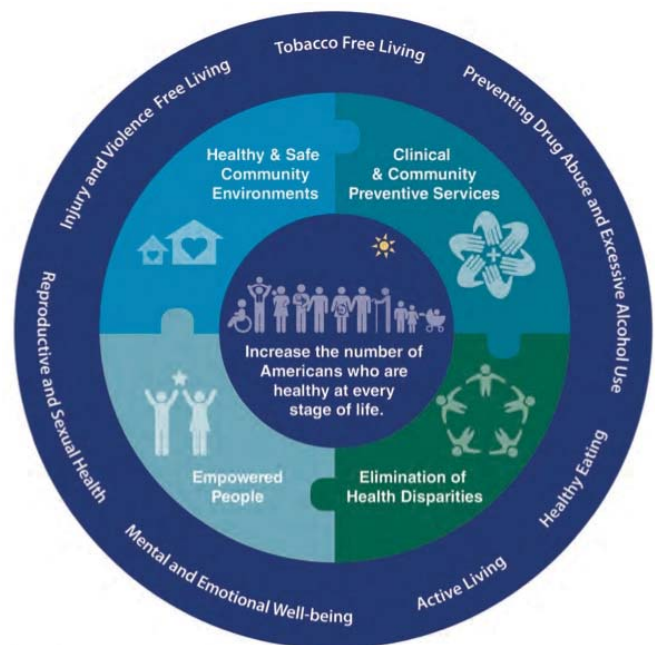
9. *Evaluate effectiveness, accessibility, and quality of personal and population-based health services.* Evaluation can measure the impact of an intervention and also provide insights for programmatic improvement. Our State Plan relies heavily on the use of evaluation to determine program and policy best practices in order to ensure the largest impact on our population.

10. *Conduct research to attain new insights and innovative solutions to health problems.* There are linkages between public health practice and the academic/research settings which seek to discover new ways to solve problems related to chronic disease. These academic and research opportunities serve to inform public health strategies specific to the chronic disease needs of South Dakota.

## The South Dakota State Plan Development, Framework and Process

A group of diverse partners (Appendix A) collaborated over the spring and summer of 2012 to develop a coordinated chronic disease State Plan for South Dakota. A face-to-face meeting with representation from all chronic disease planning committees, stakeholder groups, and advisory boards in South Dakota, including the five leading causes of chronic disease death and disability, was held in April 2012. The session was hosted by the South Dakota Department of Health (SDDOH) and facilitated by Spectrum Health Policy Research.

Prior to the meeting SDDOH staff researched planning options and selected the National Prevention Strategy as the framework for the South Dakota plan as it represents all federal agencies and was the latest public health guidance at the time that State Plan development started. The National Prevention Strategy was released in 2011 by the National Prevention Council.<sup>3</sup> The council is comprised of 17 heads of departments, agencies, and offices across the federal government who are committed to promoting prevention and wellness. The national strategy emphasizes four Strategic Directions: 1) Healthy and Safe Community Environments; 2) Clinical and Community Preventive Services; 3) Empowered People; and 4) Elimination of Health Disparities. These Strategic Directions serve as cornerstones for all prevention activities and are represented in the illustration below. In addition, see Appendix B for copies of materials on the National Prevention Strategies and the Social Determinants of Health which were sent to State Planning Group participants in advance of the meeting to provide a base for collaborative conversation.



<sup>3</sup>National Prevention Council, National Prevention Strategy, U.S. Department of Health and Human Services, 2011.

At the April 2012 meeting, participants approved the use of the four Strategic Directions for the structural theory of the State Plan and separated into five smaller groups to generate cross-sectional ideas to reduce chronic disease and improve health in South Dakota. These ideas were organized under the four Strategic Directions. The group then prioritized these ideas using a modified Delphi method under each of the four Strategic Directions. In the following months, a smaller sub-committee of volunteers refined these priority ideas into strategies and SMART objectives that were reviewed by the entire planning group. These original ideas are now reflected strategies and measurable objectives delineated in the State Plan. Therefore, South Dakota has taken a strong inclusive approach to the development of the State Plan, ensuring input and ownership of all statewide partners in pursuing the success of the state's chronic disease prevention and management efforts.

### **The Four Strategic Directions in Relation to the Four Domains**

As previously stated, the four Strategic Directions of the National Prevention Strategy are Healthy and Safe Community Environments, Clinical and Community Preventive Services, Empowered People, and Elimination of Health Disparities. These categories align with the Centers for Disease Control's (CDC) four domains of Epidemiology and Surveillance, Environmental Approaches, Healthy Systems Change, and Community-Clinical Linkages. Further description about these strategies and domains are as follows:

**Healthy and Safe Community Environments.** The place where a person lives needs to be conducive to good health and healthy living. Making the healthy choice the easy choice is the mantra of many health prevention and promotion advocates. Individuals need to have opportunities available that facilitate a healthy living style. Examples are safe streets and lighted walk ways; adequate smoke-free housing; affordable healthy food; accessible parks; and policies that are in place to improve communities.

**Clinical and Community Preventive Services.** The benefits of preventive services have been particularly highlighted through health care reform. The focus on prevention may begin in the health care setting but should extend into the community to ensure comprehensive care. If prevention efforts do not follow the individual where they live, these efforts will not have as much effect as an integrated system bridging the health care setting and the community. Prevention activities should be evidence-based and have a wide reach to impact numerous individuals. And as such, they should be supported through policy and systems change in order to be most effective in their impact.

**Empowered People.** Personal empowerment attempts to motivate people of all ages and abilities to seek knowledge, opportunities, and access to healthy choices. Empowering people to develop skills to make their life healthier is a critical step to positive health behavior change.

**Elimination of Health Disparities.** As the public health community seeks to empower the entire population, public health practitioners should maintain a particular focus on impacting the health improvement of those who are disproportionately affected by health issues. Some disparate populations include those with low socioeconomic status, physical disabilities, those in rural and undeserved locations, and Native American populations. By targeting efforts to eliminate health disparities, all South Dakotans benefit from reducing the risks and costs associated with chronic disease.

