

# 2012

## Community Health Status





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# Section 1







## Welcome Letter

The mission of the Sioux Falls Health Department is to improve the quality of life for the Sioux Falls community by preventing or controlling disease, mitigating adverse health threats, and by providing an open door to primary health services. Our vision is to understand and influence the health and well-being of the citizens of Sioux Falls. Our first Community Health Needs Assessment, 2012 Live Well Sioux Falls, provides data as well as resident input that provides a comprehensive picture of the health status of our community and outlines proven community-based strategies that can move us closer to delivering our mission and achieving our vision, to live well as a community.

In collaboration with our many partners, this report is focused on framing community assets and needs specifically as they relate to physical activity, nutrition, tobacco use, chronic disease management, and leadership. Using nationally recognized tools and data, and local community feedback and involvement, our partners—both public and private—can and are already planning for community level changes that are sustainable, impact infrastructure, and aid in shifting social norms related to each of these health topics. I applaud these efforts and am grateful to all who have partnered with the Sioux Falls Health Department to give Live Well Sioux Falls life.

As you read this report, take pride in our community assets, embrace community needs, and engage in becoming part of the process to move these needs to assets. Also, find ways to be part of the conversation moving forward, and find ways you can personally and collectively be part of the solution. Let's Live Well Sioux Falls!

Jill Franken  
Public Health Director  
Sioux Falls Health Department



Falls Community Health  
521 North Main Avenue  
Sioux Falls, SD  
605-367-8760  
[siouxfalls.org/health](http://siouxfalls.org/health)

## Executive Summary

Sioux Falls, South Dakota, has taken a proactive approach in addressing its public health issues. Live Well Sioux Falls is an initiative designed to help improve the health and well-being of Sioux Falls residents through collaborating on projects to address the community health-related needs. This community health needs assessment (CHNA) engaged a consortium of more than 24 Sioux Falls organizations to form the Live Well Sioux Falls Coalition and Assessment Team (Live Well Team). The Live Well Team was formed to collaborate and assist with implementing the CDC-developed Community Health Assessment and Group Evaluation (CHANGE) tool to collect and organize data concerning community assets and needs regarding policy, systems, and environmental change strategies. This information may be used to inform decisions and guide efforts to improve community health and wellness.



In 2011, the Sioux Falls Health Department (SFHD) published its first Community Health Status Report. The report provides an overview of available public health services and the prevalence of long-standing and emerging public health issues that affect the community. In 2012, the SFHD sought to expand its annual community

health status inquiry through its community stakeholder-driven Live Well Sioux Falls initiative and by conducting a community health needs assessment (CHANGE) analyzing the data and setting priorities based on the data for improving the health of the community. Utilizing the Centers for Disease Control and Prevention (CDC) Community Transformation Grant funds provided by the South Dakota Department of Health, the SFHD led a group of local stakeholders in organizing two major community data collections—the CHANGE Tool and the Live Well Sioux Falls Resident Survey.

The CHNA identifies opportunities and challenges for all five sectors represented (CAL—Community at Large, CIO—Community Institutions and Organizations, Work Site, Health Care, and Schools) to modify policies and environments to improve the health and quality of life in Sioux Falls. Specific health topics addressed include nutrition, physical activity, chronic disease management, tobacco, and leadership. Our hope is that the report will be used to guide the efforts of the many excellent programs and services currently provided in our community as well as inspire new programs and services that focus on the most critical needs of Sioux Falls residents.

The Live Well Team identified three project goals for the initiative.

### 1. **Tobacco-Free Living: Prevent and reduce tobacco use.**

Tobacco use is “the leading cause of premature and preventable death. Living tobacco free reduces a person’s risk of developing heart disease, various cancers, chronic obstructive pulmonary disease, periodontal disease, asthma, other diseases, and of dying prematurely.”<sup>1</sup>

### 2. **Clinical Preventive Services: Increase control and awareness of high blood pressure and high cholesterol.**<sup>2</sup>

Clinical preventive services such as routine disease screening and scheduled immunizations are key to reducing death and



disability and improving the nation’s health. These services both prevent and detect illnesses and diseases at more treatable stages. Millions of children, adolescents, and adults go without clinical preventive services that could protect them from developing a number of serious diseases.

rules, as well as by economics and design features.”<sup>3</sup> This influences a person’s level of physical activity. For example, inaccessible or nonexistent sidewalks and bicycle or walking paths contribute to sedentary habits. These habits lead to poor health outcomes such as obesity, cardiovascular disease, diabetes, and some cancer.

**3. Healthy and Safe Physical Environment (Built Environment): Improve the community environment to support health, specifically to increase active transportation and promote active recreation.**

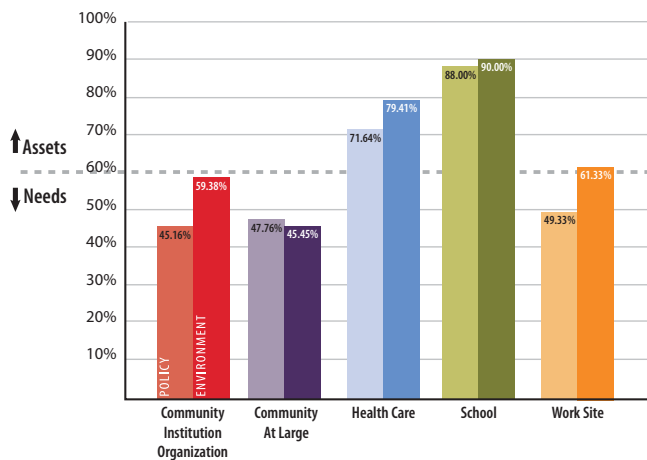
According to the Healthy Eating Active Living Convergence Partnership, the built environment or healthy community design, “encompasses places and spaces created or modified by people including buildings, parks, and transportation systems. The built environment is structured by land use

Opportunities for Community Health Improvement

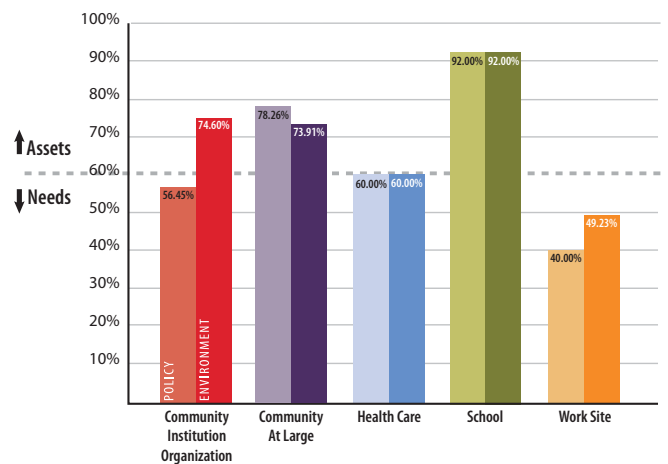
The CHANGE tool process identified opportunities that cross all sectors and also those specific to a sector and a health topic. Opportunities are identified if a health topic score for environment or policy score is less than 60 percent. Below is a summary of the opportunities identified by health topic for each sector represented.

# 2012 CHANGE Assessment Results

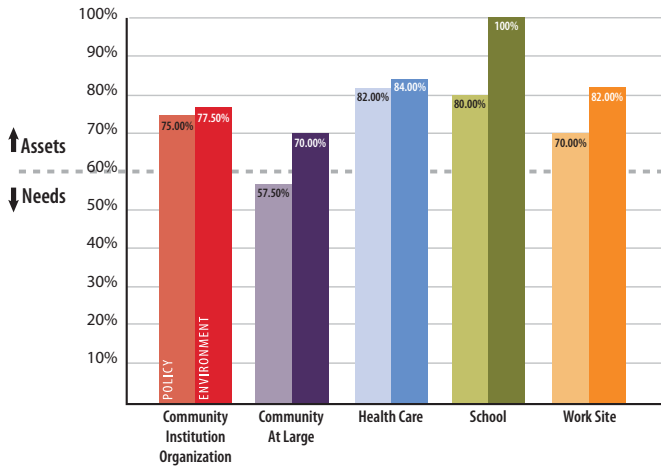
## Nutrition



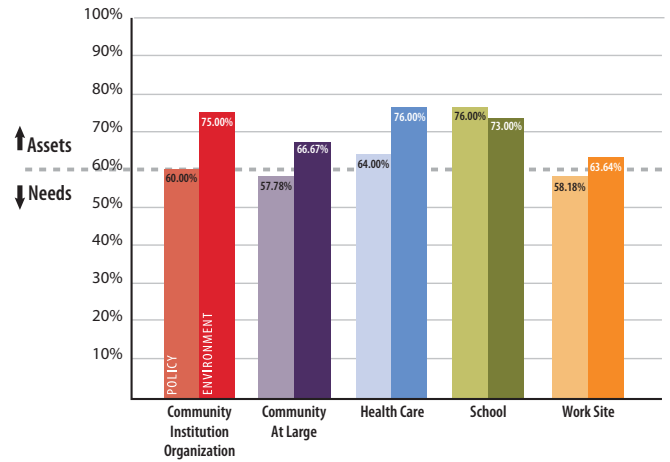
## Physical Activity



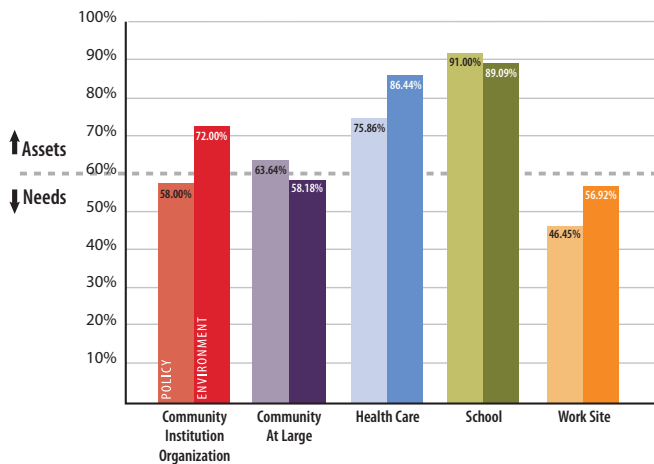
### Tobacco Use



### Chronic Disease Management



### Leadership



The Live Well Survey respondents were asked to identify their perceived top three unhealthy behaviors in Sioux Falls from a list of twelve behaviors. Live Well Survey respondents ranked the top three unhealthy behaviors in the Sioux Falls Community as:

- Alcohol abuse (45.6 percent)
- Poor eating habits (44.5 percent)
- Smoking/tobacco use (41.7 percent)

A lack of exercise (40.5 percent) closely followed behind Smoking/Tobacco Use as an unhealthy behavior in the Sioux Falls community.

