

# South Dakota Comprehensive Cancer Control State Plan 2015 - 2020



# South Dakota Comprehensive Cancer Control State Plan 2015-2020

April 2015; Updated February 2018

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April 2015

Dear Fellow South Dakotans:

The South Dakota Department of Health and its partners are pleased to present the 2015-2020 South Dakota Comprehensive Cancer Control State Plan. The plan is a collaborative effort of the department's Comprehensive Cancer Control Program, the South Dakota Comprehensive Cancer Coalition and key stakeholders. This is the third plan that has been developed by this diverse statewide group.

Nearly 4,200 South Dakotans were diagnosed with reportable cancer in 2012, or about 11 new cases of cancer diagnosed every day. Moreover, cancer is the second leading cause of death in South Dakota, accounting for one in every four deaths.

The department, the Comprehensive Cancer Coalition and other stakeholders are working to reduce the devastating impact of cancer, focusing on five overarching goals outlined in this plan – prevent cancer, detect cancer in its earliest stages, ensure timely and appropriate access and treatment for all cancer patients, optimize quality of life across the continuum of cancer, and eliminate disparities in the burden of cancer in South Dakota.

This plan provides a framework for action and a collaborative roadmap for state staff, public health professionals, healthcare professionals, schools, communities, tribes and workplaces involved in cancer prevention and control. It includes evidence-based interventions and policy, system, and environmental change approaches to ensure measurable impact and sustainability.

Reducing the burden of cancer in South Dakota will take dedication and collaboration, but working together we can decrease the impact this devastating disease has on all South Dakotans.

Sincerely,



Kim Malsam-Rysdon  
Secretary of Health

## TABLE OF CONTENTS

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Introduction .....	5
Vision and Mission .....	8
Cancer Prevention and Control in South Dakota.....	9
Plan Development .....	15
Goals .....	17
Key Terms .....	17
Priorities, Objectives, and Strategies.....	18
How Can I Help Reduce the Burden of Cancer in South Dakota? .....	26
Alignment within the Office of Chronic Disease Prevention and Health Promotion.....	29
Acknowledgements .....	30
Resources.....	31
References .....	34

## DEDICATION

The South Dakota Comprehensive Cancer Control State Plan 2015-2020 is dedicated to those in South Dakota who have been touched by cancer.

## INTRODUCTION

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The South Dakota Comprehensive Cancer Control State Plan 2015-2020 (SD Cancer Plan) is the result of a collaborative planning process undertaken by the South Dakota Department of Health's Comprehensive Cancer Control Program (SD CCCP), South Dakota Comprehensive Cancer Coalition, and other cancer prevention and control stakeholders in South Dakota. This group aimed to develop a collaborative framework for action to guide all cancer prevention and control stakeholders in their efforts to reduce the burden of cancer in South Dakota. This is the third state cancer plan developed by this diverse statewide group.

The SD Cancer Plan identifies goals, priorities, evidence-based strategies, and objectives across the continuum of cancer prevention and control. The plan is intended to reach adolescents and adults across all races and socioeconomic levels, as well as target underserved populations who face a disparate proportion of the cancer burden. The SD Comprehensive Cancer Coalition aims to select three to five priorities from the SD Cancer Plan to implement on an annual basis and convene task forces to develop detailed action plans to achieve these priorities using the strategies and objectives identified. These action plans will be posted to the [cancersd.com](http://cancersd.com) webpage annually. All cancer prevention and control stakeholders are invited to join the SD Comprehensive Cancer Coalition in these efforts. The SD Comprehensive Cancer Control Steering Committee (Steering Committee) will utilize the approved SD CCCP Implementation Funding Plan, which outlines the protocol for allocating funding for coalition task forces and external funding opportunities, to allocate resources to aid in implementation of the SD Cancer Plan. The Steering Committee will review and update this funding plan on an annual basis.

The SD Cancer Plan is a living document and modifications or mid-course revisions to the plan will occur as identified by stakeholders during its implementation. All revisions will first be reviewed and approved by the Steering Committee, as indicated in the bylaws.

[Evidence-based guidelines, interventions, and best practices](#) are integrated into the SD Cancer Plan wherever possible to support achievement of long-term health outcomes for cancer prevention and control. Evidence-based strategies are those that have been evaluated and proven to be effective in addressing the problem being targeted. These strategies identify the target populations that have benefited from the strategy, the conditions under which the strategy works, and sometimes the change mechanisms that account for their effects (Fertman, 2010). A defining characteristic of evidence-based strategies is their use of health theory both in developing the content of the approach and evaluation. Common sources of evidence-based guidelines, interventions, and best practices incorporated in the SD Cancer Plan include *Best Practices for Comprehensive Tobacco Control Programs*, Cancer Control P.L.A.N.E.T. *The Guide to Community Preventative Services*, Research-tested Intervention Programs, the United States Preventive Services Task Force, National Guideline Clearinghouse: Agency for Healthcare Research and Quality, *Morbidity and Mortality Weekly Report Recommendations*, and Systematic Reviews.

## SOURCES FOR IDENTIFYING EVIDENCE-BASED STRATEGIES

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

<http://www.ahrq.gov>

BEST PRACTICES FOR COMPREHENSIVE TOBACCO CONTROL PROGRAMS

[http://cdc.gov/tobacco/stateandcommunity/best\\_practices](http://cdc.gov/tobacco/stateandcommunity/best_practices)

CANCER CONTROL P.L.A.N.E.T.

<http://cancercontrolplanet.cancer.gov>

COCHRANE REVIEW

<http://cochrane.org>

THE COMMUNITY GUIDE

<http://thecommunityguide.org>

PREVENTION RESEARCH CENTERS

<http://cdc.gov/prc>

RESEARCH-TESTED INTERVENTION PROGRAMS (RTIPS)

<http://rtips.cancer.gov/rtips>

U.S. PREVENTIVE SERVICES TASK FORCE

<http://uspreventiveservicestaskforce.org>

Policy, systems, and environmental change approaches are incorporated into the SD Cancer Plan to ensure cancer prevention and control efforts are long-lasting. While personal choice often determines individual health, variations in uncontrollable, local conditions and resources also contribute. The goals, priorities, strategies, and objectives included in the plan are evidence-based approaches designed to encourage change in policies, systems, and/or environments in South Dakota to make the healthy choice, the easy choice. Access to fruits and vegetables, the design of sidewalks and bike lanes in communities, and smoke-free policies in workplaces directly increase the likelihood that people can eat healthy and nutritious food, walk to school or work, and avoid secondhand smoke exposure (NACCHO, 2011). Policy, systems, and environmental changes are key factors in making healthier choices a reality for communities by addressing the laws, rules, environments, and choices that impact healthy behaviors.

- **Policy Change** includes interventions that create or amend laws, ordinances, resolutions, regulations, or rules (NACCHO, 2011). Policies can be legislative or organizational. Examples of legislative policies include clean indoor air laws regulating tobacco use and exposure or regulations governing the national school lunch program. Examples of organizational policies include schools requiring healthy food options for all students or policies that provide time off during work hours to complete cancer screening.
- **Systems Change** includes interventions that impact all elements of an organization, institution, or system (NACCHO, 2011). Systems change and policy change often work hand-in-hand. Systems change often focuses on changing infrastructure within entities such as a school, park, worksite, or health setting. Examples of systems change include implementing the national school lunch program across state school systems, ensuring a tobacco-free hospital system, or implementing a system change that incorporates client and/or provider reminders for cancer screening or HPV vaccination.

- **Environmental change** includes transforming the environment through physical or material changes to the economic, social or physical environment that can influence people's practices and behaviors (NACCHO, 2011). Examples of environmental changes include incorporating sidewalks, paths, and recreation areas into community design or an increase in favorable attitudes of community decision makers about the importance of nonsmoking policies. Social and environmental factors contribute to influencing healthy behaviors and exposure to modifiable risk factors and access to goods and services within one's community can promote and sustain health.

**Health disparities** are incorporated into the SD Cancer Plan to support achievement of long-term health equity outcomes. The cancer plan advisory committee and coalition members elected to incorporate objectives and strategies focusing on underserved populations throughout the plan to more effectively encompass existing disparities in cancer prevention and control. This decision was intentionally designed to ensure health equity is addressed within all priorities of the plan. As appropriate, objectives and strategies specific to underserved populations within the state are identified. The identified underserved populations and associated objectives and strategies were determined based on a thorough review of the available risk factor and disease burden data.

**Evaluation of the SD Cancer Plan** is essential to ensure the goals and objectives are met and measurable impact occurs. The SD CCCP is committed to providing stakeholders with an annual evaluation report demonstrating the effectiveness and impact of program activities. Evaluation of the objectives and strategies in the SD Cancer Plan is essential to ensure efforts are directed appropriately, progress is achieved, and no strategies are overlooked. The overall purpose of the evaluation is to: (a) monitor the SD CCCP program implementation, (b) discern the long-term impact of SD CCCP activities on the citizens of SD, and (c) disseminate this information to improve SD CCCP efforts. A detailed evaluation plan is developed each year, following the framework for public health program evaluation from the Centers for Disease Control and Prevention. The full annual evaluation plan is available from the SD CCCP Program Coordinator and located on the [cancersd.com](http://cancersd.com) website.