Similar to the National Prevention Strategy's four Strategic Directions, the CDC developed four Chronic Disease Prevention and Health Promotion Domains (four domains) to help guide states and stakeholders in their public health efforts. In addition to a focus on primary prevention, the four domains also take into consideration secondary prevention for those already diagnosed with a disease.

*Epidemiology and Surveillance* is arguably CDC's most all-encompassing domain as it is crucial to gather data and information to make informed public health decisions. Through data collection, analysis, and evaluation, public health practitioners can make decisions that will be the most effective and have the highest impact on the population.

Epidemiology and surveillance is woven throughout the Strategic Directions as the four directions were based on years of research to identify effective practices, prevalence of risk factors, and the needs of both communities and individuals. Many factors contribute to a person being able to make healthy choices. Epidemiology and surveillance allow public health professionals to make evidence-based decisions about programs, activities and needs of the people with whom they work. For example, the environment needs to be conducive to behavior change. If there are no safe walking or biking paths, or places to buy fresh produce at a reasonable cost, individuals' ability to maintain a healthy lifestyle will be affected. Epidemiology and surveillance provides the concrete data collection and analysis to assess the health needs of the population.

*Environmental Approaches* closely resembles the Strategic Direction of Healthy and Safe Community Environments in that they both highlight the need for policy and environmental change to make it easier for individuals at work, home, and play to make healthy choices.



*Health Systems Change* translates to increasing the quality and access of care. In a clinical setting this may mean automated physician prompts or optimization of screening and reporting protocols. When clinical environments implement policies or procedures to ensure interventions are effective, the population as a whole benefits as there are both cost savings and corresponding decreases in disease.

*Community-Clinical Linkages* expands the health system by extending health care services into the community. Services received in a doctor's office or hospital are augmented and supported by opportunities found within the community. An example of this would be lifestyle change education programs or chronic disease self-management education.

Whether called a Strategic Direction or a domain, the common denominator is that public health interventions need to be evidence-based, tailored to a population's needs, take account of the population's environment, and be sustained through establishing appropriate policies and systems to support the intervention. South Dakota's coordinated approach among all statewide partners and stakeholders provides the supportive backdrop to successfully pursue the State Plan objectives.

State Plan partners see value in the coordinated approach not only for increased program efficiency and impact, but for increased sustainability of our selected interventions as we draw from the multiple resources which State Plan partners offer to successfully obtain our objectives. Both the core planning group and the Statewide Chronic Disease Partners understand that to make lasting changes to the public's health, the healthy choice needs to be the choice which is most accessible. We accomplish this by ensuring that interventions and objectives in the State Plan support environmental and systems changes in all facets of the public's lives – their communities, workplaces and schools.

### Statement of Need<sup>4</sup>

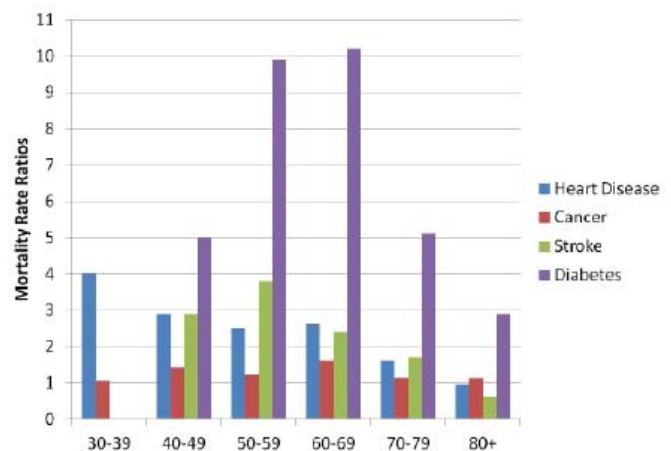
Coordinated chronic disease prevention efforts in South Dakota can reduce the prevalence of chronic disease across the state population. Even small decreases in statewide tobacco use or obesity prevalence translate into both improving the quality of life for thousands of South Dakotans, as well as saving millions of dollars by preventing cardiovascular disease, cancer, stroke, arthritis, and diabetes.

Heart disease and cancer are the leading causes of death in South Dakota, and in 2010, these chronic diseases caused nearly half (46%) of all deaths in the state. In 2009, 30% of South Dakota adults reported they had high blood pressure

and 36% of adults screened reported high cholesterol. Both of these factors put an average 200,000 South Dakotans at risk of heart disease and stroke. From 2005-2010 cancer was the leading cause of death for South Dakotans aged 45-84 years of age. And in 2011, nearly 10% of South Dakota adults had been diagnosed with diabetes; 28% of the population was obese; and 24% were current smokers.

Figure 1 details a comparative analysis of the age-specific rates of mortality for American Indians and whites in South Dakota from 2000-2010 utilizing death certificate data for four chronic diseases. Concerning heart disease, American Indians died at rates that were over two times (between ages 40 to 69 years) to four times (between ages 30-39 years) higher than whites. Concerning stroke, American Indians died at rates from nearly two to nearly four times higher between the ages of 40-79 years compared to whites that died from stroke in the same age group. The greatest disparities can be found in diabetes where mortality rates ranged from five to 10 times higher than whites between the ages of 40-79 years of age. Finally, while there are disparities in rates of cancer mortality between American Indians and whites, those rates of disparities are relatively small compared to other chronic disease rates.

**Figure 1. Early Age Mortality Disparity in South Dakota: Four Chronic Diseases**



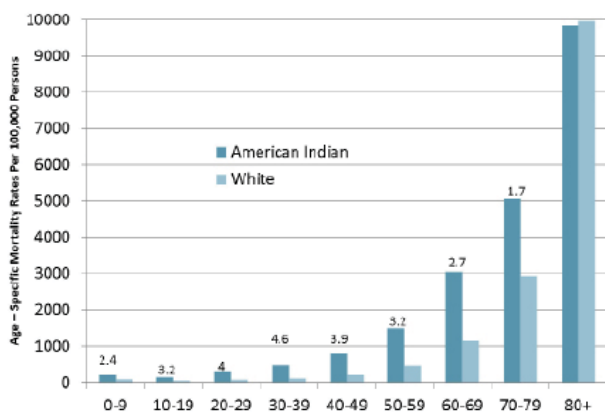
The geographic distribution of cancer, heart disease, stroke, arthritis, and diabetes in South Dakota is not proportional across the state. Most of the rural and frontier counties with small cities and towns under 5,000 people have higher proportions of older adults than the few urban areas. For many South Dakotans, long travel distances are required to reach both routine and emergency health care services.