Live Well Survey Respondents were also asked to indicate significant problems that exist in Sioux Falls across a number of areas. Problems identified are:

- Child health or childhood obesity (34.6 percent)
- Substance abuse/alcohol, drug, prescription (32.9 percent)
- Bullying (schools, playground, etc.) (30 percent)

Additional areas recognized as significant problems in the community include: Access to affordable housing (23.8 percent), workforce and job training opportunities (22.5 percent), and crime (neighborhood, schools, parks) (21.7 percent). Respondents who live in zip codes 57106 and

57103 accounted for the highest percentage of persons who indicated the top community problems when compared across respondents in other zip codes. White respondents accounted for the highest percentage of persons by race group who indicated the top community problems.

## Prioritization

The following health priorities represent recommended areas of intervention, based on the information gathered through this CHNA and the guidelines from the National Prevention Strategy. From these data, opportunities for health improvement exist with regard to the following areas:

- Nutrition—Increase the number of Sioux Falls residents who have access to healthy and affordable food options.
- Clinical Preventive Services—Increase control of high blood pressure and access to health risk assessments.
- Healthy Community Design—Promote community planning and design to make healthier choices easier.
- Tobacco—Prevent and reduce tobacco use.
- Health Promotion—Develop a comprehensive wellness model and increase number of work sites that maintain wellness programs.
- Leadership—Develop a sustainability plan for Live Well Sioux Falls and healthy community design concepts.
- Coalition Management and Advocacy—Coordinate an effective and sustainable Live Well coalition to provide advocacy for healthy community design concepts.

These strategic directions will be implemented in a phased approach over a four-year period. Additional information on these graphs is available in Section 4 of the complete Health Status Report.

## Information Gaps

While this assessment is quite comprehensive, it cannot measure all aspects of health in the community, nor can it adequately represent all possible populations of interest. Because of these information gaps, the ability to assess all of the community health needs may be limited in some ways.





## Introduction to Live Well Sioux Falls

The 2012 Community Health Status Report provides an overview of the health of the Sioux Falls community, presents information on community health needs and assets, and outlines strategies that support the health-related needs of Sioux Falls in order to inform local decision makers as well as guide efforts to improve overall community health and wellness.

According to the Centers for Disease Control and Prevention, “chronic diseases affect almost 50% of Americans and accounts for 7 of the 10 leading causes of death in the United States. Preventable health risk factors such as tobacco use and exposure, insufficient physical activity, and poor nutrition contribute greatly to the development and severity of many chronic diseases.”<sup>4</sup> One way to combat the prevalence of chronic disease in communities across the nation is through organized and informed community action to help reduce health risk factors and health inequities. In addition to chronic disease, communities are also affected by public health issues, including infectious disease, environmental health, injury prevention, and public health emergencies.

Sioux Falls, South Dakota, has taken a proactive approach in addressing its public health issues. In 2011, the Sioux Falls Health Department (SFHD) published its first Community Health Status Report. That report provided an overview of available public health services and the prevalence of longstanding and emerging public health issues that affect the community. In 2012, the SFHD sought to expand its annual community health status inquiry through its community stakeholder driven Live Well Sioux Falls initiative and by conducting a community health needs assessment (CHNA). A CHNA is a public health tool to assist with understanding the health within a specific community utilizing quantitative and qualitative methods, including collecting and analyzing the data and setting priorities based on the data for improving the health of the community. Utilizing the Centers for Disease Control and Prevention (CDC) Community

Transformation Grant funds provided by the South Dakota Department of Health, the SFHD led a group of local stakeholders in organizing two major community data collections—the CHANGE Tool and the Live Well Sioux Falls resident survey.

The Live Well Sioux Falls initiative convened local stakeholders representing a broad spectrum of the community from sectors such as the community at large, schools, work sites, health care organizations, and community-based organizations/institutions. These sectors, in conjunction with the Sioux Falls Health Department, form the Live Well Coalition and Assessment Team (Live Well Team). The Live Well Team was formed to collaborate and implement the CDC-developed Community Health Assessment and Group Evaluation (CHANGE) tool to collect and organize data concerning community assets and areas for improvement regarding policy, systems, and environmental change strategies.<sup>5</sup>

In addition to the CHANGE tool, the Live Well Team assisted in designing and implementing a nonscientific resident survey that gathered information regarding residents’ individual health status and their perceptions about the “health” of Sioux Falls concerning public health-related issues such as access to care and community services. Comparisons of Sioux Falls’ public health data to secondary data sets were also utilized in describing the community’s health status.

As part of the CHNA process, the Live Well Team sectors utilized the data gathered through each of the aforementioned tools to identify priorities and achievable strategies to support the long-term health of Sioux Falls. The community defined for this CHNA is the city of Sioux Falls. The Live Well Sioux Falls initiative seeks to sponsor and achieve sustainable policy and environmental systems changes that support a healthy community. The 2012 Community Health Status Report supports the Live Well Sioux Falls initiative by providing a current snapshot as to the community’s health needs, assets, and strategies for improvement.

## A State and Community Overview

**South Dakota:** As of 2010, estimated population for the state of South Dakota is 814,180, with a population density of 10.7 persons per square mile, making South Dakota one of the least densely populated states in the nation.<sup>6</sup> The population of South Dakota is predominantly non-Hispanic Caucasian at 84.7 percent; Native American represents the largest minority at 8.8 percent. Nearly 25 percent of South Dakotans are under the age of 18. The most common South Dakota household type includes married couples with no children under the age of 18 living in the house. Approximately 52 percent of South Dakotans live in an urban setting, 8 percent in rural farm areas, and 41 percent in rural nonfarm areas. Based on the U.S. Department of Health and Human Services, 13.7 percent of the people live below the federal poverty level (FPL).

Below is a population pyramid, also called an age picture diagram, for the state of South Dakota. This is a graphical illustration that shows the distribution of various age groups in a population. Population pyramids are often viewed as the most effective way to graphically depict the age and sex distribution of a population. A great deal of information about the population broken down by age and sex can be read from a population pyramid, and this can shed light on the extent of development and other aspects of the population.

Adults age 65 and older comprise 14.4 percent, which is higher than the national average of 12.6 percent. An estimated 7.2 percent of the state's population is under the age of 5 years old.<sup>7</sup>

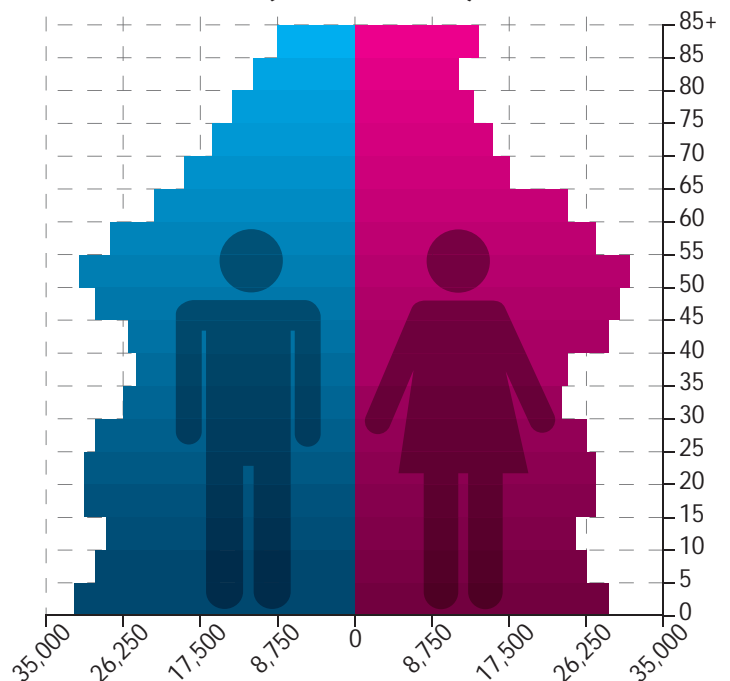
### 2012 Poverty Guidelines for the 48 Contiguous States and the District of Columbia

Persons in family/ household	Poverty guideline	Percentage of respondents who meet guideline
1	\$11,170	27.7%
2	\$15,130	9.7%
3	\$19,090	9.3%
4	\$23,050	4.1%
5	\$27,010	0.9%
6	\$30,970	0.2%
7	\$34,930	0.2%

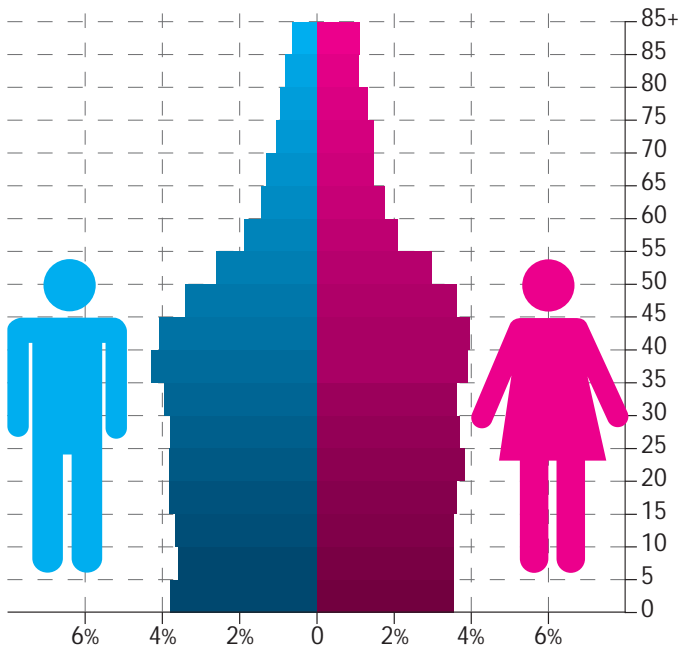
For families/households with more than 8 persons, add \$3,960 for each additional person.