**Annual evaluation** of the SD CCCP includes tracking of 46 measurable objectives. Indicator data is gathered from a number of sources, including cancer morbidity and mortality data from the South Dakota Cancer Registry, risk behavior data from the South Dakota Behavioral Risk Factor Surveillance System, and survey data collected by the SD DOH Office of Health Statistics, including associated youth surveys. Finally, programs and organizations throughout the state gather information through surveys and studies of sub-populations, graciously sharing this data to promote cancer control efforts in South Dakota. A contracted evaluator conducts ongoing evaluation of the SD Cancer Plan, the SD CCCP, and the SD Comprehensive Cancer Coalition. The SD CCCP evaluation uses program monitoring and key indicator data to measure progress and identify areas for future priority focus. Each year, the SD CCCP publishes a public report outlining progress towards meeting the SD Cancer Plan objectives.

## VISION AND MISSION

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### OUR VISION

Reduce the human and economic impact of cancer on South Dakotans through the promotion and support of collaborative, innovative, and effective programs and policies for cancer prevention and control.

### OUR MISSION

Ensure that all South Dakotans have access to quality cancer prevention and control information and services in order to reduce the number of new cancer cases as well as the illness, disability, and death caused by cancer and for survivors to live the best quality of life possible.

- **All South Dakotans** should receive culturally appropriate information about cancer risks and prompt access to high quality cancer prevention, screening, diagnosis, treatment, and rehabilitation information and services;
- **Strong, collaborative partnerships** at the state and local levels will help reduce the human and financial impact of cancer on the people of South Dakota;
- **A collaborative and unified effort** by public, private, and volunteer agencies and individuals increases the effective use of limited resources and minimizes duplication of efforts.



# CANCER PREVENTION AND CONTROL IN SOUTH DAKOTA

## SOUTH DAKOTA DEMOGRAPHICS

South Dakota encompasses over 75,000 square miles and is one of the nation's most rural and frontier geographic areas. There are 814,180 persons living in South Dakota and an average population density of 10.7 people per square mile (US Census Bureau, 2010). Of South Dakota's 66 counties, 34 are designated frontier with a population density of less than six people per square mile and 30 counties are rural.

Of the state's racial/ethnic distribution, 85.9 percent are white, 8.8 percent are American Indian, and the remaining 5.3 percent are classified as some other race or are two or more races. South Dakota's unemployment rate is one of the lowest at 3.5 percent compared to the national rate of 6.2 percent (US Census Bureau, 2013). In addition to a low unemployment rate, the 2009-2013 American Community Survey (ACS) 5-year estimates indicate 14.1 percent of South Dakotans live below 100 percent of the Federal Poverty Level (FPL) compared to 15.4 percent for the US. Within the state, however, poverty levels for counties in or near American Indian reservations are substantially higher. The 10 poorest counties are either part of or adjacent to one of nine American Indian reservations, with poverty levels ranging from 22.3-53.2 percent (US Census Bureau, 2013). The state's rural geography also impacts access to health care services. The majority of the state is designated as a health professional shortage area and most of the rural and frontier counties with towns under 2,000 people are considered medically underserved areas. Another factor affecting health is lack of insurance with 13.6 percent of the state uninsured (US Census Bureau, 2012).

## HOW CANCER AFFECTS SOUTH DAKOTA

Cancer was the second leading cause of death in South Dakota in 2012, with over 4,180 cancer cases diagnosed and 1,623 deaths (South Dakota Cancer Registry, 2014). In 2012, the most common cancer diagnosis in South Dakota was female breast cancer, followed by prostate, lung and bronchus, and colorectal cancers (Table 1).

TABLE 1. AGE-ADJUSTED CANCER INCIDENCE AND MORTALITY RATES IN SOUTH DAKOTA, 2012

CANCER INCIDENCE RATES		CANCER MORTALITY RATES	
SITE	AGE-ADJUSTED RATES	SITE	AGE-ADJUSTED RATES
All Sites	435.1	All Sites	161.2
Female Breast	141.4	Lung and Bronchus	43.3
Prostate	102.4	Female Breast	19.1
Lung and Bronchus	54.6	Prostate	17.8
Colorectal	40.1	Colorectal	15.9
Corpus and Uterus, NOS	23.7	Pancreas	10.5
Melanoma	22.6	Leukemia	7.4
Urinary Bladder	19.3	Ovary	7.1
Non-Hodgkin's Lymphoma	19.0	Non-Hodgkin's Lymphoma	6.1
Leukemia	14.9	Kidney and Renal Pelvis	5.2
Kidney and Renal Pelvis	14.0	Corpus and Uterus, NOS	4.9

Figure Source: SD Cancer Registry  
Rates per 100,000 age-adjusted to the 2000 U.S. standard population and 2012 SD estimated population.

More than half of the cancers diagnosed in South Dakota are prostate, female breast, lung, or colorectal cancer (Figure 1). These four primary sites accounted for 54 percent of all cancers diagnosed and 50 percent of all cancer deaths in South Dakota during the time period of 2003 to 2012 (South Dakota Cancer Registry, 2014). South Dakota ranked 27th in cancer incidence out of the 49 states reporting in 2011; the death rate from cancer ranked high at 30th out of the 50 states and Washington, DC registries reporting (US Cancer Statistics Working Group, 2014). For the time period during 2003-2012, in South Dakota, an average of 1,600 people died each year from cancer and approximately 4,000 people were diagnosed with cancer each year. This equates to one in four deaths in South Dakota being attributable to cancer (South Dakota Cancer Registry, 2014).