<sup>4</sup>Data sources in this section include: 2009 and 2011 South Dakota Behavioral Risk Factor Surveillance System (CDC), 2010 South Dakota Vital Statistics Report (South Dakota Department of Health) and 2010 U.S. Census.

Figure 2 represents a comparison of all-cause mortality rates for American Indians and whites between the years 2000-2010. South Dakota is home to nine American Indian reservations and most are located in remote regions of the state. In 2009, the age-adjusted prevalence of self-reported diabetes in the adult American Indian population was three times higher than the white population. Moreover, mortality data from 2000-2010 showed that American Indians were dying from diabetes at an age-adjusted rate 5.5 times higher than whites in the state. Heart disease mortality also was higher among younger American Indian adults than same-age whites. American Indians between 30-59 years-of-age died from heart disease at a rate 2.7 times higher than whites of the same age from 2000-2010. Stroke mortality rates were also three times higher for American Indians than whites 40-69 years of age. As American Indians make up 8.8% of the state's population, addressing the chronic disease disparities in this population is an essential component to the State Plan.

Figure 2 represents a comparison of all-cause mortality rates for American Indians and whites between the years 2000-2010. This data is based on approximately 5,700 American Indian deaths and 70,000 white deaths during that time period. The numbers above the bars represent how many times higher the age-specific mortality rate is for American Indians compared to whites within each age group. For example, between the ages of 0-9 years, American Indians had a death rate that was 2.4 times higher than whites within this age group, and between the ages of 30-39 years, American Indians had a death rate that was 4.6 times higher than whites within this age group.

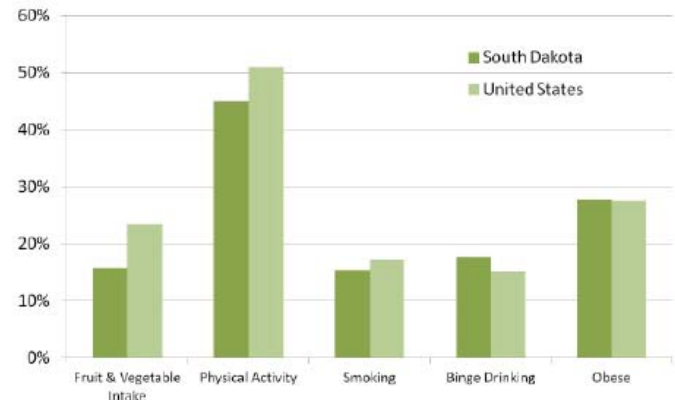
**Figure 2. Early Age Mortality Disparity in South Dakota**



While smoking has declined in the last several years for whites and American Indians, there remains a large disparity in the American Indian population. In 2009, the age-adjusted prevalence of self-reported smoking among American Indians was nearly three times higher than whites. Similarly, the average annual age-adjusted incidence rate of lung cancer from 2004-2008 was nearly twice as high among American Indians – 105 compared to 64 per 100,000 persons. From

1995 to 2010, adult obesity prevalence in South Dakota doubled increasing from 13.9% to 27.8%. During this time, an average 100,000 South Dakota adults became obese representing one-sixth of the adult population. Moreover, South Dakota had the lowest consumption of vegetables in the nation in 2009. Figure 3 details current rates concerning modifiable risk factors for chronic disease which could impact the burden of chronic disease within the state

**Figure 3. Modifiable Risk Factors for Chronic Disease**



The American Indian population in the state experiences a disproportionate burden of obesity consequences. In 2009, the age-adjusted prevalence of obesity was 40.1% for American Indians. Heavy alcohol misuse among some American Indians in South Dakota contributed to large disparities in early mortality. From 2000-2010 American Indians died from chronic liver disease and cirrhosis at a rate 12 times higher than whites.

As these statistics have detailed, South Dakota faces a strong need to address chronic disease both in terms of prevention and treatment. Health disparities exist throughout the state both in urban and rural settings as well as among specific group populations. Addressing these chronic disease needs in a coordinated manner allows for the expertise and best practices of a particular area to provide a positive impact on additional health-related needs of an individual or a community. The State Plan prioritizes the coordinated approach to addressing chronic disease needs in order to build the capacity of our individuals, communities, health care providers and related professionals in the receipt and delivery of chronic disease-related services.

## Economic Burden of Chronic Disease

Numerous studies have quantified the economic burden of chronic disease. One such study providing a state-specific analysis was conducted in 2007 by the Milken Institute. The Milken study acknowledges that the “seven common chronic diseases – cancer, diabetes, heart disease, hypertension, stroke, mental disorders, and pulmonary conditions... shorten lives, reduce quality of life, and create considerable burden for caregivers.”<sup>5</sup> According to the Milken study, the cost of treating these chronic disease conditions in South Dakota was \$900 million in 2003. Chronic diseases also impact work productivity by either causing employees to miss work or under-produce while they are ill. The Milken study estimated the cost of lost workdays and lower employee productivity due to chronic disease to amount to \$2.8 billion in South Dakota in 2003. However, when accounting for improvements in preventing and managing chronic disease, the Milken study projected that South Dakota costs related to chronic disease would decline by 28% or \$3.1 billion dollars in the year 2023.<sup>6</sup> South Dakota has a clear economic benefit in choosing to address the state’s chronic disease burden in a coordinated effort to prevent and manage these costly public health priorities.

<sup>5</sup> Milken Institute, South Dakota Tables, 2007, <http://www.chronicdiseaseimpact.com/ebcd.taf?cat=state&state=SD>

<sup>6</sup> Milken Institute, South Dakota Fact Sheet, 2007, [http://www.chronicdiseaseimpact.com/state\\_sheet/SD.pdf](http://www.chronicdiseaseimpact.com/state_sheet/SD.pdf)



# HEALTHY AND SAFE COMMUNITY ENVIRONMENTS

## **Goal 1: Utilize technology to enhance coordinated chronic disease prevention and health promotion.**

Corresponds with CDC Domains: Environmental Approaches, Community-Clinical Linkages, and Health Systems Change

### **Objective 1.1**

**By 2013, develop a centralized, online calendar hosted on the SDDOH website to promote and track online chronic disease prevention and health promotion professional training opportunities.**

#### DATA SOURCES

SDDOH Website (page TBD)

#### STRATEGIES/INDICATORS

- 1) By August 31, 2013, create webpage.
- 2) Post three training opportunities monthly.
- 3) Track webpage usage statistics monthly.