Source: 2012 HHS Poverty Guidelines, HHS  
<http://aspe.hhs.gov/poverty/12poverty.shtml>

Population by Sex and Age 2010 (South Dakota)

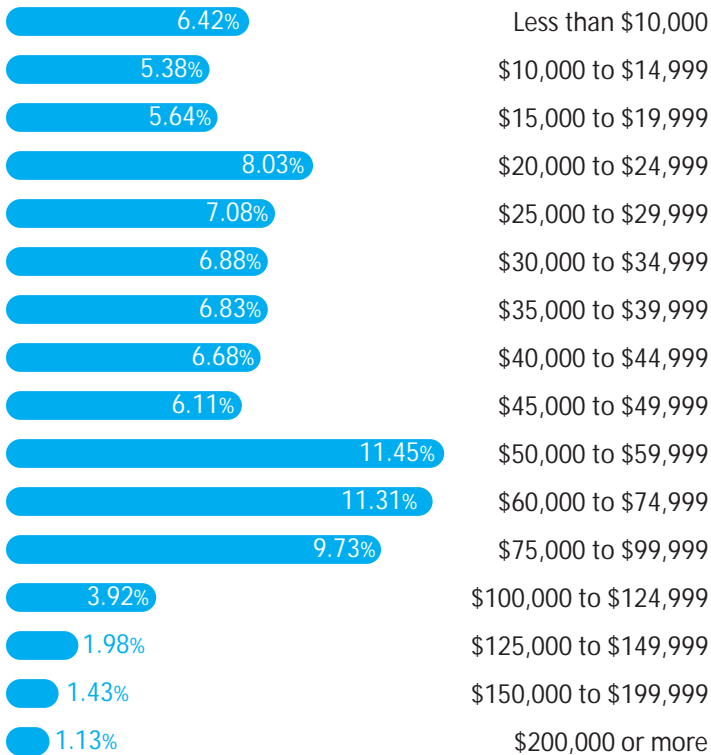


**Population by Sex and Age 2000  
(Minnehaha County)**



**Minnehaha County:** As of 2010, estimated population for Minnehaha County is 169,468. While the majority of the counties in South Dakota are rural, the vast majority of Minnehaha County, as well as the city of Sioux Falls, are classified as urban. The population of Minnehaha County is predominantly non-Hispanic Caucasian at 86.2 percent with Hispanic or Latino origin representing the largest minority at 4.1 percent. Economically, 9.7 percent of the county’s residents live at or below 100 percent of the federal poverty level. Fifty percent of Minnehaha residents are female, with 11.3 percent of the overall population age 65 or older. Nearly 25 percent are under the age of 18. Almost 10 percent of the people live below the federal poverty level (FPL). Again, the most common household type includes married couples with no children under the age of 18 living in the house.

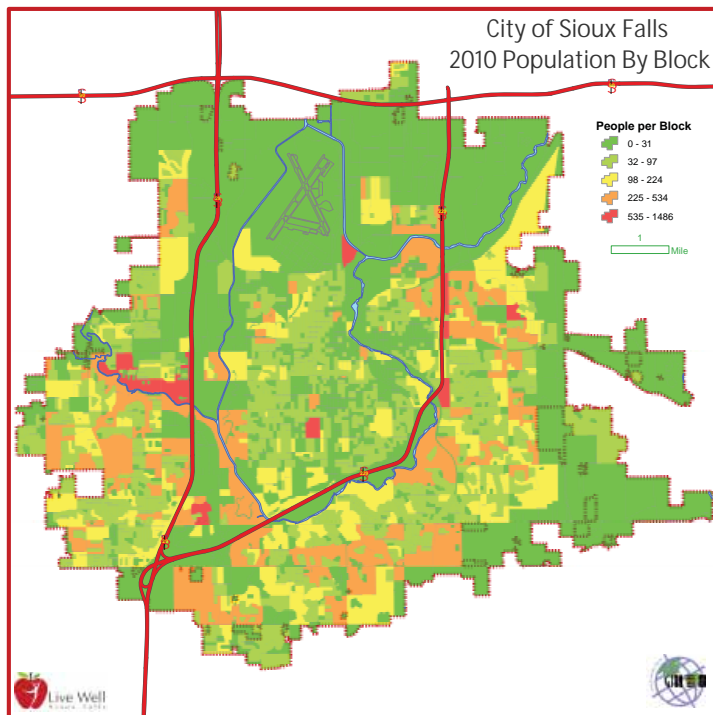
**Net Household Income  
(Minnehaha County)**



**Sioux Falls:** Sioux Falls is located in eastern South Dakota, and is the largest city in the state. Sioux Falls is the county seat of Minnehaha County and also extends into Lincoln County. Sioux Falls has been transformed from an agricultural area to an important finance, health care, and retail hub in South Dakota.







Population density across each city block in Sioux Falls.

### Sioux Falls Statistics

**Number of Households:**  
59,751

**Percent Change:**  
+3 percent since 2008  
+25 percent since 2000

**Average Household Income:**  
\$71,564  
+46 percent since 2000

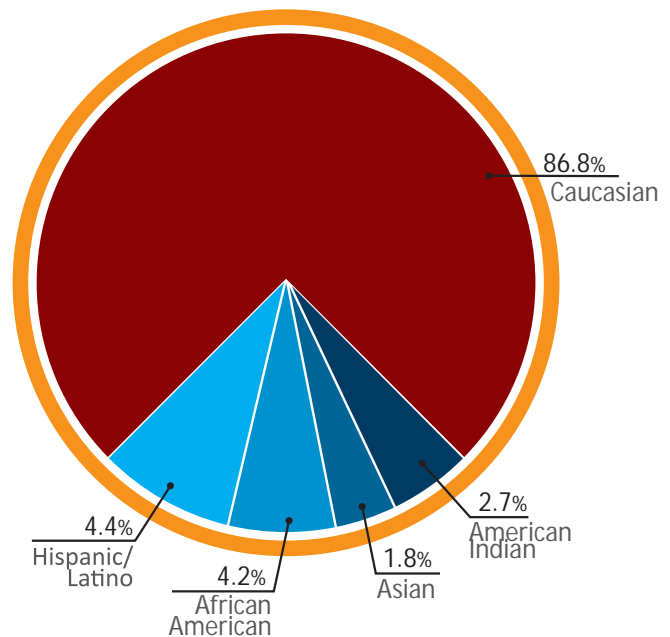
**Median Household Income:**  
\$50,727<sup>8</sup>

**Average Persons Per Household:**  
2.4 persons per household  
3.02 average family size

### Language Spoken

English: 90 percent  
Non-English:  
10 percent (+3 percent increase)

### Sioux Falls Race Breakdown



1. National Prevention Council, National Prevention Strategy, Washington,DC: U.S. Department of Health and Human Services, Office of the Surgeon General, 2011.
2. Healthy People 2020; [www.cdc.gov/nchs/healthy\\_people/hp2020.htm](http://www.cdc.gov/nchs/healthy_people/hp2020.htm).
3. [www.convergencepartnership.org/atf/cf/%7B245A9B44-6DED-4ABD-A392-AE583809E350%7D/CP\\_Built%20Environment\\_printed.pdf](http://www.convergencepartnership.org/atf/cf/%7B245A9B44-6DED-4ABD-A392-AE583809E350%7D/CP_Built%20Environment_printed.pdf).
4. [www.cdc.gov/healthycommunitiesprogram/overview/index.htm](http://www.cdc.gov/healthycommunitiesprogram/overview/index.htm).
5. [www.cdc.gov/healthycommunitiesprogram/tools/change.htm](http://www.cdc.gov/healthycommunitiesprogram/tools/change.htm).
6. [www.cdc.gov/healthycommunitiesprogram/overview/index.htm](http://www.cdc.gov/healthycommunitiesprogram/overview/index.htm).
7. U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, County Business Patterns, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report, Census of Governments. Last Revised: Tuesday, 18-Sep-2012.
8. U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, County Business Patterns, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report, Census of Governments. Last Revised: Tuesday, 18-Sep-2012.



# Section 2



## Project Goals

In 2012, with the funding received from the South Dakota Department of Health through the Community Transformation Grant from the Centers for Disease Control and Prevention (CDC), the Sioux Falls Health Department (SFHD) took an expanded approach to address the health of the Sioux Falls community. The approach included developing and facilitating a community health needs assessment (CHNA), which engaged a consortium of more than 24 Sioux Falls organizations to form the Live Well Sioux Falls Coalition and Assessment Team (Live Well Team). Live Well Sioux Falls is an initiative designed to help improve the health and well-being of Sioux Falls residents through collaborating on projects to address the community's health-related needs. The Live Well Team identified three project goals for the initiative.

### 1. Tobacco-Free Living: Prevent and reduce tobacco use.

Tobacco use is “the leading cause of premature and preventable death. Living tobacco free reduces a person’s risk of developing heart disease, various cancers, chronic obstructive pulmonary disease, periodontal disease, asthma, other diseases, and of dying prematurely.”<sup>1</sup>

### 2. Clinical Preventive Services: Increase control and awareness of high blood pressure and high cholesterol.<sup>2</sup>

Clinical preventive services, such as routine disease screening and scheduled immunizations, are key to reducing death and disability and improving the nation’s health. These services both prevent and detect illnesses and diseases at more treatable stages. Millions of children, adolescents, and adults go without clinical preventive services that could protect them from developing a number of serious diseases.

### 3. Healthy and Safe Physical Environment (Built Environment): Improve the community environment to support health, specifically to increase active transportation and promote active recreation.

According to the Healthy Eating Active Living Convergence Partnership, the built environment or healthy community design, “encompasses places and spaces created or modified by people including buildings, parks, and transportation systems. The built environment is structured by land use rules, as well as by economics and design features.”<sup>3</sup> This influences a person’s level of physical activity. For example, inaccessible or nonexistent sidewalks and bicycle or walking paths contribute to sedentary habits. These habits lead to poor health outcomes such as obesity, cardiovascular disease, diabetes, and some cancer.

## Overall Methodology

The Live Well Sioux Falls Community Health Needs Assessment incorporates data from both quantitative and qualitative sources. Quantitative data was gathered from both primary (Live Well Resident Survey) and secondary data sources (such as the Behavioral Risk Factor Surveillance System (BRFSS) data, and other resources defined below), which allow for trending and comparison to benchmark data at the community, state, and national levels. Additionally, a survey instrument was developed and made available to Sioux Falls residents and administered via paper and online. Qualitative data was gathered through the CDC’s Community Health Assessment and Group Evaluation (CHANGE) tool focus group discussions and the Live Well Resident Survey utilizing open-ended responses.

While this assessment is comprehensive, it does not measure all potential public health issues in the community, nor can it adequately represent all possible populations of interest. These information gaps might in some way limit the ability to assess



all of the community’s health needs. Both the quantitative and qualitative data have limitations and as a result should not be used to confirm or deny a specific health issue in Sioux Falls. For example, the BRFSS data referenced was scientifically designed with a random sample of the state and metropolitan area of Sioux Falls and is representative of the state and city. In contrast, the Live Well Resident Survey is a nonscientifically designed “convenience sample” and therefore representative of only the Sioux Falls residents who chose to participate in the Live Well survey. The additional tools utilized to conduct the CHNA are identified later in this section.