FIGURE 1. TEN MOST DIAGNOSED CANCERS, SOUTH DAKOTA, BY PRIMARY SITE 2003-2012

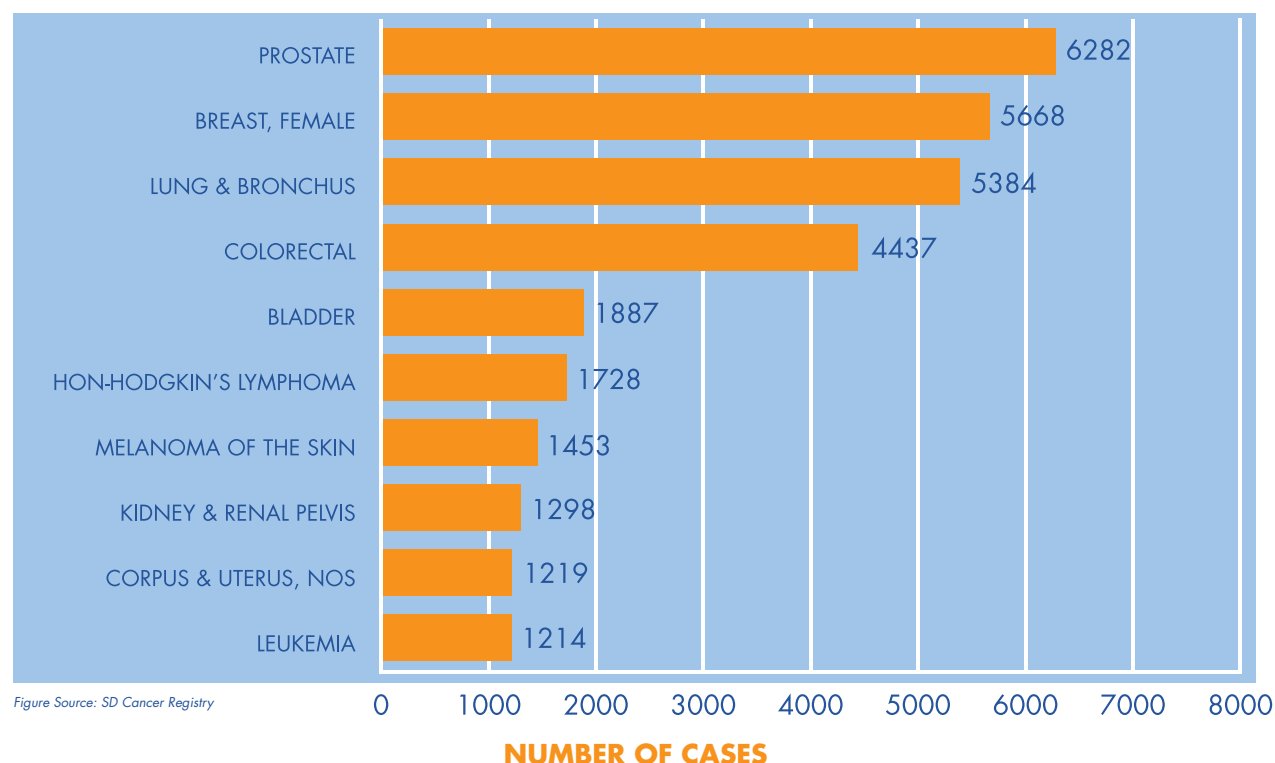


FIGURE 2. AGE-ADJUSTED CANCER MORTALITY RATES, UNITED STATES AND SOUTH DAKOTA, BY RACE, 2003-2012\*

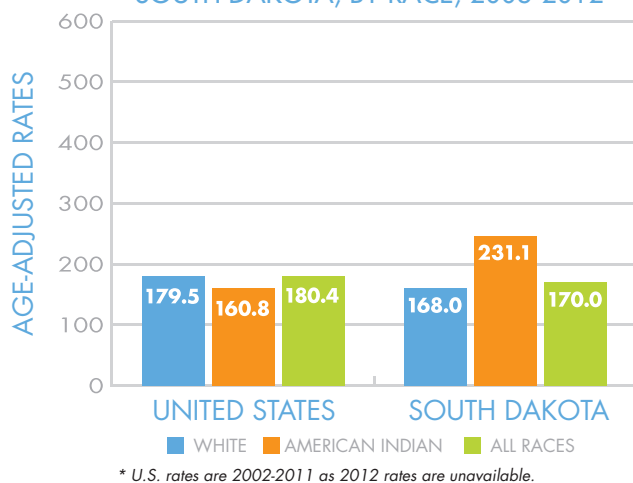


FIGURE 3. AGE-ADJUSTED CANCER MORTALITY RATES, SOUTH DAKOTA, BY RACE AND GENDER, 2003-2012

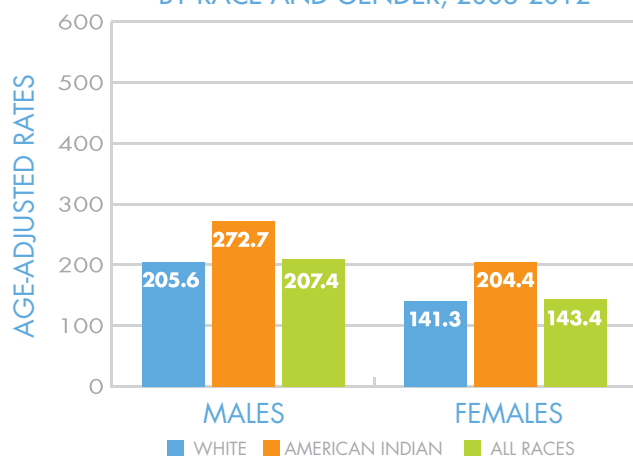
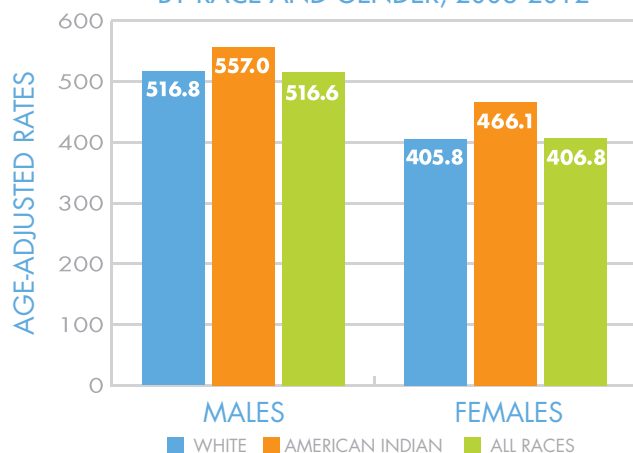


FIGURE 4. AGE-ADJUSTED CANCER INCIDENCE RATES, SOUTH DAKOTA, BY RACE AND GENDER, 2003-2012



Rates per 100,000 US Standard Population and SD estimated population  
Figure Source: SD Cancer Registry

## CANCER DISPARITIES

The burden of cancer in South Dakota disproportionately affects certain populations. National statistics clearly show a higher impact on certain racial and ethnic groups. This difference is similarly reflected in South Dakota's data. The 2003-2012 age-adjusted cancer mortality rate was 168.0/100,000 for whites and 231.1/100,000 for American Indians (Figure 2).

A disparity is also found between genders (Figure 3), with the greatest cancer impact on males (South Dakota Cancer Registry, 2014). According to Meyer, Yoon, and Kaufmann, "The conditions and social context in which persons live can explain, in part, why certain populations in the United States are healthier than others and why some are not as healthy as they could be. The social determinants of health as well as race and ethnicity, sex, sexual orientation, age, and disability all influence health. Identification and awareness of the differences among populations regarding health outcomes and health determinants are essential steps towards reducing disparities in communities at greatest risk" (Meyer, Yoon, & Kaufmann, 2013).

American Indians have been designated as a disparate population for cancer prevention and control efforts in our state. American Indians have a higher age-adjusted incidence rate of cancer than the state as a whole and the white population in the state (Figure 4). Overall, males have higher rates than females (Figure 4).

## FINANCIAL TOLL OF CANCER

In 2008, an estimated 4.1 percent (33,200) of South Dakotans had some form of cancer. The cost of cancer in South Dakota was approximately \$377 million for all payers combined.\* The estimated, average cost per South Dakotan was \$11,360 (Table 2). Persons age 65 and over had a majority of the cancer expenditures with \$274 million (CDC, 2013).

TABLE 2. ECONOMIC BURDEN OF CANCER

GROUP	BENEFICIARIES	PREVALENCE	BENEFICIARIES w/CANCER	COST PER BENEFICIARY	ALL PAYERS
<b>United States</b>	<b>304,059,724</b>	<b>4.2%</b>	<b>12,634,600</b>	<b>\$11,140</b>	<b>\$140,789,000,000</b>
<b>South Dakota</b>	<b>804,194</b>	<b>4.1%</b>	<b>33,200</b>	<b>\$11,360</b>	<b>\$377,000,000</b>
Age 18-44	279,607	1.3%	3,800	\$4,350	\$16,000,000
Age 45-64	210,178	5.1%	10,800	\$8,020	\$86,000,000
Age 65+	116,100	16.0%	18,600	\$14,720	\$274,000,000
Males	400,864	4.0%	16,000	\$11,310	\$181,000,000
Females	403,333	4.3%	17,100	\$11,410	\$196,000,000

NOTE: Annual expenditures inflated to 2010 dollar value. All results generated are estimates. Actual costs may be larger or smaller than those reported.

\*All payers combined includes Medicaid, Medicare, private insurers and all other payers: out of pocket (including the uninsured), Veteran's Administration, TRICARE, other federal sources, other state and local sources, worker's compensation, other private, other public, and other unclassified sources.

Figure Source: Centers for Disease Control and Prevention, 2013

FIGURE 5. ADULT AND YOUTH TOBACCO USE, SD AND US, 2013

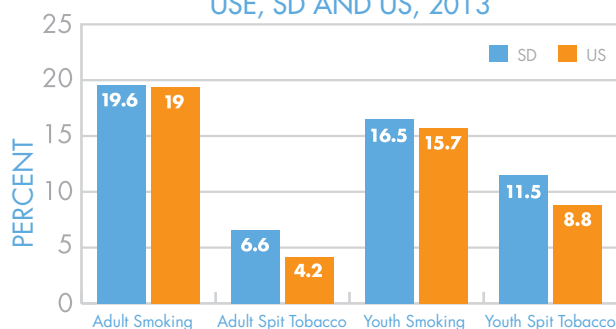


Figure Source: YRBS 2013, BRFSS 2013

FIGURE 6. SD ADULT TOBACCO USE, 2009-2013

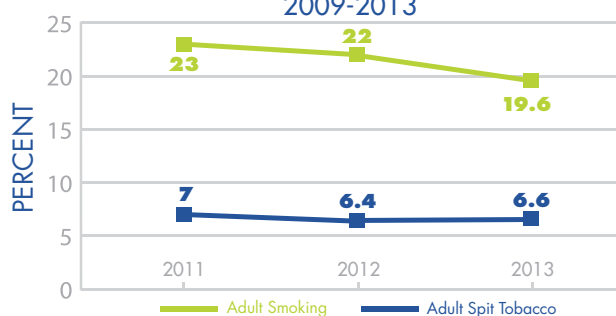


Figure Source: BRFSS 2011-2013

FIGURE 7. SD YOUTH TOBACCO USE, 2009-2013

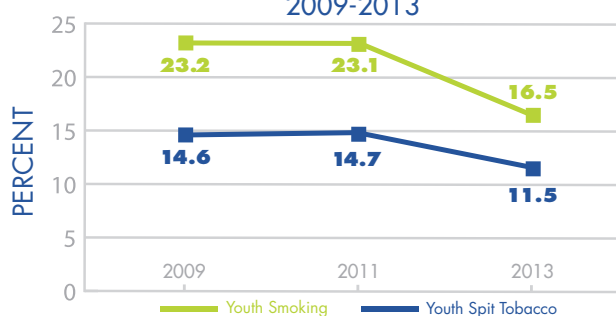


Figure Source: YRBS, 2009-2013

## PREVENTION AND EARLY DETECTION

### Risk Factors

The Centers for Disease Control and Prevention (CDC) indicates that the risk for cancer can be reduced in a variety of ways, including maintaining a healthy weight, avoiding tobacco, limiting alcohol intake, and practicing sun protective behaviors (CDC, 2015). Although tobacco use rates are declining in South Dakota (Figure 6 & 7), tobacco remains one of the leading causes of preventable death. In South Dakota, adults smoke at a rate of 19.6 percent and use spit tobacco at a rate of 6.6 percent (Figure 5). Proven strategies to end the tobacco epidemic should continue, including implementing smoke-free policy, increasing access to cessation services, and public health campaigns (US Department of Health and Human Services, 2014). Targeting these efforts to populations most impacted by tobacco use is important, including American Indians in South Dakota, for which rates of smoking are reported at 44 percent. South Dakota youth also use tobacco at a higher rate than the US (Figure 5).