### **Objective 1.2**

**By 2017, conduct an environmental scan and then develop and implement five sector-specific plans for the areas of communities, schools, worksites, tribes and health care in which to deliver public health messaging.**

#### DATA SOURCES

Sector-specific environmental scan assessments and sector-specific public health messaging plans (which will be posted on SDDOH sector-related websites)

#### STRATEGIES/INDICATORS

- 1) By August 2013, develop an environmental scan assessment.
- 2) By August 2014, conduct an assessment in at least two sector-specific areas.
- 3) By August 2015, develop and implement at least two sector-specific public health messaging plans; and conduct environmental scan assessments in three remaining sector-specific areas.
- 4) By August 2017, develop and implement three remaining sector-specific public health messaging plans.

### **Objective 1.3**

**Through 2017, enhance our existing interactive/query-able online system to link chronic disease plans (strategic and state plans, both internal and external to SDDOH).**

#### DATA SOURCES

Catalyst (SDDOH's online data management system)

#### STRATEGIES/INDICATORS

- 1) By August 2013, input and link all SDDOH chronic disease-related plans.
- 2) By August 2014, input and link South Dakota Tribal chronic disease-related plans.
- 3) By August 2015, input and link at least two community chronic disease-related plans.
- 4) By August 2017, determine system best practices including: standardizing language across plans; eliminating redundancy among plans; and identifying collaborative opportunities.

# HEALTHY AND SAFE COMMUNITY ENVIRONMENTS

## Objective 1.4:

**By 2015, develop and implement an interactive online system for customizing public health messaging (i.e. a make-it-your-own system where a “wizard-based” setup allows you to create printed materials).**

### DATA SOURCES

SDDOH-sponsored online system (developed either internally or utilize an existing product)

### STRATEGIES/INDICATORS

- 1) By August 2013, conduct an assessment of available online system options and make a decision as to internal development of a system or adoption of an existing system.
- 2) By August 2014, develop public health messaging options.
- 3) By August 2015, implement the system.

## Goal 2: Encourage the adoption of policies that make health a priority.

Corresponds with CDC Domain: Environmental Approaches

## Objective 2.1

**By 2015, develop a set of 10 model policies related to chronic disease.**

### DATA SOURCES

Policies will be posted in the Catalyst data management system and on the SDDOH website

### STRATEGIES/INDICATORS

- 1) By August 2013, the Chronic Disease Policy Task Force develops two model policies.
- 2) By August 2014, the Chronic Disease Policy Task Force develops an additional eight model policies.
- 3) Through 2015, the Chronic Disease Policy Task Force promotes the 10 model policies.

## Objective 2.2

**By 2017, increase the number of new health-related policies being adopted in SD settings (communities, worksites, schools, tribes, child care and health care) from zero to 20.**

### DATA SOURCES

Policies will be tracked in the Catalyst Policy Monitoring system

### STRATEGIES/INDICATORS

- 1) By August 2013, adopt five policies among the various settings.
- 2) By August 2014, adopt an additional five policies.
- 3) By August 2015, adopt an additional five policies.
- 4) By August 2017, adopt an additional five policies.

## Objective 2.3

**By 2016, document and disseminate 10 success stories related to health policies in SD settings (communities, worksites, schools, tribes, child care and health care).**

### DATA SOURCES

Success stories will be posted in the Catalyst data management system and on the SDDOH and partners' website, as well as distributed by email and hard copy to partners/stakeholders across the state

### STRATEGIES/INDICATORS

- 1) By August 2014, create and disseminate two success stories statewide.
- 2) By August 2015, create and disseminate an additional three success stories.
- 3) By August 2016, create and disseminate an additional five success stories.

# HEALTHY AND SAFE COMMUNITY ENVIRONMENTS

## **Goal 3: Make local data and evidence-based best practices readily available to community leaders.**

Corresponds with CDC Domain: Epidemiology and Surveillance

### **Objective 3.1**

**By 2014, develop and promote a web-based data query system that includes local data related to chronic disease.**

#### DATA SOURCES

Web-based data query system will be hosted on the SDDOH website for birth, death, and cancer data

#### STRATEGIES/INDICATORS

- 1) By June 2013, implement the web-based data query system.
- 2) Through December 2014, promote the web-based data query system via weblinks posted on SDDOH and partners' webpages.

### **Objective 3.2**

**Through 2016, develop and disseminate quarterly informational briefs highlighting chronic disease prevention data and action recommendations to statewide community leaders and stakeholders.**

#### DATA SOURCES

Briefs will be posted in the Catalyst data management system and on the SDDOH website

#### STRATEGIES/INDICATORS

- 1) Produce and disseminate briefs quarterly throughout the grant period.

### **Objective 3.3**

**Through 2017, in partnership with local community leaders and stakeholders, provide local chronic disease data and action recommendations to at least three [one large (10,000+ population), one small (<10,000 population) and one tribal] communities per year.**

#### DATA SOURCES

RFI (Request for Information) process which leads to a formal agreement between SDDOH and the local community; follow-up report produced with findings and recommendations for next steps (i.e. proposed policy, systems and environmental changes)

#### STRATEGIES/INDICATORS

- 1) By June 2013, publish RFIs.
- 2) By January 2014, select the first three communities and initiate work.
- 3) By July 2014, complete the first three reports; release next RFI.
- 4) By January 2015, select next three communities and initiate work.
- 5) By July 2015, complete next three communities' reports; release next RFI.
- 6) By January 2016, select next three communities and initiate work.
- 7) By July 2016, complete next three communities' reports; release next RFI.
- 8) By January 2017, select next three communities and initiate work.
- 9) By July 2017, complete next three communities' reports; release next RFI.