### Community Health Assessment aNd Group Evaluation (CHANGE):

The Live Well Team utilized the Community Health Assessment aNd Group Evaluation (CHANGE)<sup>4</sup> tool, developed by the Centers for Disease Control and Prevention (CDC), to identify specific health-related needs and assets within the Sioux Falls community. “The CHANGE tool is geared toward achieving systemic community change and assists in assessing relationships among living conditions, culture and economics, social networks and lifestyle factors. Recognizing that a community’s health is composed of many factors, including policy, systems, and environmental changes, all were reviewed. Policy change includes laws, regulations, rules, and procedures designed to guide or influence behavior. A system change impacts all elements of an organization or an institution. An example of this could be a “Smoke-



*Institute of Medicine. The Future of the Public’s Health in the 21st Century. Washington, D.C.: National Academies Press.*



Free Campus” policy. Environmental changes are those that are physical, social, or economic conditions designed in a way to influence people’s practices and behaviors.”<sup>5</sup>

The CHANGE tool provides qualitative data and assists community teams (such as coalitions) in assessing existing assets and barriers for improvement regarding current policy, systems, and environmental change strategies in multiple community sectors. The sectors specific to the CHANGE tool are schools, community institutions/organizations, health care settings, work sites, and the community at large. Each sector, consisting of Live Well Team members, completed an evaluation of their policy, systems, and environment assets and needs focused on the health-related areas (also referred to as modules) of physical activity, nutrition, tobacco, chronic disease management, and leadership. The school sector focused on two additional areas of after-school programming and school district. For greater sector definition and the specific questions each sector addressed, refer to Appendix B of this document.

The CHANGE tool identifies four key objectives and three benefits.

#### Objectives:

- Identify community strengths and areas for improvement.
- Identify the status of community health needs.
- Define improvement areas to guide the community toward implementing and sustaining policy, systems, and environmental changes around healthy living styles.
- Assist with prioritizing community needs and consider appropriate allocation for valuable resources.

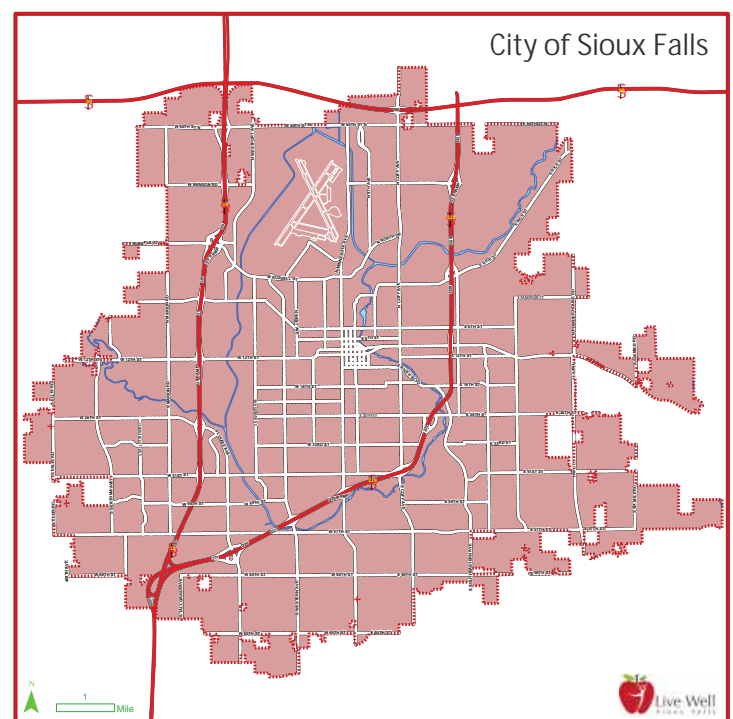
#### Benefits:

- Allow local stakeholders to work together in a collaborative process to survey their community.
- Offer suggestions and examples of policy, systems, and environmental change strategies.

- Provide feedback to communities as the community institutes local level change for healthy living.<sup>6</sup>

The CHANGE tool is an eight-step process.<sup>7</sup>

- 1. Assemble the Community Team.** The start of the commitment phase. The Live Well Sioux Falls Assessment Team (a subdivision of the Live Well Coalition) includes diverse sector representation of representatives from 1) community institutions/organizations, 2) schools, 3) work sites, 4) health care organizations, and 5) the community at large and played an active role in data collection and assessment.
- 2. Develop a team strategy.** In this step of the process, the Assessment Team first defined “community” as the city limits of Sioux Falls as the demographic area to be studied. Assessment Team members separated into the five sector work groups to begin the data collection and analysis process. Two team members participated within all five sectors to ensure consistency in collecting and analyzing data and reporting back to the Coalition.



Sioux Falls city limits.

3. **Review all CHANGE Sectors.** This step helped to understand what policy, systems, and environment data specific to each sector was assessed. Within each CHANGE sector, questions addressing nutrition, physical activity, tobacco, chronic disease, and leadership, with after school and district added for the school sector, were outlined specifically within each sector.
4. **Gather Data.** Data was gathered from each site regarding the policy and environment strategies in place for nutrition, physical activity, tobacco, chronic disease management, and leadership. Sites are the locations within a sector where data was collected.
5. **Review Data Gathered.** Collected data was reviewed during this step to help Sector Teams agree on how each strategy should be rated. Team members rated the strategies to reflect if they were in place or not and to what degree.
6. **Enter Data.** A team member entered the data from each site into the CHANGE tool.

### CHANGE Tool Scoring

	Policy	Environment
Response #	Item #1: Require sidewalks to be built for all developments (e.g., housing, schools, commercial).	
1	This stage represents the time when the issue has not yet been identified as a concern or a problem. For example (examples provided correspond to item #1), the city or county government has never discussed instituting a sidewalk policy; complaints have never been filed and issues have not been raised by residents.	At this point, no elements are in place in the environment. For example (examples provided correspond to item #1), there are no sidewalks that are fully accessible to all pedestrians (including those in wheelchairs), there is no appropriate lighting, there are no stoplights, and there are no crosswalks.
2	This stage involves getting a problem onto the radar screen of the authoritative body that must deal with the issue. This is usually done when the issue or problem is categorized as a social or public problem. For example (examples provided correspond to item #1), the city or county government discusses instituting a sidewalk policy after complaints are filed by residents who are not able to safely walk in their neighborhoods; policy implications and issues are being considered.	At this point, only a few elements are in place in the environment. For example (examples provided correspond to item #1), there are sidewalks that are fully accessible to all pedestrians (including those in wheelchairs), but there is no appropriate lighting, there are no stoplights, and there are no crosswalks.
3	This stage involves analyzing policy goals and solutions, the development or creation of alternative recommendations to resolve or address the identified public problem, and final selection of a policy. For example (examples provided correspond to item #1), the city or county government developed and approved the policy, but it has not yet been implemented. It will be implemented in the next fiscal year.	At this point, there are some elements in place in the environment. For example (examples provided correspond to item #1), there are sidewalks that are fully accessible to all pedestrians (including those in wheelchairs) and there is appropriate lighting, but there are no stoplights and there are no crosswalks.
4	This occurs within organizations directed to carry out adopted policies. Implementation begins once a policy has been formulated and adopted, and administrators have made a decision about how to deploy necessary resources (human and financial) to actualize the policy. For example (examples provided correspond to item #1), the sidewalk policy was established and passed last year by the city or county government, communicated to residents, and implemented this year. The end of this year will be the review and comment period of the policy.	At this point, most elements are in place in the environment. For example (examples provided correspond to item #1), there are sidewalks that are fully accessible to all pedestrians (including those in wheelchairs), there is appropriate lighting, and there are stoplights, but there are no crosswalks.
5	This stage involves determining to what extent the policy has been enforced, and what occurred as a result of the policy. Based on the evaluation results, adjustments can be made to the current policy to ensure effectiveness. For example (examples provided correspond to item #1), the sidewalk policy was in place last year, and a comment period was held. The policy was revamped, and is now implemented with revisions including increased funding for implementation and increased punishment for violations.	At this point, all elements are in place in the environment. For example (examples provided correspond to item #1), there are sidewalks that are fully accessible to all pedestrians (including those in wheelchairs), there is appropriate lighting, there are stoplights, and there are crosswalks.
99	This type of policy is not appropriate for this community.	This type of environmental change strategy is not appropriate for this community.

CDC Community Health Assessment and Group Evaluation (CHANGE)

7. **Review Consolidated Data.** Step seven involved sector teams collaborating to review the assets and needs aligned with the policy and environment change strategies. Teams determined what strategies necessitated areas of improvement.
8. **Build the Community Action Plan.** The results of the sector analysis are used to develop the Community Action Plan, which is a living document that enables our community to structure identified health-related activities around a common purpose and to prioritize needs. The strategic priorities identified for each health module are included in this document in Section 4.

### CHANGE Tool Sampling Methodology

The CHANGE Tool is designed for communities to utilize multiple data collection methods. The Live Well Team Sectors collected data from each site through document review, secondary data collection, and group discussion. The CHANGE tool suggested that data be gathered from a minimum of 13 sites to understand the intricacies of the community; however, the Live Well Team gathered data from 36 sites.

Individual sites within each sector completed a set of questions specific to policy and environment change strategies. The CHANGE Tool design provides a rating scale for sites to score their policy and environment strategies. The rating scale allocated a number between 1, “No elements in place,” up to 5, “All elements in place,” for both the policy and environment strategies. The CHANGE Tool Scoring table shows a scale with examples for scores 1 through 5. A low score (1) for a module indicates that policy and environment change strategies are not in place for that site. A high score (5) indicates that the site has begun to implement strategies or has ones already in place. Personnel housed within each site scored the strategies. Sector team members interpreted the scale indicating that elements specific to the health topic being reviewed were in place at each site regarding policy and environment strategies.

Sector team members participated in group discussion regarding their sector scores. Sectors reviewed the scores and calculated an average percentage rating for the presence of policy and environment change strategies in each sector regarding physical activity, nutrition, tobacco, chronic disease management, and leadership modules. The CHANGE Tool design provided Sector Teams with a user-friendly Microsoft Office Excel spreadsheets for data collection and calculation. Team members determined the needs and assets of each sector module based on the averaged rating scores. The CHANGE Tool defined any module that scored 60 percent or lower as a “need” and 61 percent or higher as an “asset.” Below is an example of the CHANGE Summary Statement. The figures included are those for the Community at Large.