**FIGURE 8. ADULT AND CHILDHOOD OBESITY IN SOUTH DAKOTA, 2011-2013**

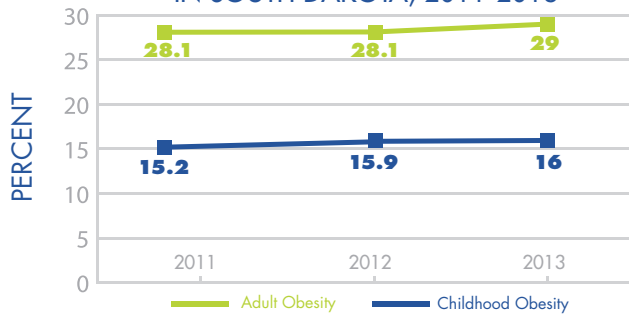


Figure Source: BRFSS, 2011-2013.  
School Height and Weight Report, SDDOH, 2011-2013

**FIGURE 9. PHYSICAL ACTIVITY AMONG HIGH SCHOOL YOUTH AND ADULTS, 2011-2013**

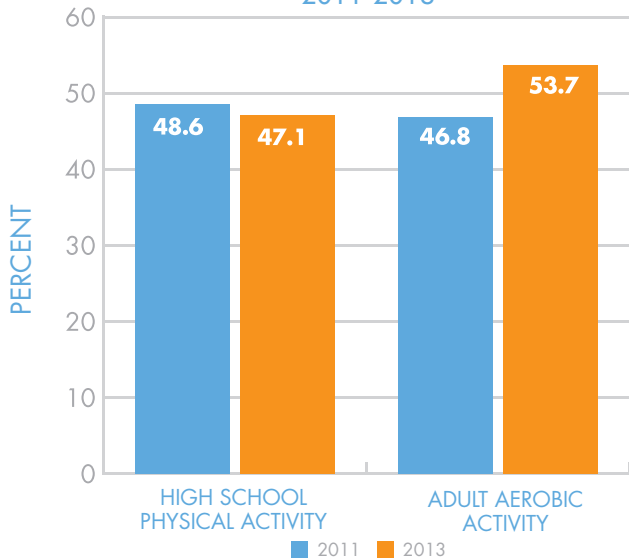


Figure Source: YRBS, 2011-2013. BRFSS, 2011-2013

Secondhand smoke exposure is also a risk factor for cancer. Eliminating exposure decreases this risk, therefore advocating for smoke-free environments in the home and at work is necessary. Currently 88.4 percent of South Dakota adults indicate smoking is not allowed in any work area and 87.6 percent indicate smoking is not allowed anywhere in their homes.

Obesity is also known to increase the risk of some cancers (CDC, 2015). From 2011-2013, the obesity trend among adults increased from 28.1 to 29 percent (Figure 8). Among school age children, however, it appears that obesity rates are relatively stable, plateauing at approximately 16 percent for the past three years. American Indian adults have a higher rate of obesity than whites (35.1 percent vs. 30 percent).

Lack of physical activity and poor nutrition can lead to obesity. However, there has been an increase in the consumption of fruits and vegetables among adults and high school youth. In 2011, only 11 percent of adults ate five or more fruits and vegetables; however, that rate increased to 12.8 percent in 2013. During that same time frame, high school youth increased their consumption of five or more fruits and vegetables from 14.6 to 18.3 percent.

Another important factor in reducing obesity is increasing physical activity. High school physical activity is measured by the number of students physically active for 60 minutes on at least five of the past seven days. There was a slight decrease in physical activity among youth (Figure 9). This same decrease was seen in the US rates, as well (data not shown). Adult aerobic activity is measured by the percent of adults achieving 150 minutes or more of aerobic activity a week and there was an increase in this percentage from 2011 to 2013 (Figure 9).

FIGURE 10. HIGH SCHOOL YOUTH BEHAVIORS THAT CONTRIBUTE TO SKIN CANCER

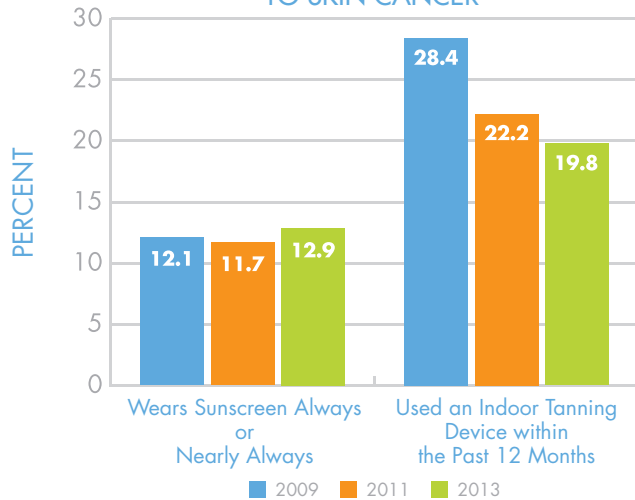


Figure Source: YRBS, 2009-2013

Skin cancer is the most common form of cancer in the United States. According to the CDC, exposure to ultraviolet rays from the sun and tanning beds appears to be the most important environmental factor involved with developing skin cancer (CDC, 2015). In 2013, 28 percent of adults and 12.9 percent of high school youth always or nearly always wore sunscreen with an SPF 15 or higher when outside for more than an hour. Additionally, 19.8 percent of high school youth used an indoor tanning device within the past 12 months (Figure 10.).

### Human Papillomavirus (HPV) Vaccination

In the United States, approximately 17,500 women and 9,300 men are affected annually by HPV-related cancers. Many of these cancers could be prevented with vaccination (CDC, 2015b). According to the National Immunization Survey, South Dakota currently has a higher adolescent female vaccination rate than the US; however, in 2013, only 42.3 percent of adolescent females, ages 13-17, had received three or more doses. This percentage is well under the Healthy People 2020 goal of 80 percent. Adolescent males in South Dakota, and in the US, lag much further behind in coverage. In 2013, only 8.4 percent of South Dakota adolescent males, ages 13-17, received three or more doses of the HPV vaccines compared to the US rate of 13.9 percent (Figure 11).

FIGURE 11. HPV VACCINE COVERAGE AMONG 13-17 YEAR OLDS RECEIVING 3 OR MORE DOSES

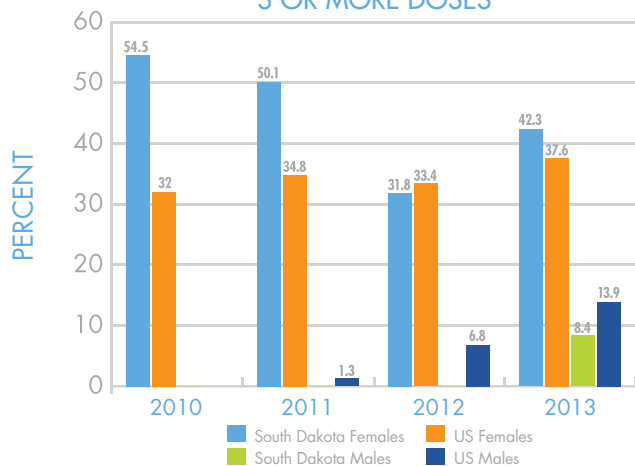


Figure Source: National Immunization Survey, 2010-2013

### Cancer Screenings

Completing recommended cancer screening tests may find breast, cervical, and colorectal cancers early, when treatment is likely to work best (CDC, 2015). The Behavioral Risk Factor Surveillance System provides data related to cancer screening. In 2012, 74.2 percent of white females ages 40 and older in South Dakota received a mammogram within the past two years compared to 67.4 percent of American Indian females. In 2012, 87.1 percent of white females, ages 21-65, completed a Pap test within the past three years. This percentage was lower for American Indian females (83.7 percent). A greater disparity between whites and American Indians exists for colorectal cancer screening. Only 42.7 percent of American Indians, ages 50-75, were up-to-date with recommended colorectal cancer screening compared to 63.8 percent of whites (Figure 12).

FIGURE 12. SOUTH DAKOTA ADULTS WHO HAVE RECEIVED THE RECOMMENDED CANCER SCREENINGS, 2012

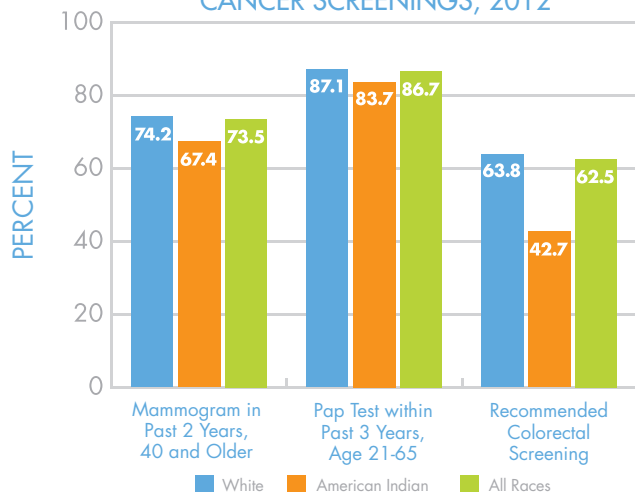


Figure Source: BRFSS, 2012

## PLAN DEVELOPMENT

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The SD Cancer Plan is the result of a collaborative planning process undertaken by the South Dakota Department of Health's Comprehensive Cancer Control Program, SD Comprehensive Cancer Coalition, and other cancer prevention and control stakeholders in South Dakota.