# CLINICAL AND COMMUNITY PREVENTIVE SERVICES

## Goal 4: Implement evidence-based programs for individuals to prevent and manage their chronic diseases.

Corresponds with CDC Domain: Community-Clinical Linkages

### Objective 4.1

**By 2016, increase the number of sites offering evidence-based chronic disease lifestyle change programs in community settings from two to 20.**

#### DATA SOURCES

Roster of sites and description of their programs

#### STRATEGIES/INDICATORS

- 1) By August 2013, implement three additional sites.
- 2) By August 2014, implement five additional sites.
- 3) By August 2015, implement five additional sites.
- 4) By August 2016, implement five additional sites.

### Objective 4.2

**Through 2017, promote comprehensive chronic disease patient navigation services by providing annual training and technical assistance.**

#### DATA SOURCES

Annual report on TA provided and annual training attendance

#### STRATEGIES/INDICATORS

- 1) By 2013, conduct pilot project opportunities for chronic disease patient navigation model.
- 2) By 2014, develop white paper on chronic disease patient navigation opportunities and barriers.
- 3) By 2016, conduct one training opportunity for providers and clinic managers; TA provided on an as-needed basis.
- 4) By 2017, promote chronic disease patient navigation model statewide.

## Goal 5: Increase access to chronic disease prevention, screening and treatment.

Corresponds with CDC Domains: Environmental Approaches, Health System Interventions, and Community-Clinical Linkages

### Objective 5.1

**By 2015, the Chronic Disease Coalition will develop a white paper describing cost savings related to prevention.**

#### DATA SOURCES

White paper which will be stored in the Catalyst data management system and posted on the SDDOH website

#### STRATEGIES/INDICATORS

- 1) By 2015, produce white paper and distribute to stakeholders statewide.

# CLINICAL AND COMMUNITY PREVENTIVE SERVICES

## Objective 5.2

**Through 2017, promote the adoption of evidence-based team-centered approaches to chronic disease treatment and prevention by providing annual training.**

### DATA SOURCES

Annual training attendance

### STRATEGIES/INDICATORS

- 1) By 2014, convene a sub-committee to research and recommend models for evidence-based team-centered approaches to chronic disease treatment and prevention.
- 2) By 2015, provide training and resources for medical providers on selected evidence-based models.
- 3) By 2017, promote statewide models on team-centered approaches.

## **Goal 6: Increase access to quality chronic disease prevention and screening.**

Corresponds with CDC Domain: Environmental Approaches

## Objective 6.1

**By 2017, increase the percentage of sites that provide chronic disease prevention and screening in nontraditional settings by 5%.**

### DATA SOURCES

Roster of sites

### STRATEGIES/INDICATORS

- 1) By March 2013, establish baseline for the current number of sites in non-traditional settings (such as school-based clinics, mobile screening units, etc.) whom offer these services.
- 2) Track numbers to meet the objective on an annual basis.
- 3) By 2014, identify gaps in access to chronic disease screening services.
- 4) Through 2017, promote chronic disease prevention outreach in non-traditional settings in identified areas of need.

## Objective 6.2

**By 2016, increase the number of employers sponsoring worksite wellness programs from 150 to 350.**

### DATA SOURCES

SDDOH Worksite Wellness database

### STRATEGIES/INDICATORS

- 1) Track the number of employers sponsoring programs on an annual basis.

# EMPOWERED PEOPLE

## **Goal 7: Create local community coalitions to develop and implement plans to address chronic disease.**

Corresponds with CDC Domain: Environmental Approaches

### **Objective 7.1**

**By 2014, increase by 5% from baseline the number of communities who have conducted needs assessments related to chronic disease prevention.**

#### DATA SOURCES

Roster of South Dakota community needs assessments

#### STRATEGIES/INDICATORS

- 1) By December 2012, establish baseline for the current number of SD community needs assessments.
- 2) Track numbers to meet the objective on an annual basis.

### **Objective 7.2**

**By 2017, increase the number of communities that have at least one community coalition or task force working on chronic disease prevention from 24 to 45.**

#### DATA SOURCES

Roster of South Dakota community coalitions/task forces

#### STRATEGIES/INDICATORS

- 1) Track numbers to meet the objective on an annual basis.

### **Objective 7.3**

**Through 2017, host at least five annual opportunities for communities to share local chronic disease strategy best practices and lessons learned (such as conferences, coordinated meetings, and planning meetings).**

#### DATA SOURCES

Meeting minutes of annual opportunities

#### STRATEGIES/INDICATORS

- 1) Track opportunities held to meet the objective annually.



# EMPOWERED PEOPLE

## **Goal 8: Develop unified health communication strategies to reduce chronic disease risk factors.**

Corresponds with CDC Domain: Environmental Approaches

### **Objective 8.1**

**Through 2016, develop and implement an integrated chronic disease communication plan.**

#### DATA SOURCES

Chronic Disease Communication Plan posted on the Catalyst Repository and SDDOH website

#### STRATEGIES/INDICATORS

- 1) By 2014, develop Chronic Disease Communication Plan.
- 2) By 2016, implement the plan statewide.

### **Objective 8.2**

**Through 2016, host an annual chronic disease state partners meeting focusing on coordination within chronic disease prevention and health promotion.**

#### DATA SOURCES

Agenda and minutes of annual meetings

#### STRATEGIES/INDICATORS

- 1) Track the number of chronic disease state partners meetings annually.

### **Objective 8.3**

**By 2017, reach at least four tribal communities with chronic disease prevention and health promotion messaging through earned and paid media.**

#### DATA SOURCES

Media companies records

#### STRATEGIES/INDICATORS

- 1) Track the number of tribal-focused messages quarterly.

# ELIMINATION OF HEALTH DISPARITIES

## **Goal 9: Engage organizations serving disparate populations to increase the focus on prevention.**

Corresponds with CDC Domains: Community-Clinical Linkages and Environmental

### **Objective 9.1**

**Through 2017, annually provide evidence-based and promising practice prevention education to 15 organizations serving disparate youth.**

#### DATA SOURCES

SDDOH program records

#### STRATEGIES/INDICATORS

1) Track the number of organizations receiving educational materials and/or trainings on an annual basis.