Community Health Assessment aNd Group Evaluation Summary Statement

Community At Large		
Module	Community	
	Policy	Environment
Physical Activity	78.26%	73.91%
Nutrition	47.76%	45.45%
Tobacco Use	57.50%	70%
Chronic Disease Management	57.78%	66.67%
Leadership	63.64%	58.18%
Demographic Information		
Community Density Population	156,300	
Community Density Sq Miles	73.89	
Community Setting	Suburban	
Median Household Income	50,000–74,999	
% No High School Diploma	5–9%	
% Poverty	10–14%	
% Unemployed	<5%	

### Sector Representation

CHANGE is divided into five sectors for assessment.<sup>8</sup> They are:

- **Community at Large Sector (CAL)**

The community at large sector includes community-wide efforts that impact the social

and built environments such as food access, walkability or bikeability, tobacco-free policies, and personal safety.

The community at large sector was represented by the City of Sioux Falls and included representation from the City Attorney's Office, Engineering, Fire Rescue, GIS, Health, Human Resources, Parks and Recreation, and Planning and Building Services.

- **Community Institutions and Organizations Sector (CIO)**

The community institution/organization sector includes entities within the community that provide a broad representation of human services and access to facilities such as child care settings, faith-based organizations, senior centers, boys' and girls' clubs, health and wellness organizations, and YMCAs.

The community institution/organization sector was represented by numerous organizations that included American Heart Association, Augustana College, Parish Nurses, Sioux Empire United Way, Urban Indian Health, and the YWCA.

- **Health Care Sector**

The health care sector includes places people go to receive preventive care or treatment, or emergency health care services, such as hospitals, private doctors' offices, and community clinics, local health department, and health insurance companies.

The health care sector was represented by Avera, DAKOTACARE, Falls Community Health, Sanford, Southeastern Behavioral Health, and Urban Indian Health Center.

- **School Sector**

The school sector includes primary and secondary learning institutions (e.g., elementary, middle, and high schools) and colleges and universities.

The school sector was represented by Augustana College and the Sioux Falls School District.

- **Work Site Sector**

The work site sector includes places of employment such as private offices, restaurants, retail establishments, and government offices.

The work site sector was represented by City of Sioux Falls, DAKOTACARE, Howalt-McDowell, Perkins Restaurant, Regency Hotel, Sioux Falls Chamber of Commerce, Sioux Falls Construction, and Volunteers of America.

## CHANGE Tool Data Limitations

It should be noted that there are limitations associated with the Live Well Team's implementation of the CHANGE tool data gathering process. The Live Well Team followed the specified instructions; however, the nature of the tool is subjective and there is no defined protocol to select team members, thus bias may occur due to the self-selection of the team members. Additionally, team members assigned scores to each policy and environment question based upon their individual perceptions.

## Live Well Resident Survey

A Live Well Resident Survey was the second primary data collection tool utilized in the Live Well Sioux Falls initiative's community health needs assessment (CHNA). The survey goal was to garner feedback from the Sioux Falls community regarding individuals' health as well as residents' perceptions of community health needs and assets. The survey was divided into nine sections that addressed personal health, preventive services, access to health services, oral health, mental health, life satisfaction, home environment, community, and demographics. Specific questions within those sections focused on health behaviors regarding chronic disease prevention, access to health/oral care and health/oral insurance, community issues, and access to community services.

The survey was developed using various CHNA model surveys and also incorporated a number of questions asked routinely in the BRFSS survey.

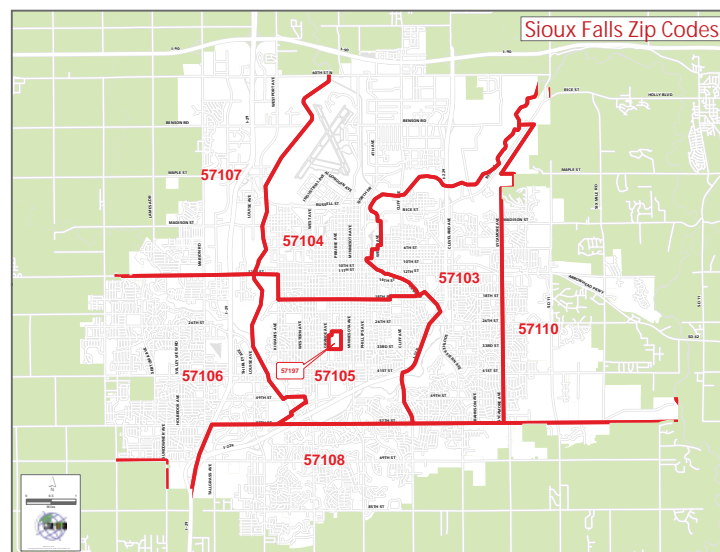


The Live Well Resident Survey questions drawn from BRFSS were those specific to nutrition, tobacco use, and physical activity. The inclusion of BRFSS questions was made in an attempt to validate survey responses with state and national BRFSS data.

## Live Well Survey Sampling Methodology

The survey was available in paper and online formats and officially open to the public from July 16, 2012, through August 5, 2012. From August 5, 2012, through September 17, 2012, outreach to male, low-income, and ethnically diverse populations was completed as an attempt to increase representation from those specific populations. The paper survey was available at the Sioux Falls Public Library; Urban Indian Health; South Dakota Woman, Infant and Children (WIC) Sioux Falls office; and the Multi-Cultural Center of Sioux Falls. The option of paper form was given in order to increase survey responses from various populations within the community who may not necessarily have had access to computers or who may have needed assistance in completing the survey.

Over 3,000 individuals accessed the Live Well survey, of which 2,388 answered all survey questions. Not all survey respondents chose



*Sioux Falls city limit zip code boundaries.*

to answer every survey question, thus survey responses were analyzed on a question-by-question basis. Respondents eligible to participate in the survey lived within the Sioux Falls city limits, had a 5-digit zip code (57103, 57104, 57105, 57106, 57107, 57108, 57110) and were 18 years of age or older.

## Live Well Resident Survey Data Limitations

While the survey does provide valuable information to assist the Live Well Sioux Falls Coalition in addressing the health of the community, the key limitation of the survey was the composition of the sample size. The survey methodology design that was used included a “convenience sample” of persons within the city of Sioux Falls and was not scientifically designed. Thus, the survey sample is not random, and the data is not statistically significant or representative of the demographics of Sioux Falls residents. As the survey is not a representative sample of the city, it is inappropriate to make explicit comparisons between the survey’s findings and other data sources such as state and national BRFSS data.

In particular, while a large percentage of Sioux Falls residents are non-Hispanic Caucasian (84.4 percent), there are a growing percentage of residents who represent other racial/ethnic populations who were not fully represented among the survey’s respondents. Additionally, when compared to the 2010 U.S. Census Demographics for Sioux Falls, there was an underrepresentation of respondents who were low-income (meet federal poverty level guidelines), as well as aged 18 to 24 and 65 or older, and a smaller percentage of male respondents compared to females.

Additional limitations that should be noted include that the survey asked for respondents’ individual perceptions of community health issues and services, thus their subjective responses may not truly reflect the current status of those community issues and services.

An analysis concerning the sample size for each survey question suggests that the length of the survey may have hindered some respondents from completing the survey in its entirety. Some respondents who accessed the paper version of the survey may not have had time to complete the survey depending on the location in which the survey was disseminated.

Finally, as a result of the two different survey formats (online and paper), some of the final survey questions did not get transferred to the final paper copies. The final online survey provided alternative answer options for specific survey questions, compared to the paper copy. In particular, on the paper copy, if a respondent answered yes to question 5, “Which of these problems keep you or your family member from getting the necessary dental care?” (select all that apply), the paper copy does not include the online survey answer option to this question of “No way to get there.” In addition, the question numbered 43 on the paper copy, “Considering mental health in Sioux Falls, how concerned are you about,” does not include the online survey answer option, “There is plenty of help during times of need.” While identical questions and answer options were unavailable, the survey questions still garnered similar outcomes.

### Public Health, Vital Statistics, and Other Data:

The third form of data collection included the use of a variety of existing (secondary) data sources that were consulted to complement the research quality of this Community Health Needs Assessment. Data was obtained from the following sources with specific citations included with graphs and other information throughout the report.

- BRFSS
- Centers for Disease Control and Prevention
- Community Health Center
- National Center for Health Statistics

- National Prevention Strategy
- South Dakota Department of Health
- State Health Facts. Kaiser Family Foundation. Statehealthfacts.org
- U.S. Census Bureau
- U.S. Department of Health and Human Services
- U.S. Department of Health and Human Services. Healthy People 2020
- U.S. Department of Agriculture (USDA) Dietary Guidelines for Americans 2010

### **Benchmark Data**

Community Risk Factor Data—State, county, and city risk factor data are the most recent BRFSS data reported by the Centers for Disease Control and Prevention and the U.S. Department of Health and Human Services. State-level vital statistics are also provided for comparison of secondary data indicators.

### **Healthy People 2020**

Healthy People provides science-based, ten-year national objectives for improving health of all Americans. The Healthy People initiative is grounded in the principle that setting national objectives and monitoring progress can motivate action. For three decades, Healthy People has established benchmarks and monitored progress over time in order to:

- Encourage collaborations across sectors.
- Guide individuals toward making informed health decisions.
- Measure the impact of prevention activities.