The planning process for the development of the SD Cancer Plan began in 2013 with a series of community listening sessions and a self-assessment of the 2011-2015 SD Cancer Plan. Between January and June of 2013, 10 community listening sessions were held in three communities throughout South Dakota for the purpose of gathering input from South Dakotans about the 2011-2015 SD Cancer Plan and assessing the needs of residents affected by cancer in their communities. The listening sessions resulted in numerous recommendations for strengthening current and future SD Cancer Plans, including: (a) strengthen access to cancer care through increased programming; (b) expand availability of cancer support services, navigators, and social workers; (c) provide education on the importance of evidence-based care and culturally sensitive care; (d) educate third-party payers on clinical practice guidelines for screening, cost savings of screening coverage, and clinical trial enrollment; (e) educate South Dakotans on the importance and cost savings related to prevention and early detection; and (f) promote and expand access to palliative and end-of-life services. The listening sessions were followed with a self-assessment of the 2011-2015 SD Cancer Plan, which occurred as part of a face-to-face meeting of the SD CCCP in September 2013. The self-assessment, using the Cancer Plan Self-Assessment Toolkit, was completed by 11 members of the Steering Committee, the SD CCCP Program Coordinator, the Cancer Programs Director, and the SD CCCP Program Evaluator. The self-assessment led to the identification of several opportunities to strengthen current and future SD Cancer Plans, such as focusing on a core set of strategies, ensuring that objectives are measurable, and highlighting evidence-based strategies. The results of the listening sessions and self-assessment were used by the SD CCCP to inform a series of strategic planning sessions and ultimately the 2015-2020 SD Cancer Plan.

In September 2014, a face-to-face strategic planning session was held in Chamberlain, South Dakota to initiate the 2015-2020 SD Cancer Plan through the collaborative development of strategic goals, measurable objectives, and evidence-based strategies for the plan. The meeting was attended by a diverse group of approximately 30 individuals representing the Steering Committee and other cancer prevention and control stakeholders in South Dakota. Stakeholders invited to join the Steering Committee members at the strategic planning meeting were selected based on an assessment conducted by the SD CCCP to determine which organizations were central to the development of the SD Cancer Plan. This group served as the 2015-2020 SD Cancer Plan Advisory Committee. Please refer to the Acknowledgements section of this publication for a list of Advisory Committee members. To assist the meeting participants in preparing for the strategic planning session, each participant received a set of background materials and resource documents for review prior to the meeting. During the face-to-face strategic planning meeting, participants worked primarily in small groups aligned with the cancer continuum (prevention, early detection, treatment, and quality of life) to develop goals, objectives, and strategies for inclusion in the SD Cancer Plan. Participants were asked to develop a strategic cancer prevention and control plan that could adapt to circumstances that may influence cancer prevention and control efforts during the lifecycle of the plan (e.g., tobacco settlement, major reorganization of health department, budget crisis).

Following the strategic planning meeting, the SD Comprehensive Cancer Coalition, SD Cancer Plan Advisory Committee, and other stakeholders continued to develop and refine the SD Cancer Plan goals, objectives, and strategies during group conference calls. In February of 2015, the draft version of the goals, priorities, objectives, and strategies was circulated to the SD Cancer Plan Advisory Committee and the entire SD Comprehensive Cancer Coalition. Two conference calls were held to gather final input on the proposed goals, priorities, objectives, and strategies. Participants were invited to provide comments during the conference calls or submit feedback via email. In March of 2015, the full set of goals, priorities, objectives, and strategies were finalized for inclusion in the 2015-2020 SD Cancer Plan.



## GOALS

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The SD Comprehensive Cancer Control State Plan 2015-2020 is guided by five overarching goals:

- Prevent cancer among South Dakotans
- Detect cancer in the earliest stages for all South Dakotans
- Ensure timely and appropriate access and treatment for all cancer patients in South Dakota
- Optimize South Dakotans' quality of life across the continuum of cancer
- Eliminate disparities in the burden of cancer in South Dakota

## KEY TERMS

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**GOALS** are general, “big picture” statements of outcomes a program intends to accomplish to fulfill its mission (CDC, 2013b). In this plan, goals reflect overarching desirable outcomes related to cancer prevention, early detection, treatment, quality of life, and health equity.

**PRIORITIES** reflect the necessary changes that must be made in order for a program to meet its goals. In this plan, priorities reflect the changes that must be made to reduce the burden of cancer in South Dakota.

**OBJECTIVES** are the “big steps” that a program will take to attain its goals and achieve its priorities. Objectives indicate what will be done, not how to make it happen. Objectives are Specific, Measureable, Achievable, Relevant and Time-bound (SMART).

**STRATEGIES** are the specific processes that will be undertaken to achieve the identified objectives. To the extent possible, strategies are evidence-based.

## PRIORITIES, OBJECTIVES, AND STRATEGIES

### PRIORITY 1: REDUCE TOBACCO USE.

#### OBJECTIVES:

- 1.1.** Increase the percentage of adults who have been advised by a doctor, nurse, or other health professional to quit smoking in the past 12 months from 64.6% to 80% by 2020.<sup>a</sup>
- 1.2.** Reduce the percentage of adult cancer survivors that currently smoke from 17.3% to 15% by 2020.<sup>a</sup>
- 1.3.** Reduce the percentage of American Indian adults that currently smoke from 47.6% to 33% by 2020.<sup>p</sup>
- 1.4.** Reduce the percentage of adults that currently smoke cigarettes from 19.6% to 14.5% by 2020.<sup>a</sup>
- 1.5.** Reduce the percentage of adults that currently use spit tobacco every day or some days from 6.6% to 4% by 2020.<sup>a</sup>

#### STRATEGIES:

- A.** Partner with healthcare organizations to promote the South Dakota QuitLine.
- B.** Encourage delivery of evidence-based cessation advice by healthcare providers.
- C.** Encourage delivery of cessation services to cancer survivors.

### PRIORITY 2: ELIMINATE EXPOSURE TO SECONDHAND SMOKE.

#### OBJECTIVES:

- 2.1.** Increase the percentage of adults who report smoking is not allowed in any work areas from 88.4% to 92% by 2020.<sup>a</sup>
- 2.2.** Increase the percentage of adults who report smoking is not allowed anywhere in their home from 87.6% to 93% by 2020.<sup>a</sup>

#### STRATEGIES:

- A.** Advocate for tobacco-free environments.
- B.** Support the implementation of smoke-free multi-unit housing policies, tobacco-free parks, and outdoor area policies.

### PRIORITY 3: INCREASE HEALTHY, ACTIVE LIFESTYLES.

#### OBJECTIVES:

- 3.1.** Decrease the percentage of adults who are obese from 29.9% to 23% by 2020.<sup>a</sup>
- 3.2.** Decrease the percentage of school-age children and adolescents who are obese from 15.8% to 14% by 2020.<sup>b</sup>
- 3.3.** Increase the percentage of adults who meet the current guideline of 150 minutes of aerobic physical activity per week from 53.7% to 59% by 2020.<sup>a</sup>

#### STRATEGIES:

- A.** Support assessment of physical activity at every visit with a healthcare professional.
- B.** Advocate for inclusion of physical activity as a patient "vital sign".
- C.** Encourage chronic disease self-management referral into standards of care, care protocols, and other policies.
- D.** Promote physical activity education and prescription as a preventive and treatment-focused behavior among healthcare professionals.
- E.** Implement policy, system, and environmental approaches that increase access to healthy foods and beverages.
- F.** Promote adoption of healthy community design principles and access to places and spaces to be physically active in communities.

<sup>a</sup> SD BRFSS, 2013    <sup>b</sup> SD School Height and Weight, 2013-2014 School Year    <sup>p</sup> SD BRFSS, 2011-2013

#### PRIORITY 4: REDUCE ULTRAVIOLET RADIATION EXPOSURE.

##### OBJECTIVES:

- 4.1.** Increase the percentage of adults who always or nearly always wear sunscreen with an SPF of 15 or higher when outside for more than one hour on a sunny day from 28.5% to 35% by 2020.<sup>c</sup>
- 4.2.** Increase the percentage of youth in grades 9–12 who most of the time or always wear sunscreen with an SPF of 15 or higher when they are outside for more than one hour on a sunny day from 12.9% to 15% by 2020.<sup>d</sup>
- 4.3.** Decrease the percentage of youth in grades 9–12 who used an indoor tanning device during the past 12 months from 19.8% to 15% by 2020.<sup>d</sup>

##### STRATEGIES:

- A.** Implement educational interventions and policy, systems, and environmental changes in day care, preschool, and primary and middle-school settings to promote sun-protective behaviors.
- B.** Implement educational interventions and policy, systems, and environmental changes in outdoor occupational and outdoor recreational and tourism settings to promote sun-protective behaviors.
- C.** Educate partners, stakeholders, and the public on strategies to reduce ultraviolet radiation exposure, including placing restrictions on access to indoor tanning for minors.

#### PRIORITY 5: REDUCE EXPOSURE TO ENVIRONMENTAL CARCINOGENS.

##### OBJECTIVES:

- 5.1.** Reduce the age-adjusted lung cancer incidence rate in South Dakota from 57.4 to 54.5 per 100,000 by 2020.<sup>g</sup>

##### STRATEGIES:

- A.** Collect and analyze health and environmental data to determine baseline and target measures.
- B.** Promote collaboration among organizations to raise awareness of and reduce exposure to environmental carcinogens.
- C.** Educate partners, stakeholders, and the public on strategies to reduce exposure to environmental carcinogens, including restrictions requiring radon education and/or testing.
- D.** Promote radon testing and mitigation within homes, schools, and worksites.

#### PRIORITY 6: INCREASE HPV VACCINATION RATES.

##### OBJECTIVES:

- 6.1.** Increase the percentage of adolescent males and females ages 13-17 in South Dakota who are up-to-date on the HPV vaccine series from 38.6% to 60% by 2020.<sup>e</sup>

##### STRATEGIES:

- A.** Support health systems and healthcare providers to implement policy and system changes and evidence-based interventions, such as client reminder and recall systems, provider assessment and feedback, provider reminders, immunization information systems, and standing orders.
- B.** Implement and maintain vaccination programs in schools.
- C.** Promote professional education for all healthcare professionals, including dental professionals, utilizing CDC's "HPV vaccine is cancer prevention" message.