### **Objective 9.2**

**By 2014, develop/update and disseminate at least four culturally appropriate educational resources that are tailored to disparate populations.**

#### DATA SOURCES

SDDOH program records; dissemination on SDDOH and related websites as well as printed copies of materials

#### STRATEGIES/INDICATORS

1) Track the number of resources developed/updated and disseminated to meet the objective on an annual basis.

## **Goal 10: Enhance the infrastructure connecting chronic disease partners and tribal organizations.**

Corresponds with CDC Domain: Environmental Approaches

### **Objective 10.1**

**By 2014, co-host an annual chronic disease educational opportunity, conference or training with statewide partners and tribal organizations.**

#### DATA SOURCES

Program roster and/or agenda

#### STRATEGIES/INDICATORS

1) Track opportunities to meet the objective on an annual basis.

### **Objective 10.2**

**By 2017, develop a minimum of one formal agreement between tribes and state-based chronic disease program(s) targeting chronic disease prevention and health promotion.**

#### DATA SOURCES

State and Tribal records

#### STRATEGIES/INDICATORS

1) Document formal agreement.

# ELIMINATION OF HEALTH DISPARITIES

## **Goal 11: Expand programs for communities to improve access to healthy foods.**

Corresponds with CDC Domain: Environmental Approaches

### **Objective 11.1**

**By 2016, increase the percentage of census tracts that have healthier food retailers located within the tract or within ½ mile of tract boundaries from 55.7% to 60%.**

#### DATA SOURCES

CDC Fruit and Vegetable Indicator Report

#### STRATEGIES/INDICATORS

1) Track the number of healthier food retailers within the tract or within ½ mile of the tract boundaries annually.

### **Objective 11.2**

**By 2017, increase the percentage of farmers markets that accept electronic benefits transfer (EBT) from 0% to 5%.**

#### DATA SOURCES

South Dakota State University Extension Program Reports and South Dakota Department of Social Services

#### STRATEGIES/INDICATORS

1) Track the percentage of farmers' markets accepting EBT annually.

## Surveillance and Epidemiology

Chronic disease surveillance and epidemiology data are relied upon to identify and track population health needs and outcomes in South Dakota. Surveillance and epidemiology data allow the identification of gaps and disparities in population health outcomes so chronic disease prevention programs can target resources to meet the greatest needs in our state. For example, vital statistics mortality data show trends in chronic disease mortality broken down by specific underlying causes of death coded by the International Classification of Diseases, Tenth Revision (ICD-10). Disparities and gaps are identified when mortality patterns diverge across population groups that can include age, race, sex, and geographic populations. Other surveillance data available to SDDOH are also used to help identify chronic disease needs, gaps, and disparities. These data sources include the Behavioral Risk Factor Surveillance System (BRFSS), the Youth Risk Behavior Survey (YRBS), hospital discharge data, the South Dakota K-12 Obesity Surveillance System, tobacco surveillance, cancer registry, Medicaid and Medicare data, U.S. Census data, and geospatial mapping. At this time, the majority of new datasets needed for State Plan objectives include establishing baseline numbers for particular objectives. Methods for obtaining these data sets are stated as a specific strategy of each corresponding objective. In addition, specific measures for each objective, including short, intermediate, and long term measures as well as measures specific to health disparate populations, can be found in the Strategies/Indicators section of each corresponding objective. (For further details, refer to the objectives pages of this document.)

In South Dakota, chronic disease surveillance and epidemiology data are also used to guide program plans, and to evaluate program activities by tracking changes in health outcomes and risk factors, and to document program impacts. The South Dakota Office of Chronic Disease Prevention and Health Promotion (OCDPHP) has recently finished the development of the OCDPHP 2020 Strategic Plan with measurable health outcomes and program objectives that will track and document annual progress in each program area including heart disease and stroke, cancer, diabetes, tobacco use, obesity, physical activity and nutrition, oral health, and school-related health. The 2020 Strategic Plan shows which chronic disease programs will coordinate and collaborate together to affect changes in the targeted and shared health outcome goals.

## Evaluation

The OCDPHP maintains robust evaluation for all office and program-specific activities in order to continuously evaluate the office's and programs' progress at achieving their public health objectives. The OCDPHP is also participating in specific evaluation connected to the State Plan, consisting of both a quantitative and qualitative analysis. Given the coordinated focus to State Plan efforts, the office will be evaluated based upon: short-term indicators (the amount and level of partnership involvement in the development of the State Plan); intermediate indicators (progress related to the successful completion of State Plan objectives); and long-term indicators (increased positive health outcomes and decreased rates of chronic disease as evidenced by state data such as BRFSS and our vital statistics records).

The office will utilize its online data management system, Catalyst, to assist in the measurement and evaluation of its short, intermediate and long-term indicators. Catalyst is a web-based management system linking all OCDPHP programs' logic models, work plans and evaluation plans. Catalyst enhances the capacity for program coordination by more effectively managing vast amounts of information, turning it into usable knowledge by associating and integrating information from multiple programs that can be used to leverage resources for individual programs. Catalyst provides an electronic, interactive, and visual tool for querying work plans and reporting on areas of potential opportunities for program collaboration thus enhancing the OCDPHP's ability to provide cross-cutting, coordinated chronic disease program management in a more effective and efficient manner, including a focus on health disparate populations and the programs/partners that serve these populations.

Along with a quantitative analysis of the level and amount of program and partner collaboration utilizing Catalyst, a qualitative analysis will also be conducted consisting of key informant interviews with program and partner individuals to gauge the success and challenges of the office's State Plan collaborative efforts.

In addition to participating and leading various State Plan objectives, statewide partners and stakeholders will hold annual partners' planning meetings to discuss progress on State Plan objectives, prioritize needs, and determine next steps for the upcoming year. The significant involvement of the various statewide stakeholders in conjunction with the thorough State Plan evaluation ensures that the State Plan process will have ample feedback for continuous quality improvement concerning State Plan activities.