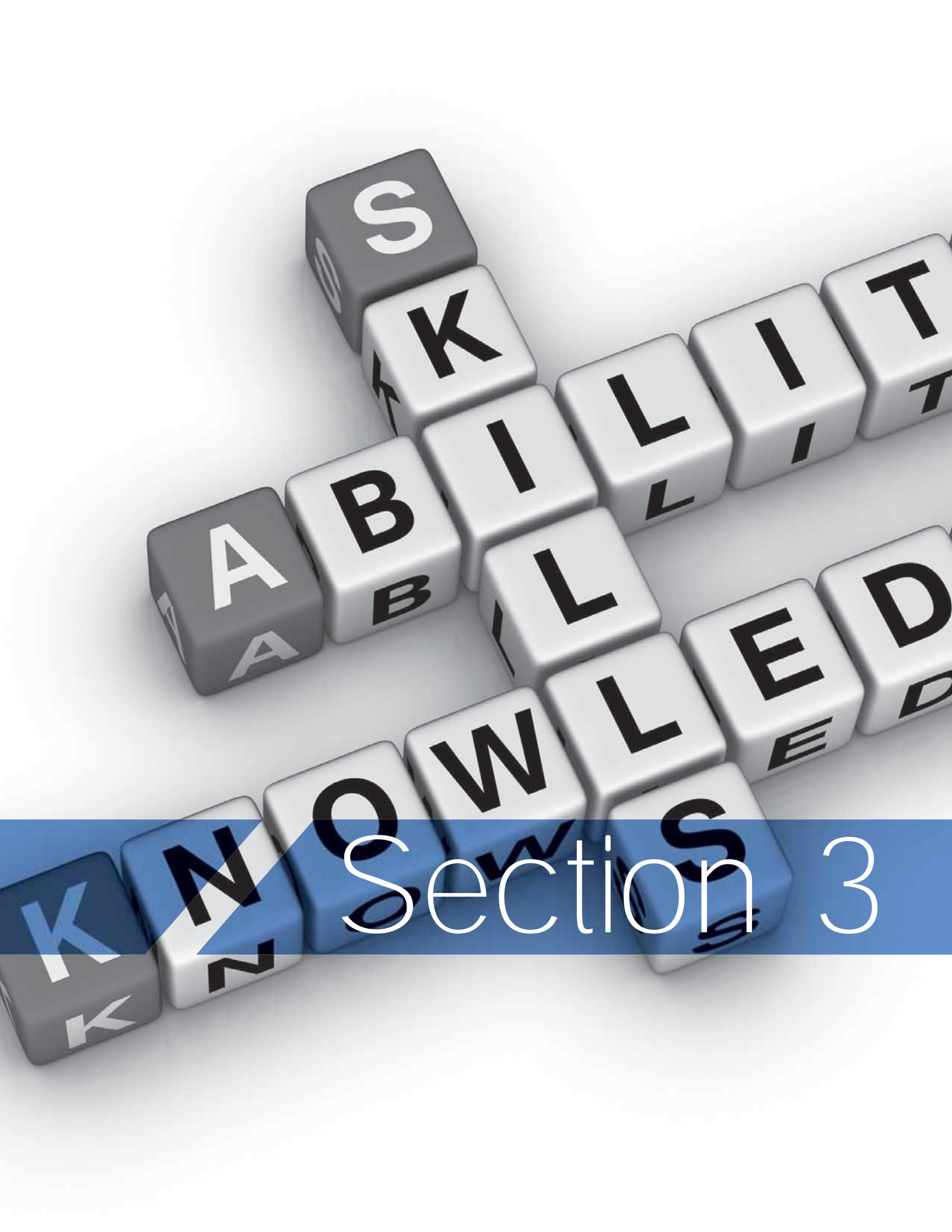
In terms of content, this assessment report was designed to provide a comprehensive and broad picture of the health of the Sioux Falls community. However, there are certainly a great number of medical conditions that are not specifically addressed. The following section of the report delineates findings from the CHANGE tool and the Live Well Resident Survey and addresses certain chronic conditions, which are related to the five health topics.





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1. National Prevention Council, National Prevention Strategy, Washington, DC.
2. U.S. Department of Health and Human Services, Office of the Surgeon General, 2011.
3. Healthy People 2020; [www.cdc.gov/nchs/healthy\\_people/hp2020.htm](http://www.cdc.gov/nchs/healthy_people/hp2020.htm). [www.convergencepartnership.org/atf/cf/%7B245A9B44-6DED-4ABD-A392-AE583809E350%7D/CP\\_Built%20Environment\\_printed.pdf](http://www.convergencepartnership.org/atf/cf/%7B245A9B44-6DED-4ABD-A392-AE583809E350%7D/CP_Built%20Environment_printed.pdf).
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6. The Centers for Disease Control and Prevention. Community Health Assessment aNd Group Evaluation (CHANGE) Action Guide: Building a Foundation of Knowledge to Prioritize Community Needs. Atlanta: U.S. Department of Health and Human Services, 2010; page 6.
7. The Centers for Disease Control and Prevention. Community Health Assessment aNd Group Evaluation (CHANGE) Action Guide: Building a Foundation of Knowledge to Prioritize Community Needs. Atlanta: U.S. Department of Health and Human Services, 2010.
8. Centers for Disease Control and Prevention. Community Health Assessment aNd Group Evaluation (CHANGE) Action Guide: Building a Foundation of Knowledge to Prioritize Community Needs. Atlanta: U.S. Department of Health and Human Services, 2010.



# Section 3



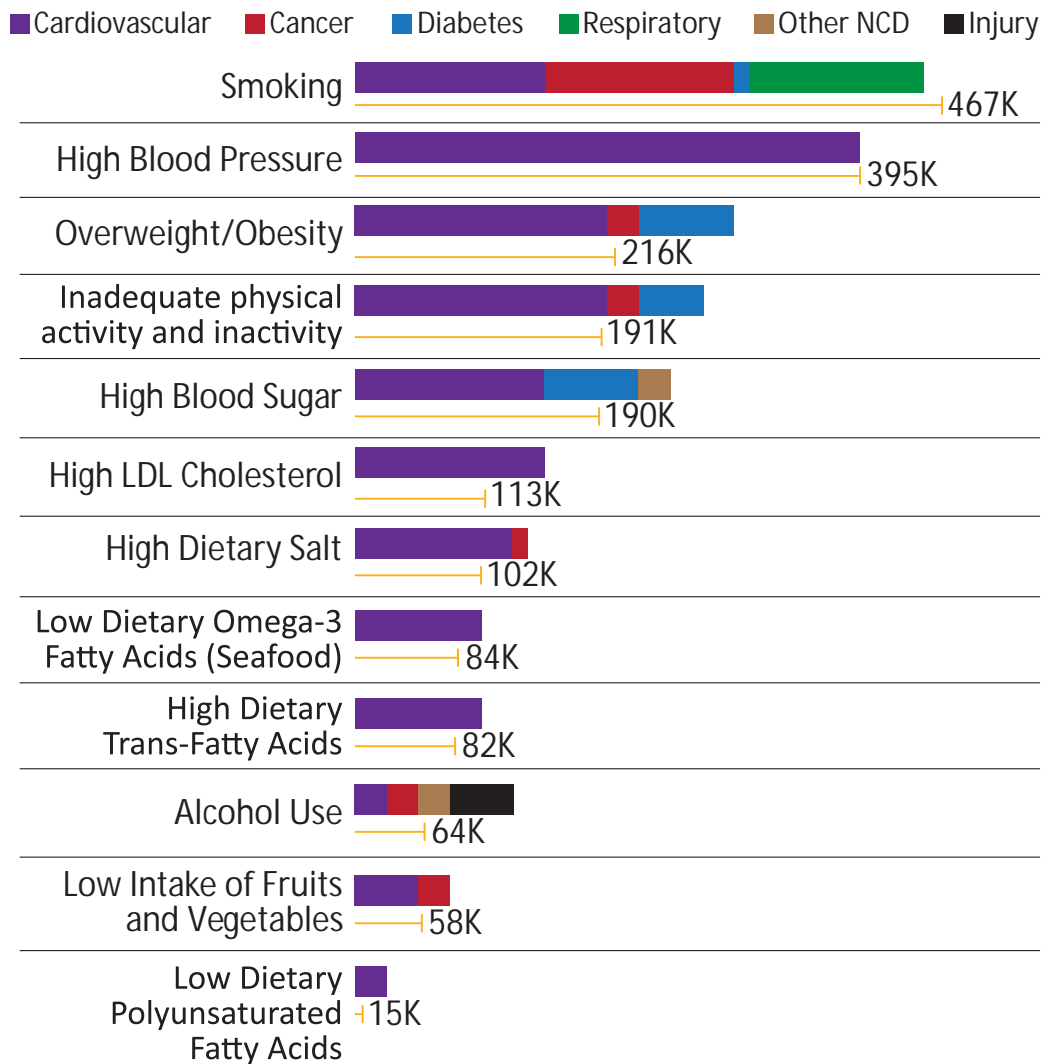
Preface

This section of the Community Health Needs Assessment provides a review of specific health topics of nutrition, physical activity, tobacco, chronic disease management, and leadership.

There is an overview of the health topics, CHANGE tool, Live Well Survey results, health statistics, and an overview of health topic assets and needs.

Today, chronic disease accounts for 7 in 10 deaths and affects the quality of life in 90 million Americans. The increasing burden of chronic disease and unhealthy lifestyles requires immediate and sustained action from all community members. Deaths attributed to these health topics and other related diseases are as follows:

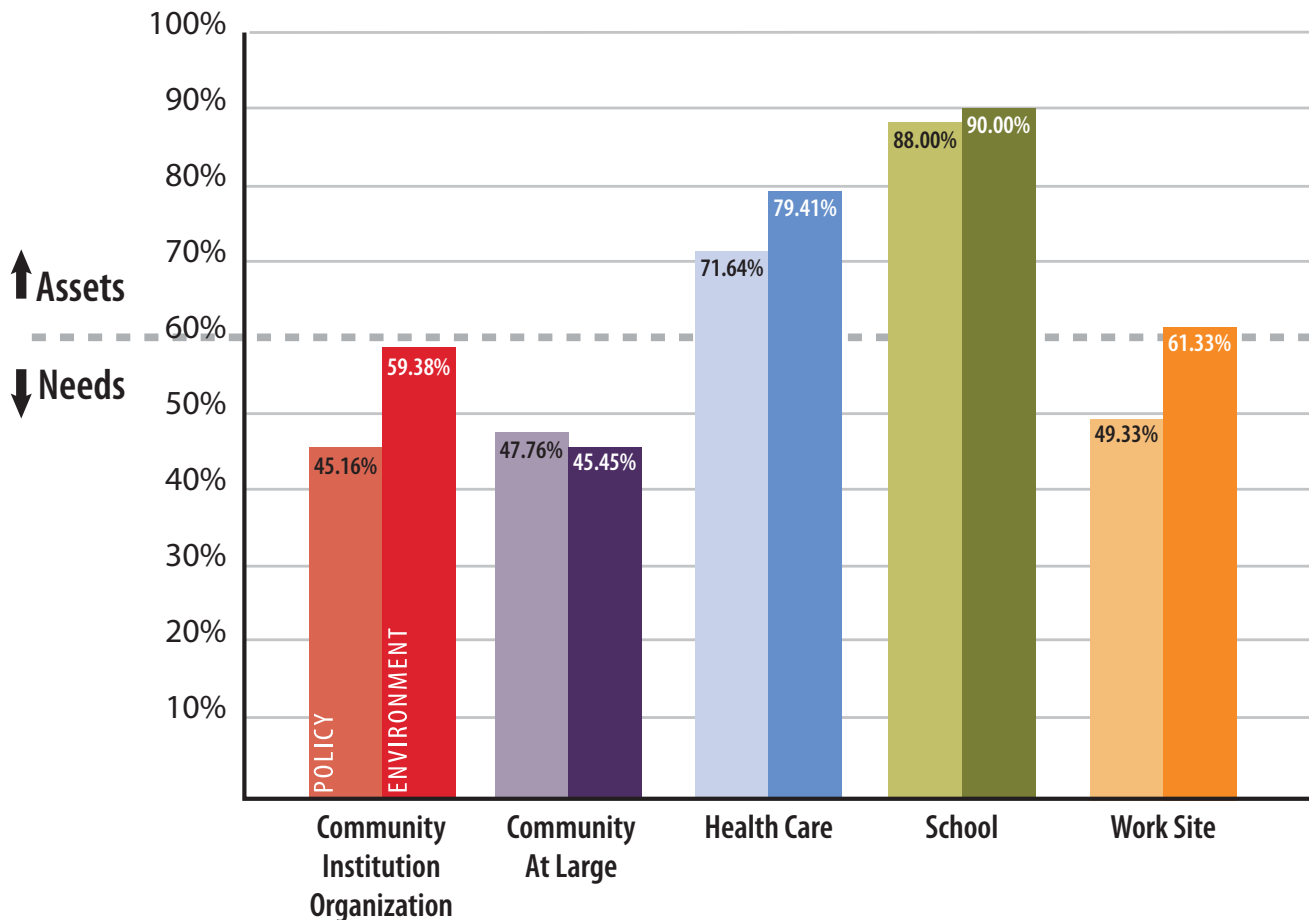
### Deaths Attributable to Individual Risks (Thousands) in Both Sexes



The graph represents the total deaths related to the health topics, with a breakdown of a specific disease, which is attributed to the cause of death.