<sup>c</sup> SD BRFSS, 2011

<sup>d</sup> SD YRBS, 2013

<sup>e</sup> National Immunization Survey-Teen 2016

## PRIORITY 7: INCREASE RISK-APPROPRIATE SCREENING FOR BREAST CANCER.

### OBJECTIVES:

- 7.1.** Increase the percentage of women ages 40 and older in South Dakota who have had a mammogram in the past two years from 73.5% to 81% by 2020.<sup>f</sup>
- 7.2.** Increase the percentage of American Indian women ages 40 and older in South Dakota who have had a mammogram in the past two years from 71% to 75% by 2020.<sup>g</sup>
- 7.3.** Reduce the age-adjusted late-stage female breast cancer incidence rate in South Dakota from 45.1 to 41.0 per 100,000 by 2020.<sup>g</sup>
- 7.4.** Reduce the age-adjusted late-stage female breast cancer incidence rate among American Indian women in South Dakota from 41.9 to 39.0 per 100,000 by 2020.<sup>g</sup>
- 7.5.** Reduce the age-adjusted female breast cancer mortality rate in South Dakota from 20.5 to 18.5 per 100,000 by 2020.<sup>g</sup>
- 7.6.** Reduce the age-adjusted breast cancer mortality rate among American Indian women in South Dakota from 25.5 to 24.3 per 100,000 by 2020.<sup>g</sup>

### STRATEGIES:

- A.** Support health systems and healthcare providers to implement policy and system changes and evidence-based interventions, such as client reminders, provider assessment and feedback and provider reminder and recall systems.
- B.** Monitor and promote the use of cancer risk assessment and risk-appropriate referral for genetic services for adults in primary care clinics and cancer centers.
- C.** Monitor and promote the use of current clinical practice guideline implementation.  
**Additional strategies specifically targeting underserved populations (American Indians, low socioeconomic status (SES) populations, uninsured populations, minority populations):**
- D.** Promote healthcare insurance coverage.
- E.** Promote the use of culturally-tailored patient navigation and messaging.
- F.** Promote low- or no-cost breast cancer screening programs (e.g., All Women Count!, Cheyenne River Sioux Tribe Breast and Cervical Screening Program) to reduce client out-of-pocket expenses.
- G.** Promote access to breast cancer screening by reducing structural barriers (e.g., flexible clinic hours and sites, transportation assistance, navigation).

<sup>f</sup> SD BRFSS, 2012

<sup>g</sup> SD DOH: SD Cancer Registry, 2008-2012

<sup>o</sup> SD BRFSS, 2012 & 2014

## PRIORITY 8: INCREASE RISK-APPROPRIATE SCREENING FOR CERVICAL CANCER.

### OBJECTIVES:

- 8.1.** Increase the percentage of women ages 21 to 65 in South Dakota who have received a Pap test within the past three years from 86.7% to 95% by 2020.<sup>f</sup>
- 8.2.** Increase the percentage of American Indian women ages 21 to 65 in South Dakota who have received a Pap test within the past three years from 81.4% to 93% by 2020.<sup>g</sup>
- 8.3.** Reduce the age-adjusted invasive uterine cervical cancer incidence rate in South Dakota from 6.7 to 5.5 per 100,000 by 2020.<sup>g</sup>
- 8.4.** Reduce the age-adjusted invasive uterine cervical incidence rate among American Indian women in South Dakota from 19.3 to 17.0 per 100,000 by 2020.<sup>g</sup>
- 8.5.** Reduce the age-adjusted mortality rate from cancer of the uterine cervix in South Dakota from 2.1 to 1.5 per 100,000 by 2020.<sup>g</sup>
- 8.6.** Reduce the age-adjusted mortality rate from cancer of the uterine cervix among American Indian women in South Dakota from 10.4 to 4.0 per 100,000 by 2020.<sup>g</sup>

### STRATEGIES:

- A.** Support health systems and healthcare providers to implement policy and system changes and evidence-based interventions, such as client reminders, provider assessment and feedback and provider reminder and recall systems.
- B.** Monitor and promote the use of cancer risk assessment for adults in primary care clinics and cancer centers.
- C.** Monitor and promote the use of current clinical practice guideline implementation.  
**Additional strategies specifically targeting underserved populations (American Indians, low socioeconomic status (SES) populations, uninsured populations, minority populations):**
- D.** Promote healthcare insurance coverage.
- E.** Promote the use of culturally-tailored patient navigation and messaging.
- F.** Promote low- or no-cost cervical cancer screening programs (e.g., All Women Count!, Cheyenne River Sioux Tribe Breast and Cervical Screening Program) to reduce client out-of-pocket expenses.
- G.** Promote access to cervical cancer screening by reducing structural barriers (e.g., flexible clinic hours and sites, transportation assistance, and navigation).

<sup>f</sup> SD BRFSS, 2012

<sup>g</sup> SD DOH: SD Cancer Registry, 2008-2012

<sup>o</sup> SD BRFSS, 2012 & 2014

## PRIORITY 9: INCREASE RISK-APPROPRIATE SCREENING FOR COLORECTAL CANCER.

### OBJECTIVES:

- 9.1.** Increase the percentage of adults ages 50–75 in South Dakota up-to-date<sup>1</sup> with recommended colorectal cancer screening from 62.5% to 80% by 2020.<sup>f</sup>
- 9.2.** Increase the percentage of American Indian adults ages 50–75 in South Dakota up-to-date<sup>1</sup> with recommended colorectal cancer screening from 54.1% to 65% by 2020.<sup>o</sup>
- 9.3.** Increase the percentage of adults ages 50–75 in South Dakota who are enrolled with Avera Health Plans, DAKOTACARE, Sanford Health Plan, Wellmark Blue Cross Blue Shield, or the South Dakota Foundation for Medical Care who had appropriate screening<sup>2</sup> for colorectal cancer from 43.6% to 70.5% by 2020.<sup>h</sup>
- 9.4.** Increase the percentage of adults ages 50–75 in South Dakota who had a doctor, nurse, or other health professional recommend they be tested for colorectal or colon cancer from 36.5% to 41% by 2020.<sup>i</sup>
- 9.5.** Reduce the invasive colorectal cancer age-adjusted incidence rate in South Dakota from 46.1 to 43.0 per 100,000 by 2020.<sup>g</sup>
- 9.6.** Reduce the invasive colorectal cancer age-adjusted incidence rate among American Indians in South Dakota from 60.6 to 50.0 per 100,000 by 2020.<sup>g</sup>
- 9.7.** Reduce the colorectal cancer age-adjusted mortality rate in South Dakota from 15.5 to 15.0 per 100,000 by 2020.<sup>g</sup>
- 9.8.** Reduce the colorectal cancer age-adjusted mortality rate among American Indians in South Dakota from 25.0 to 15.0 per 100,000 by 2020.<sup>g</sup>

<sup>1</sup> Fecal occult blood test (FOBT) within 1 year, or sigmoidoscopy within 5 years with FOBT within 3 years, or colonoscopy within 10 years.

<sup>2</sup> HEDIS numerator includes those who have received one or more of the following: (a) fecal occult blood test (FOBT) during the measurement year; (b) flexible sigmoidoscopy during the measurement year or the four years prior to the measurement year; (c) colonoscopy during the measurement year or the nine years prior to the measurement year.

### STRATEGIES:

- A.** Support health systems and healthcare providers to implement policy and system changes and evidence-based interventions, such as client reminders, provider assessment and feedback, provider reminder and recall systems, and FluFIT/FluFOBT.
- B.** Monitor and promote the use of cancer risk assessment and risk-appropriate referral for genetic services for adults in primary care clinics and cancer centers.
- C.** Monitor and promote the use of current clinical practice guideline implementation.  
**Additional strategies specifically targeting underserved populations (American Indians, low socioeconomic status (SES), uninsured, minority):**
- D.** Promote healthcare insurance coverage and colorectal cancer screening coverage through Indian Health Service.
- E.** Promote the use of culturally-tailored patient navigation and messaging.
- F.** Promote low- or no-cost colorectal cancer screening programs (e.g., GetScreenedSD) to reduce client out-of-pocket expenses.
- G.** Promote access to colorectal cancer screening services by reducing structural barriers (e.g., flexible clinic hours and sites, transportation assistance, and navigation).

<sup>f</sup> SD BRFSS, 2012

<sup>g</sup> SD DOH: SD Cancer Registry, 2008-2012

<sup>h</sup> HEDIS, 2012

<sup>i</sup> SD BRFSS, 2014

<sup>o</sup> SD BRFSS, 2012 & 2014

## PRIORITY 10: INCREASE RISK-APPROPRIATE SCREENING FOR LUNG CANCER.

### OBJECTIVES:

- 10.1.** Reduce the age-adjusted rate of lung cancer cases diagnosed at the distant stage in South Dakota from 31.0 to 29.0 per 100,000 by 2020.<sup>g</sup>
- 10.2.** Reduce the age-adjusted rate of lung cancer cases diagnosed at the distant stage among American Indians in SD from 60.2 to 57.0 per 100,000 by 2020.<sup>g</sup>
- 10.3.** Reduce the age-adjusted lung cancer mortality rate in South Dakota from 44.8 to 40.0 per 100,000 by 2020.<sup>g</sup>
- 10.4.** Reduce the age-adjusted lung cancer mortality rate among American Indians in South Dakota from 75.8 to 60.0 per 100,000 by 2020.<sup>g</sup>

### STRATEGIES:

- A.** Develop and deliver appropriate lung cancer prevention messages to increase awareness of appropriate screening protocols and quality care standards.
- B.** Engage new and existing stakeholders to assess capacity, increase access, and ensure quality lung cancer screening for high-risk individuals.
- C.** Ensure tobacco cessation support for cigarette smokers undergoing lung cancer screening.