## Health Communication and Chronic Disease

South Dakota has a unique opportunity to use existing collaboration, technology and tracking to demonstrate linkages between existing categorical statewide plans and the statewide chronic disease plan. Currently, categorical plans exist in cancer, nutrition and physical activity, oral health, diabetes, tobacco, and heart disease and stroke. Each plan identifies strategies and measures to evaluate chronic disease outcomes. Independent coalitions and partner organizations have reviewed and pledged their support of the adopted goals and objectives.

Linkages between the chronic disease state plan, individual coalition plans and categorical work plans will all be demonstrated by utilizing the Department of Health Catalyst data management system. This system will demonstrate the linkages between objectives that support the State Plan. This reporting will provide all partners information regarding progress toward meeting the desired outcomes, as well as gaps, in their health communication interventions.

The State Plan includes a number of objectives that seek to enhance and coordinate health communication interventions that address chronic disease. For example, environmental scans will be conducted in order to create sector specific health communication plans. In addition, the plan provides for highlighting local successes in chronic disease prevention and health promotion to partners, stakeholders, and the public.

Health communication interventions are vital and powerful tools that can be used to educate the public and stakeholders about the social and economic burden of chronic diseases, conditions and risk factors. Health communication can illustrate the need for and impact of chronic disease prevention and health promotion interventions and help create a supportive climate for policy and programmatic community efforts. South Dakota supports the National Cancer Institute's Making Health Communication Programs Work premise that argues that health communications play a specific role in disease prevention and control.<sup>7</sup>

The book argues that health communication can do the following: increase the intended audience's knowledge and awareness of a health issue problem, or solution; influence perceptions, beliefs, and attitudes that may change social norms; prompt action; demonstrate or illustrate healthy skills; reinforce knowledge, attitudes, or behavior; show the benefit of behavior change; advocate a position on a health issue or policy; increase demand or support for health services; and refute myths or misconceptions.

Combined with other strategies, health communication can

create sustained change in which an individual adopts and maintains a new healthy behavior or an organization adopts and maintains a new policy direction; and overcome barriers/systemic problems, such as insufficient access to care. Health communication cannot produce sustained change in complex health behaviors without the support of a larger program for change, including components addressing health care services, technology, and changes in regulations and policy.

In South Dakota, health communication interventions have been used to reduce tobacco use, to promote active living and healthy eating, to promote cancer screening, and to raise awareness of the signs and symptoms of a heart attack or stroke. The State Plan Communication Plan details strategies for expanding our chronic disease health communication efforts in concert with other interventions and can be found in Appendix C.

In conclusion, the purpose of this document is to unite chronic disease partners around a set of long-term goals. The State Plan will be disseminated through the state's chronic disease coalitions, partners, and stakeholders. In addition, the document will be used to recruit additional partners to assist with implementing the plan. We thank all of the statewide partners and stakeholders who assisted in creating a strong vision for coordinated chronic disease efforts in our state.

<sup>7</sup>National Cancer Institute, Making Health Communication Programs Work, <http://www.cancer.gov/cancertopics/cancerlibrary/pinkbook/page1>

# Appendices

- A) Participants in the Development of the Chronic Disease State Plan**
- B) National Prevention Strategies and Social Determinants of Health**
- C) Communication Plan for the State Plan**



## Participants in the Development of the Chronic Disease State Plan Partners

Ron Baumgart <i>River City Transit</i>	Richard Holm, MD <i>Primary Care Physician</i>	Kari Senger <i>South Dakota Department of Education</i>	Karen Workman <i>Great Plains Tribal Chairmen's Health Board</i>
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## Participants in the Development of the Chronic Disease State Plan Staff and Contractors

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*Fruit and Vegetable Coordinator*

Enid Weiss  
*Worksite Wellness Coordinator*

# Strategic Directions and Priorities

*We know a great deal about how to improve the health of the nation: decades of research and practice have built the evidence base and identified effective prevention approaches. Improving socioeconomic factors (e.g., poverty, education) and providing healthful environments (e.g., ensuring clean water, air and safe food, designing communities to promote increased physical activity) reinforce prevention across broad segments of society. Broad-based changes that benefit everyone in a community should be supplemented by clinical services that meet individual health needs (e.g., immunization, colonoscopy, tobacco cessation counseling, blood pressure and cholesterol monitoring and control). Through health promotion, education, and counseling, we can provide people with the knowledge, tools, and options they need to make healthy choices.*

## Strategic Directions

The National Prevention Strategy identifies four Strategic Directions. These Strategic Directions are the foundation for all prevention efforts and form the basis for a prevention-oriented society. Each Strategic Direction can stand alone and can guide actions that will demonstrably improve health. Together, the Strategic Directions create the web needed to fully support Americans in leading longer and healthier lives.

**Healthy and Safe Community Environments:** *Create, sustain, and recognize communities that promote health and wellness through prevention.* Many elements of our communities affect health directly and also influence individuals' health-related choices. A healthy community environment can help make healthy choices easy and affordable. Many factors influence individual choices, including the availability of resources to meet daily needs (e.g., educational and job opportunities, safe and affordable housing, healthy and affordable foods); community structures (e.g., accessible and safe buildings, parks, transportation); and the natural environment (e.g., absence of toxic substances and other physical hazards). Federal, state, tribal, local, and territorial policies that improve these factors within communities are often interrelated.

**Clinical and Community Preventive Services:** *Ensure that prevention-focused health care and community prevention efforts are available, integrated, and mutually reinforcing.* The provision of evidence-based clinical and community preventive services and the integration of these activities are central to improving and enhancing physical and mental health. Certain clinical preventive services have proven to be both effective and cost-saving through decades of practice and research; The Affordable Care Act reduces barriers to people receiving many clinical preventive services. Clinical preventive services can be supported and reinforced by community prevention efforts that have the potential to reach large numbers of people.

**Empowered People:** *Support people in making healthier choices.* Although policies and programs can make healthy options available, people still need to make healthy choices. When people have access to actionable and easy-to-understand information and resources, they are empowered to make healthier choices. Efforts

to educate and motivate people to make healthy choices should occur across the lifespan, with a particular emphasis on ensuring that young people are provided with the knowledge, skills, and opportunities they need to allow them to become healthy adults. In addition, we should provide knowledge and opportunities that support the unique needs of our growing older adult population.