# 2012 CHANGE Assessment Results

## Nutrition



### Nutrition Overview

Scientific evidence supports the health benefits of eating a healthy diet and maintaining a healthy body weight. The goal of demonstrating good community nutrition requires efforts to address individual behaviors, including policies and environments that support these behaviors in such settings as schools, work sites, health care organizations, and communities.



Live Well survey results reveal poor eating habits as one of the top unhealthy behaviors the community of Sioux Falls faces as we move toward becoming a more healthy community. Various factors influence the nutrition behaviors of individuals, including access to healthy and affordable foods, knowledge, beliefs, attitude about good nutrition, as well as social and economic factors. Community strategies such as the availability and promotion of community gardens, nutritional labeling at restaurants and on vending machines, breast-feeding initiatives to support future and current moms, healthy food options at organizational events, and healthy food and beverage options in vending machines, were evaluated through the CHANGE tool. Communities can support eating healthy by making healthy options affordable and accessible. Communities can also provide people with the information and tools needed to make healthy choices. Implementing and expanding these and other strategies will be key to improving the nutritional score for Sioux Falls. Current performance across all sectors is represented in the nutrition topic graph.

### Good Nutrition/Eating a Healthy Diet

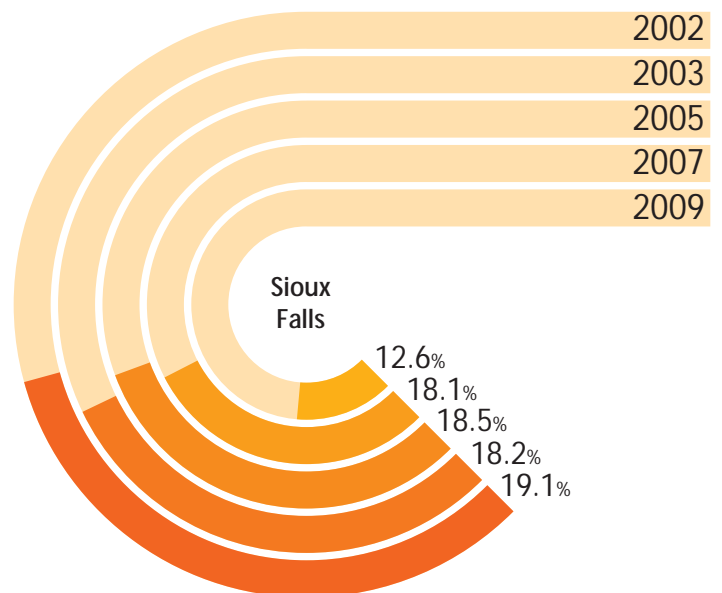
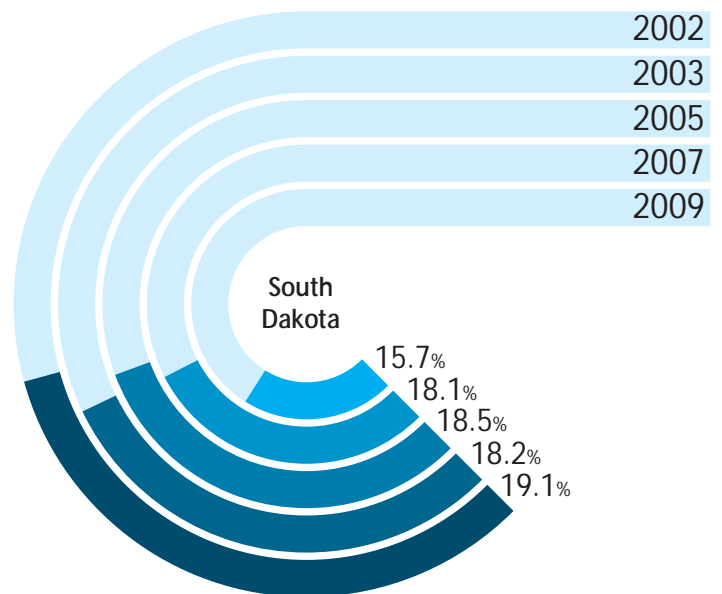
Good nutrition can reduce people’s risk for heart disease, high blood pressure, diabetes, osteoporosis, and several types of cancer, as well as help maintain a healthy body weight. As described in the Dietary Guide for America, eating healthy means consuming a variety of nutritious foods and beverages, especially vegetables, fruits, low-fat and fat-free dairy products, and whole grains; limiting intake of saturated fats, added sugars, and sodium; keeping trans fat as low as possible; and limiting caloric intake with calories burned to manage body weight.<sup>1</sup>

Vegetables, fruits, and grains are excellent sources of vitamins, minerals, carbohydrates, and other substances that are important for a healthy diet and maintaining a healthy weight. While the number of adults who reported consuming fruits and vegetables five or more times per day held

### Did You Know?

Farmers’ markets are available during the summer months in Sioux Falls. There are three markets that are available to the public throughout the city. Locations are at Falls Park, Empire East, and 8th and Railroad. These are great venues for residents of Sioux Falls as well as visitors to go to and buy fresh produce for themselves and their families.

Adults Who Consumed Five or More Servings of Fruits and Vegetables Per Day



steady from 2002 through 2007, results in the 2009 Centers for Disease Control's Behavioral Risk Factor Surveillance System (BRFSS) show a decline in the number of people consuming a healthy number of servings of fruits and vegetables. Further review of the BRFSS trend data reveals that the state of South Dakota ranks as the second worst state for fruit and vegetable consumption, with only 15.7 percent of respondents reporting they consume five or more servings of fruits and vegetables per day. Nationwide, the median is 23.5 percent of the people responded they consume five or more servings of fruits and vegetables per day.

The Sioux Falls MSA within the South Dakota 2009 BRFSS data, reports the lowest number (12.6 percent) of people who consume five or more servings of fruits and vegetables per day, which would rank Sioux Falls as one of the worst MSAs in the United States for healthy eating.

Recommendations from the Dietary Guidelines for Americans are intended for Americans ages 2 years and over, including those at increased

risk of chronic disease, and provide the basis for federal food and nutrition policy and education initiatives. The Dietary Guidelines encourage a focus on eating a healthful diet—one that focuses on foods and beverages that help achieve and maintain a healthy weight, promote health, and prevent disease.<sup>2</sup> Choosing a healthy diet can prevent premature death as six of the ten leading causes of death in the United States are linked to poor diets.<sup>3</sup>

## The Heavy Toll of Diet-Related Chronic Diseases

### Cardiovascular Disease

- 81.1 million Americans—37 percent of the population—have cardiovascular disease. Major risk factors include high levels of blood cholesterol and other lipids, type 2 diabetes, hypertension (high blood pressure), metabolic syndrome, overweight and obesity, physical inactivity, and tobacco use.
- 16 percent of the U.S. adult population has high total blood cholesterol.

## Local Story

### Sioux Falls School District—Child Nutrition Services Overview

The Sioux Falls School District's Child Nutrition Services has been implementing changes in their program for many years. Even before participation in the Growing Healthy Initiative in Sioux Falls they had made many changes in food choices on menus, food preparation techniques, and recipes.

In 2011, the district was awarded the Healthier US School Challenge bronze award for meeting the criteria of the USDA/Team Nutrition challenge. Food choices, physical activity, and nutrition education were the key areas that the district was judged upon.

Child Nutrition Services had worked diligently to be sure their program was ready for the new regulations as a result of the Healthy Hunger Free Kids Act of 2010. Therefore, they have only had to make some minor adjustments to menus. They have already been monitoring calories of meals, fat content, and sodium. They have been purchasing low-fat meats and entrees, serving vegetable varieties, whole grains, and skim and low-fat milks.

Adjustments for 2012 were adding an extra 1/4 cup vegetable serving in the elementary meal and ensuring that secondary students take a fruit or vegetable. Middle school and high school students have always had the opportunity to take unlimited portions of fruits and vegetables during school lunch. Items include fresh fruits and vegetables, a steamed vegetable daily, a legume dish daily, canned fruits in their own juice or water pack, and some days 100 percent fruit or vegetable juices.

## Hypertension

- 74.5 million Americans—34 percent of U.S. adults—have hypertension.
- Hypertension is a major risk factor for heart disease, stroke, congestive heart failure, and kidney disease.
- Dietary factors that increase blood pressure include excessive sodium and insufficient potassium intake, overweight and obesity, and excess alcohol consumption.
- 36 percent of American adults have prehypertension blood pressure numbers that are higher than normal, but not yet in the hypertension range.

## Diabetes

- Nearly 24 million people—almost 11 percent of the population—ages 20 years and older have diabetes. The vast majority of cases are type 2 diabetes, which is heavily influenced by diet and physical activity.
- About 78 million Americans—35 percent of the U.S. adult population ages 20 years or older—have prediabetes. Prediabetes (also called impaired glucose tolerance or impaired fasting glucose) means that blood glucose levels are higher than normal, but not high enough to be called diabetes.

## Cancer

- Almost one in two men and women—approximately 41 percent of the population—will be diagnosed with cancer during their lifetime.
- Dietary factors are associated with risk of some types of cancer, including breast (postmenopausal), endometrial, colon, kidney, mouth, pharynx, larynx, and esophagus.