## PRIORITY 11: PROMOTE TIMELY, HIGH QUALITY CANCER TREATMENT.

### OBJECTIVES:

- 11.1.** Reduce the percentage of South Dakotans under the age of 65 without health insurance from 13.6% to 11% by 2020.<sup>j</sup>
- 11.2.** Maintain the number of cancer centers accredited by the American College of Surgeons Commission on Cancer from 5 to 5 by 2020.<sup>k</sup>

### STRATEGIES:

- A.** Routinely monitor and report on data and surveillance trends.
- B.** Support accreditation of cancer treatment centers.
- C.** Increase access and availability to personalized medicine for cancer treatment.
- D.** Enhance health insurance coverage and reimbursement for cancer care and treatment.
- E.** Improve access to transportation and lodging resources for cancer patients.

<sup>g</sup> SD DOH: SD Cancer Registry, 2008-2012

<sup>j</sup> US Census: Small Area Health Insurance Estimates, 2012

<sup>k</sup> American College of Surgeons Commission on Cancer, 2014

## PRIORITY 12: INCREASE PARTICIPATION IN CANCER CLINICAL TRIALS.

### OBJECTIVES:

- 12.1.** Increase the percentage of participants enrolled in cancer-related clinical trials among identified South Dakota cancer centers from 11.4%<sup>4</sup> to 15% by 2020.<sup>1</sup>

<sup>4</sup>This data was collected using a standard set forth by the CoC for accreditation of cancer facilities. Patients participating in more than one clinical trial are counted for each trial they participated in during the specified time period.

- 12.2.** Improve the percentage of SD adults reporting ever having cancer and participating in a clinical trial as part of their cancer treatment from 4.5% to 5% by 2020.<sup>9</sup>

### STRATEGIES:

- A.** Collect and analyze clinical trial participation data from the seven identified cancer centers in South Dakota to determine baseline and target measures.
- B.** Develop a prioritized action plan with partners to address effective recruitment strategies.
- C.** Raise awareness among healthcare professionals and the public about clinical trial benefits and availability (e.g., promote SD CCCP web-based clinical trial resources).
- D.** Ensure that all South Dakota cancer patients receive information about clinical trials at time of diagnosis (e.g., QI project CoC, meaningful use).

## PRIORITY 13: PROMOTE PATIENT-CENTERED CARE THAT ENHANCES QUALITY OF LIFE FOR ALL CANCER SURVIVORS.

### OBJECTIVES:

- 13.1.** Of those ever diagnosed with cancer, increase the percentage who have ever been given a written summary, by a doctor, nurse, or other health professional, of the cancer treatments they received from 38.9% to 42.8% by 2020.<sup>9</sup>
- 13.2.** Of those ever diagnosed with cancer, increase the percentage who have ever received written instructions from a doctor, nurse, or other health professional about where they should return or who they should see for routine cancer check-ups after completing treatment for cancer from 53.2% to 58.5% by 2020.<sup>9</sup>
- 13.3.** Increase the number of healthcare professionals and health home staff who receive motivational interviewing training from 0 to 100 by 2020.<sup>1</sup>
- 13.4.** Increase the number of community health workers who receive advanced training in chronic disease from 0 to 100 by 2020.<sup>1</sup>

### STRATEGIES:

- A.** Utilize and maintain the BRFSS survivorship module.
- B.** Encourage the use of survivorship care plans for all cancer patients.
- C.** Promote linkages between health facilities and community resources (e.g., Reach to Recovery, Better Choices, Better Health [chronic disease self-management program], transportation assistance, support groups).
- D.** Support the use of patient navigation and community health workers across the cancer continuum.
- E.** Develop resources to increase healthcare provider awareness of survivor needs and available best practices and guidelines.
- F.** Support efforts by healthcare providers to establish health homes and care coordination.

<sup>8</sup> SD DOH, 2015  
<sup>9</sup> SD BRFSS, 2017

<sup>1</sup> Primary Data Collection from the following SD Cancer Centers: Avera Cancer Institute Aberdeen, Avera Cancer Institute Mitchell, Avera Cancer Institute Yankton, Avera Cancer Institute Sioux Falls, John T. Vucurevich Cancer Care Institute, Prairie Lakes Cancer Center, Sanford Cancer Center Sioux Falls



#### **PRIORITY 14: IMPROVE PALLIATIVE CARE SERVICES AND AWARENESS FOR CANCER PATIENTS.**

##### **OBJECTIVES:**

**TBD**

##### **STRATEGIES:**

- A.** Support collaborative learning opportunities to help establish new palliative care programs.
- B.** Promote health care professional training and certification in palliative and end-of-life care, particularly where programs are not currently available.
- C.** Integrate national palliative care standards into routine cancer care (e.g., Institute for Clinical Systems Improvement, National Consensus Project: Clinical Practice Guidelines for Quality Palliative Care, National Comprehensive Cancer Network).
- D.** Increase awareness and education of the general public on the benefits of palliative care.

#### **PRIORITY 15: INCREASE THE USE OF ADVANCE CARE PLANNING.**

##### **OBJECTIVES:**

- 15.1.** Increase the percentage of adults 18 and older who reported having an advanced directive in place from 31.4% to 35% by 2020.<sup>m</sup>

##### **STRATEGIES:**

- A.** Identify and reduce any disparities among population groups.
- B.** Educate healthcare professionals on the importance of advance care planning and facilitating culturally-appropriate conversations about advance care planning.
- C.** Promote completion of advance directives.
- D.** Promote the use of electronic medical record reminders for providers to prompt provider-patient conversations about advanced care planning and advanced directive completion.

<sup>m</sup> SD BRFSS, 2015

## HOW CAN I HELP REDUCE THE BURDEN OF CANCER IN SOUTH DAKOTA?

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There is never a better time to join the fight to reduce the burden of cancer in South Dakota than now! Below you'll find activities, listed by sector, that can be implemented to support the goals, priorities, and objectives of the SD Cancer Plan. In addition, joining the SD Cancer Coalition is a great way to network and partner with other cancer prevention and control stakeholders in South Dakota. [Join today!](#)

### HEALTH CARE PROFESSIONALS AND HOSPITALS

- Educate healthcare staff on the South Dakota QuitLine and how to refer patients. (Priority 1)
- Adopt a written 100% tobacco-free buildings and ground policy. (Priorities 1 and 2)
- Routinely ask patients about healthy lifestyle factors including nutrition, physical activity, tobacco use, UV exposure, and in-home radon testing. (Priority 1, 2, 3, 4 and 5)
- Incorporate chronic disease self-management referral into standards of care, care protocols, and other policies. (Priority 3)
- Include physical activity as a patient "vital sign" and assess physical activity at every visit. (Priority 3)
- Routinely review and utilize evidence-based cancer screening and immunization recommendations. (Priorities 6, 7, 8, 9 and 10)
- Recommend risk-appropriate screening for breast, cervical, colorectal, and lung cancer for patients. This includes educating on and offering all recommended testing options. (Priorities 7, 8, 9 and 10)
- Measure, monitor, and report the cancer screening and HPV immunization rates in your practice; they may not be as high as you think. (Priorities 6, 7, 8, 9 and 10)
- Implement evidence-based practice changes to increase your cancer screening and HPV immunization rates (e.g., implement protocols/policies/standing orders, setup client and provider reminder systems, complete provider assessment and feedback). (Priorities 6, 7, 8, 9 and 10)
- Ensure staff and patients understand their health insurance coverage for cancer screenings and HPV immunization. Be aware and knowledgeable of programs that provide free or low cost services for eligible patients. (Priorities 6, 7, 8, 9 and 10)
- Monitor the quality of your cancer screening services. (Priorities 7, 8, 9 and 10)
- Promote and support local and national cancer screening initiatives such as the 80% by 2018 initiative. (Priorities 7, 8, 9 and 10)
- Partner with federally qualified community health centers and other safety net practices to provide screening and treatment for low-income and underserved patients. Consider including cancer screening initiatives as part of your community benefit or accreditation requirements. (Priorities 7, 8, 9 and 10)
- Acquire or maintain American College of Surgeons Commission on Cancer accreditation. (Priorities 11, 12 and 13)
- Expand access to clinical trials. (Priority 12)
- Enroll patients in clinical trials. (Priority 12)
- Establish health homes and care coordination. (Priority 13)
- Support the use of patient navigators and community health workers. (Priority 13)
- Refer patients to non-clinical, community resources. (Priority 13)
- Provide cancer patients with a written summary of their care plan or survivorship care plan. (Priority 13)
- Expand access to palliative, end-of-life care, and advanced planning services. (Priority 14 and 15)