**Elimination of Health Disparities:** *Eliminate disparities, improving the quality of life for all Americans.* All Americans should have the opportunity to live long, healthy, independent, and productive lives, regard less of their race or ethnicity; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics. In the United States, health disparities are often closely linked with social, economic, or environmental disadvantage. Clear evidence exists that with appropriate focus and investment, health disparities can be eliminated while simultaneously improving the health of all Americans.

## Priorities

Americans aspire to live long, healthy, and productive lives; however obesity, tobacco use, misuse of alcohol and other substances, and community stressors (e.g., job and home losses, discrimination, family separations, and violence) are serious threats to health. In addition, too many Americans do not receive the preventive services that help maintain health, prevent or delay the onset of disease, and reduce health care costs. Each year, injuries and chronic diseases such as heart disease, cancer, and reduce health care costs. Each year, injuries and chronic diseases such as heart disease, cancer, and diabetes are responsible for millions of premature deaths among Americans. In 2005, 133 million Americans -almost one in two adults had at least one chronic illness. Furthermore, injuries are the leading cause of death among infants, youth, and young adults.<sup>6</sup>

**Together, chronic illnesses (e.g., cancer, obesity, depression) cause Americans to miss 2.5 billion days of work each year, resulting in lost productivity totaling more than \$1 trillion/**

## Choosing Words: Best Practices in the Language and Framing of Social Determinants of Health

America leads the world in medical research and medical care, and for all we spend on health care, we should be the healthiest people on Earth. Yet on some of the most important indicators, like how long we live, we're not even in the top 25, behind countries like Bosnia and Jordan. It's time for America to lead again on health, and that means taking three steps. The first is to ensure that everyone can afford to see a doctor when they're sick. The second is to build preventive care like screening for cancer and heart disease into every health care plan and make it available to people who otherwise won't or can't go in for it, in malls and other public places, where it's easy to stop for a test. The third is to stop thinking of health as something we get at the doctor's office but instead as something that starts in our families, in our schools and workplaces, in our playgrounds and parks, and in the air we breathe and the water we bring. The more you see the problem of health this way, the more opportunities you have to improve it. Scientists have found that the conditions in which we live and work have an enormous impact on our health, long before we ever see a doctor. It's time we expand the way we think about health to include how to keep it, not just how to get it back.

1. Health starts-long before illness-in our homes, schools and jobs.
2. All Americans should have the opportunity to make the choices that allow them to live a long, healthy life, regardless of their income, education or ethnic background.
3. Your neighborhood or job shouldn't be hazardous to your health.
4. Your opportunity for health starts long before you need medical care.
5. Health begins where we live, learn, work and play.
6. The opportunity for health begins in our families, neighborhoods, schools and jobs.

### Citation:

Robert Wood Johnson Foundation, *A New Way to Talk About the Social Determinants of Health*, 2010, <http://www.rwjf.org/vulnerablepopulations/product.jsp?id=66428>



# Communication/Dissemination Plan

Communicating the vision of the Chronic Disease State Plan is vital to the plan's implementation and success. During the planning process a communication network of diverse stakeholders and partners was created. Throughout the implementation phase, this network will be used to coordinate efforts, share lessons learned, and report results.

## *Plan Distribution*

Upon completion, the plan will be posted on the Department of Health's website and distributed to those involved in the planning process. DOH staff and partners will make presentations to introduce the plan to the state's chronic disease coalitions. In addition, partners and coalitions will be asked to assist with the implementation of strategies outlined in the plan. SDDOH chronic disease staff will also present the plan to department leadership and will use the plan as a tool to educate policymakers about chronic disease programming. The plan's executive summary will be used as a tool for recruiting and engaging chronic disease partners.

## *Implementation*

The State Plan contains a number of objectives that relate to translating and disseminating data and information for the public, policymakers, partners, and stakeholders. During the planning process, the following communication objectives were incorporated into the plan:

### ***Strategic Direction: Healthy and Safe Community Environments***

#### **Goal 1: Utilize technology to enhance coordinated chronic disease prevention and health promotion.**

*Objective 1.1* By 2013, develop a centralized, online calendar hosted on the SDDOH website to promote and track online chronic disease prevention and health promotion professional training opportunities.

*Objective 1.4* By 2015, develop and implement an interactive online system for customizing public health messaging.

#### **Goal 3: Make local data and evidence-based best practices readily available to community leaders.**

*Objective 3.2:* Through 2016, develop and disseminate quarterly informational briefs highlighting chronic disease data and action recommendations to statewide community leaders and stakeholders.

*Objective 3.3* Through 2017, in partnership with local community leaders and stakeholders, provide local chronic disease data and action recommendations to at least three [one larger (10,000+ population), one small (<10,000 population) and one tribal] communities per year.

### ***Strategic Direction: Clinical and Community Preventive Services***

#### **Goal 5: Increase access to chronic disease prevention, screening and treatment.**

*Objective 5.1* By 2015, the Chronic Disease Coalition will develop a white paper describing cost savings related to prevention.

## ***Strategic Direction: Empowered People***

### **Goal 7: Create local community coalitions to develop and implement plans to address chronic disease.**

*Objective 7.3 Through 2017, host at least five annual opportunities for communities to share local chronic disease strategy best practices and lessons learned (such as conferences, coordinated meetings, and planning meetings).*

### **Goal 8: Develop unified health communication strategies to reduce chronic disease risk factors.**

*Objective 8.1 Through 2016, develop and implement an integrated chronic disease communication plan.*

*Objective 8.2 Through 2016, host an annual statewide public health partners meeting focusing on coordination within chronic disease prevention and health promotion.*

*Objective 8.3 By 2017, reach at least four tribal communities with chronic disease prevention and health promotion messaging through earned and paid media.*

## ***Strategic Direction: Elimination of Health Disparities***

### **Goal 9: Engage organizations serving disparate populations to increase the focus on prevention.**

*Objective 9.2 By 2014, develop/update and disseminate at least four culturally appropriate educational resources that are tailored to disparate populations.*

### **Goal 10: Enhance the infrastructure connecting chronic disease partners and tribal organizations.**

*Objective 10.1 By 2014, co-host an annual chronic disease educational opportunity, conference or training with statewide partners and tribal organizations.*