## HEALTH INSURANCE PLANS AND PAYERS

- Educate clinicians, health plan staff, and patients about covered services. (Priorities 1, 3, 6, 7, 8, 9, 10, 11, 13 and 14)
- Provide comprehensive coverage for evidence-based cessation products and services. (Priority 1)
- Adopt a written 100% tobacco-free buildings and ground policy. (Priorities 1 and 2)
- Use data in strategic ways to track and promote screening and HPV vaccination. Set system-wide goals for cancer screening and HPV vaccination. (Priorities 7, 8, 9 and 10)
- Incentivize providers for high performance on cancer screening and HPV immunization measures. Consider pay-for-performance measures or incentive programs for these measures. (Priorities 6, 7, 8, 9 and 10)
- Be familiar with known barriers to screening and immunization for patients. (Priorities 6, 7, 8, 9 and 10)
- Promote quality screening options. (Priorities 7, 8, 9 and 10)
- Distribute client reminders to eligible patients for cancer screenings. (Priorities 7, 8, 9 and 10)

## EMPLOYERS

- Promote the South Dakota QuitLine. (Priority 1)
- Adopt a written 100% tobacco-free buildings and ground policy. (Priorities 1 and 2)
- Support comprehensive worksite wellness programs using evidence-based strategies. (Priority 3)
- Adopt and implement the model physical activity policy and the healthy vending and snack bar model policy. (Priority 3)
- Adopt and implement the model UV Protection Policy. (Priority 4)
- Complete radon testing and mitigation, if necessary, in your worksite. (Priority 5)
- Create a cancer screening friendly work culture. Allow your employees paid time off to complete cancer screenings and work with your insurance provider to reduce financial barriers to cancer screening. (Priorities 7, 8, 9 and 10)
- Partner with your health plan to distribute client reminders to eligible patients for cancer screenings. (Priorities 7, 8, 9 and 10)
- Ensure health insurance coverage for all employees and dependents. (Priority 11)

## COMMUNITY ORGANIZATIONS

- Promote the South Dakota QuitLine. (Priority 1)
- Promote 100% tobacco-free buildings and grounds policies. (Priorities 1 and 2)
- Perform retail assessments to increase awareness of tobacco marketing and sales. (Priority 1)
- Promote community-wide campaigns to support healthy community design principles and to educate residents on places to be physically active. (Priority 3)
- Complete a Community Health Needs Assessment (CHNA) and Improvement Plan. (Priorities 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 14)
- Promote walk audits, active transportation principles and master pedestrian walking and bicycling plans. (Priority 3)
- Increase access to farmers markets and healthier food retail. (Priority 3)
- Advocate for restrictions on access to indoor tanning for minors. (Priority 4)
- Advocate for restrictions requiring radon education and/or testing. (Priority 5)
- Raise awareness of radon, lung cancer, and radon testing and mitigation resources within your community. (Priorities 5 and 10)
- Educate and raise awareness in your community on cancer screening options and HPV vaccination. (Priorities 6, 7, 8, 9 and 10)
- Partner with neighborhood organizations, physicians, hospitals, and local public health officials to support local and national cancer screening initiatives such as the 80% by 2018 initiative. (Priorities 7, 8, 9 and 10)
- Support reimbursement for community health workers, patient navigators, palliative care/end-of-life services, and advanced care planning. (Priorities 11, 13, 14, and 15)

## CANCER SURVIVORS AND CAREGIVERS

- Quit smoking and other tobacco use. (Priority 1)
- Mentor other survivors and caregivers and share their experiences to help educate the public on survivor and caregiver needs. (Priority 13)

## ALL SOUTH DAKOTANS

- [Join](#) the SD Cancer Coalition!
- Quit smoking and other tobacco use. (Priority 1)
- Promote 100% tobacco-free buildings and grounds policies. (Priorities 1 and 2)
- Eat healthy food and get the recommended amount of physical activity. (Priority 3)
- Protect your skin from the sun and avoid indoor tanning. (Priority 4)
- Complete radon testing and mitigation, if necessary, in your home. (Priority 5)
- Talk to your doctor about completing the appropriate cancer screenings and vaccinations for you. (Priorities 6, 7, 8, 9 and 10)
- If diagnosed with cancer, consider participating in a clinical trial. (Priority 12)
- Complete advance directives. (Priority 15)

## ALIGNMENT WITHIN THE OFFICE OF CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION

The SD CCCP is located within the Office of Chronic Disease Prevention and Health Promotion (Office) of the South Dakota Department of Health. The SD CCCP collaborates closely and aligns activities with other programs located within the Office. To ensure continued collaborative efforts, the SD Cancer Plan aligns with the six CDC National Comprehensive Cancer Control Program priorities released in 2010, Healthy People 2020 Objectives, South Dakota Department of Health 2020 Objectives, the South Dakota Tobacco Control State Plan 2015-2020, South Dakota State Plan for Nutrition and Physical Activity to Prevent Obesity and Other Chronic Diseases 2015-2020, and the South Dakota Chronic Disease State Plan.

The priorities and objectives that align with the SD Cancer Plan goal, “Prevent cancer among South Dakotans” were developed in conjunction with the SD Tobacco Prevention and Control Program and the SD Nutrition and Physical Activity Program. Moreover, many of the objectives and strategies are shared between the SD Cancer Plan, the South Dakota Tobacco Control State Plan 2015-2020, South Dakota State Plan for Nutrition and Physical Activity to Prevent Obesity and Other Chronic Diseases 2015-2020, and the South Dakota Department of Health 2020 objectives. Individually, these plans provide a framework for action for a multitude of stakeholders from varying sectors. Thus, collaborative objectives ensure a multifaceted approach to ensuring these shared objectives are met. Additionally, shared objectives reduce duplicative efforts as programs and stakeholders aim to achieve mutual goals.

### CHRONIC DISEASE DOMAINS

The CDC’s National Center for Chronic Disease Prevention and Health Promotion has developed “The Four Domains of Chronic Disease Prevention” that provide a framework for working toward healthy people in healthy communities. Addressing cancer prevention and control in the broader context of chronic disease is key, as the risk factors that cause or complicate chronic disease can be prevented or lessened by many of the same strategies and interventions (CDC, 2015c). The following table indicates priorities and objectives from the SD Cancer Plan that relate to the four domains:

CHRONIC DISEASE DOMAIN	SOUTH DAKOTA CANCER PLAN ALIGNMENT
<b>Domain 1</b> – Epidemiology and surveillance refers to systems that are used to track chronic diseases and their risk factors.	All SD Cancer Plan Priorities and Objectives
<b>Domain 2</b> – Environmental approaches refers to changes in policies and physical surroundings to make the healthy choice the easy choice.	Priorities 1, 2, 3, 4, 5, 6, 7, 8, 9
<b>Domain 3</b> – Health care system interventions refers to improvements in care that allow doctors to diagnose chronic diseases earlier and to manage them better.	Priorities 1, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
<b>Domain 4</b> – Community programs linked to clinical services refers to those that help patients prevent and manage their chronic diseases, with guidance from their doctor.	Priorities 1, 3, 11, 12, 13, 14, 15

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27. Nikki Prosch, South Dakota State University Extension
28. Christen Rennich, American Cancer Society

The facilitators for developing the plan were Frank Bright and Carol McPhillips-Tangum from the National Association of Chronic Disease Directors.

## RESOURCES

### South Dakota Department of Health Resources

Be Tobacco Free South Dakota

<http://befreesd.com>

Good & Healthy South Dakota

<http://goodandhealthysd.org/>

Healthy SD

<http://healthysd.gov/>

South Dakota Cancer Registry

<http://getscreened.sd.gov/registry>

South Dakota Cancer Screening Programs

<http://getscreened.sd.gov/>

South Dakota Comprehensive Cancer Control Program

<http://cancersd.com/>

South Dakota Data Query System

<http://dqs.sd.gov/webApp1/cancer.aspx>

South Dakota Department of Health

<http://doh.sd.gov/>

South Dakota Health Data and Statistics

<http://doh.sd.gov/statistics/>

South Dakota QuitLine

<http://sdquitline.com/> or 1-866-SD-QUITS



Print materials can be ordered online, at no charge, through the

South Dakota Department of Health at the following link: <http://doh.sd.gov/catalog>

## Federal Agency Resources

Centers for Disease Control and Prevention- Cancer Prevention and Control

<http://www.cdc.gov/cancer/>

National Cancer Institute

<http://www.cancer.gov/>

National Comprehensive Cancer Control Program

<http://www.cdc.gov/cancer/ncccp/>

## State and National Resources

American Cancer Society

<http://www.cancer.org/>

American College of Surgeons Commission on Cancer

<http://www.facs.org/cancer/>

Cancer Control P.L.A.N.E.T.

<http://cancercontrolplanet.cancer.gov/>

C-Change

<http://c-changetogether.org/>

Great Plains Tribal Chairmen's Health Board

<http://gptchb.org/>

Guide to Community Preventive Services

<http://www.thecommunityguide.org/>

National Association of Chronic Disease Directors

<http://www.chronicdisease.org/>

National Cancer Institute

<http://www.cancer.gov/>

Northern Plains Comprehensive Cancer Control Program

<http://health.gptchb.org/npcccp/>

Research-tested Intervention Programs

<http://rtips.cancer.gov/rtips/index.do>



Susan G. Komen South Dakota  
<http://komensouthdakota.org/>

U.S. Preventive Services Task Force  
<http://www.uspreventiveservicestaskforce.org/>

## Data Sources from the Centers for Disease Control and Prevention

Behavioral Risk Factor Surveillance System  
<http://www.cdc.gov/brfss>

National Program of Cancer Registries  
<http://apps.ncccd.cdc.gov/uscs/>

National Vital Statistics System  
<http://www.cdc.gov/nchs/nvss.htm>

Surveillance, Epidemiology, and End Results Program  
<http://seer.cancer.gov/>

Youth Risk Behavior Surveillance System  
<http://www.cdc.gov/yrbss>

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