## Obesity

Obesity, a leading preventable cause of death, is a medical condition in which excess body fat has accumulated to the extent that it may have an adverse effect on health, leading to reduced

life expectancy and/or increased health problems. Obesity increases the likelihood of various chronic diseases, including heart disease, type 2 diabetes, high blood pressure, and certain types of cancer. Obesity rates have been on the rise in the United States for several decades, contributing to an increased medical cost burden and stressed health care delivery system. According to the CDC, obesity and overweight together are the second leading cause of preventable deaths, close behind tobacco use.<sup>4</sup>

The BRFSS report determines participants who are overweight and obese based on their individual Body Mass Index (BMI).<sup>5</sup> BMI is a number calculated from an individual's weight and height and according to the CDC is, "a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems." BMI is categorized by weight, <18.5 = Underweight, 15.5–24.9 = Normal, 25–29.9 = Overweight and >30 = Obese.<sup>6</sup> South Dakota was named the 17th most obese state in the country, according to the eighth annual "F as in Fat: How Obesity Threatens America's Future 2011," a report from the Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation (RWJF). Personal choices and behavior plus economic conditions and environmental policies contribute to obesity.

Data from the 2011 South Dakota BRFSS report indicates that 28.1 percent of participants are obese. While the percentage of Sioux Falls MSA participants who are classified as overweight has been increasing, the percentage of Sioux Falls MSA participants who are obese increased each year from 2005–2009, with a decrease in 2010.<sup>7</sup>

## Live Well Survey Adults

Live Well Survey respondents were asked to provide their height and weight to facilitate a BMI calculation. The BMI of survey respondents was assessed and the actual data shows that the highest percentage of individuals have a "Normal" BMI, 38.3 percent. However, when asked about their health condition, approximately half of

respondents' BMI indicated they are "Overweight" or "Obese." Respondents 65 or older reported the highest percentage of "Overweight" persons, 39.7 percent, and respondents aged 56 to 64 reported the highest percentage of "Obese" persons. While the majority of survey respondents were female, almost double the percentage of male respondents identified as "Overweight," 44.8 percent, when compared to "Overweight" females.

An "Overweight" or "Obese" BMI classification is one risk factor that contributes to "metabolic syndrome," which is "the name for a group of risk factors that raises a person's risk for heart disease and other health problems." Other risk factors include heart disease, high cholesterol, high blood pressure, and diabetes. Survey respondents were asked if they have ever been told by a health professional if they have been told they have one or more health issues, including the risk factors for metabolic syndrome. Of those survey respondents who indicated they have the risk factors, a higher percentage of individuals reported being "Overweight" or "Obese."<sup>8</sup>

### Childhood Overweight/Obesity

Live Well Survey respondents identified childhood obesity as a major health issue in the Sioux Falls community. BMI is a measure that is also used to determine childhood overweight and obesity. A child's weight status is determined using an age- and sex-specific percentile for BMI rather than the BMI categories used for adults because body

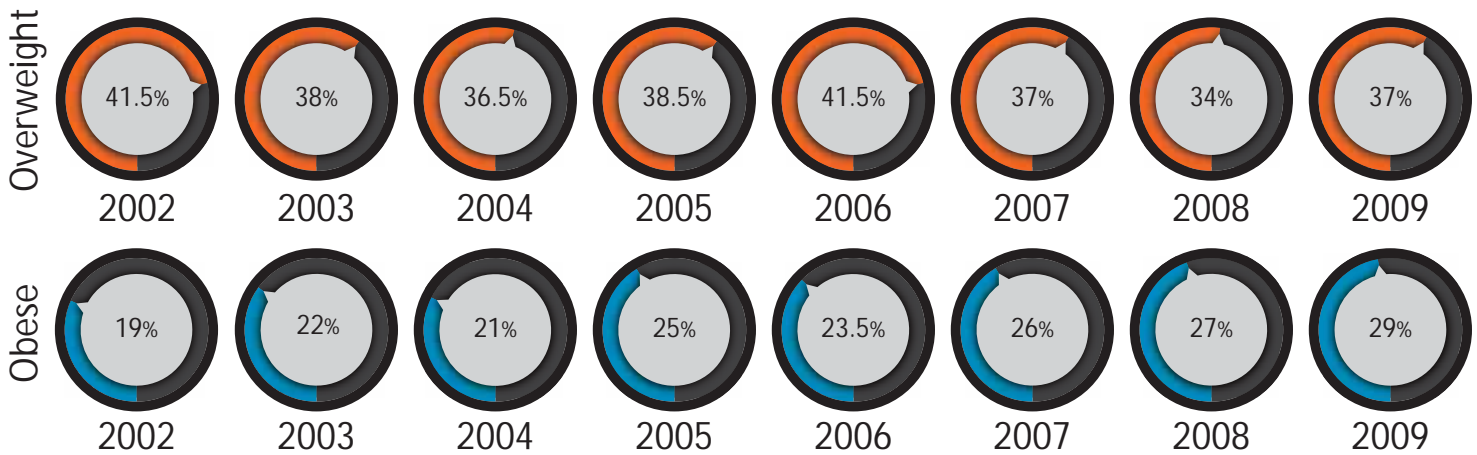
composition in children varies as they age and varies between boys and girls.

The Centers for Disease Control and Prevention weight and height charts are used to determine the corresponding BMI-for-age and sex percentile. For children and adolescents (aged 2 to 19 years), overweight is defined as a BMI at or above the 85th percentile and lower than the 95th percentile for children of the same age and sex. Obesity is defined as a BMI at or above the 95th percentile for children of the same age and sex.

Obesity now affects 17 percent of all children and adolescents in the United States—triple the rate from just one generation ago. Childhood obesity rates have increased dramatically in South Dakota in 10- to 17-year-old children. According to the 2011–2012 South Dakota School Height and Weight Report, South Dakota's child obesity rate rose slightly in the 2011–2012 school year for kids 19 and under, 15.9 percent, which is up from the 2010–2011 school year rate of 15.2 percent.<sup>9</sup> While recent reports have shown that obesity is on the rise in some parts of South Dakota, the Sioux Falls School District has seen a reduction in the percentage of overweight/obese children.<sup>10</sup>

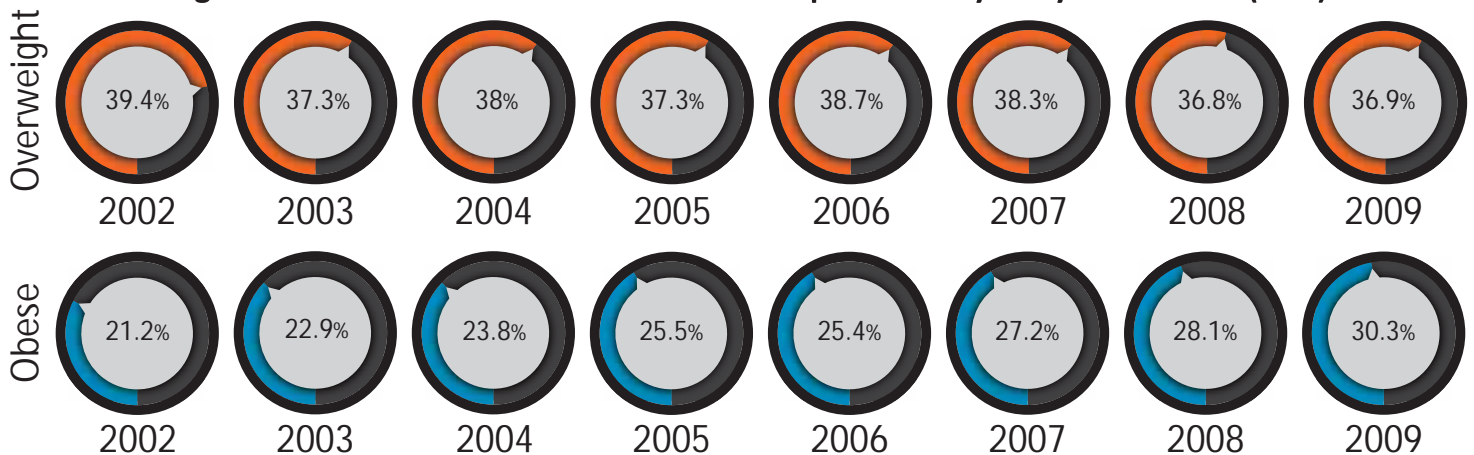
If timely, dramatic, and effective measures are not implemented, the current national prevalence—30 percent—of excessive weight and obesity among children will likely double by 2030.<sup>11</sup> Obesity is related to poor nutrition, the lack of physical activity, and increased sedentary behavior. The most widespread consequences of obesity in

**Weight Classification of Sioux Falls MSA Respondents by Body Mass Index (BMI)**





**Weight Classification of South Dakota MSA Respondents by Body Mass Index (BMI)**



children are psychological. With a culture that generally prefers thinness, obese children are targets of early and systematic discrimination, often referred to as bullying.

for at least four days per week, and are less likely to spend two hours or more in front of a television or computer screen.

Live Well Survey

Survey respondents also identified bullying as a top unhealthy behavior in Sioux Falls. A study completed by a pediatrics society indicated obese children have fewer friends and are regarded as lazy or sloppy. Obese adolescents often develop a negative self-image. In addition, children who mature early tend to have lower self-esteem.<sup>12</sup>

Other points of interest related to childhood obesity are as follows:<sup>13</sup>

- Approximately 17.9 percent of South Dakota children and 14.0 percent of Sioux Falls children ages 2 to 5 years are considered overweight or obese according to BMI-for-age standards.
- The prevalence of overweight and obesity among South Dakota children in higher-income families is less than one in six (15.6 percent), which is seven percentage points below the national rate and second lowest among the 50 states and D.C., trailing only Colorado.
- About one in five (21.3 percent) white children in South Dakota are overweight or obese. South Dakota ranks fifth for this subgroup.
- South Dakota children are just as likely as their counterparts nationwide to be physically active

Local Story

**Avera McKennan Employee Wellness**

Avera McKennan’s internal employee wellness program has sponsored an employee community garden the past two years. Fifty-five plots are available at the St. Isidore garden and all are planted. People are encouraged to donate any extra produce to the Walsh Family Village or other organizations.

This last gardening season saw increased productivity in everyone’s gardens and increased visibility to the garden project. A “green” garden shelter was erected using reclaimed/recycled construction materials as well as all the labor being donated. The shelter features a communication board where gardeners can post items such as extra garden produce for the taking or request help in watering plots.

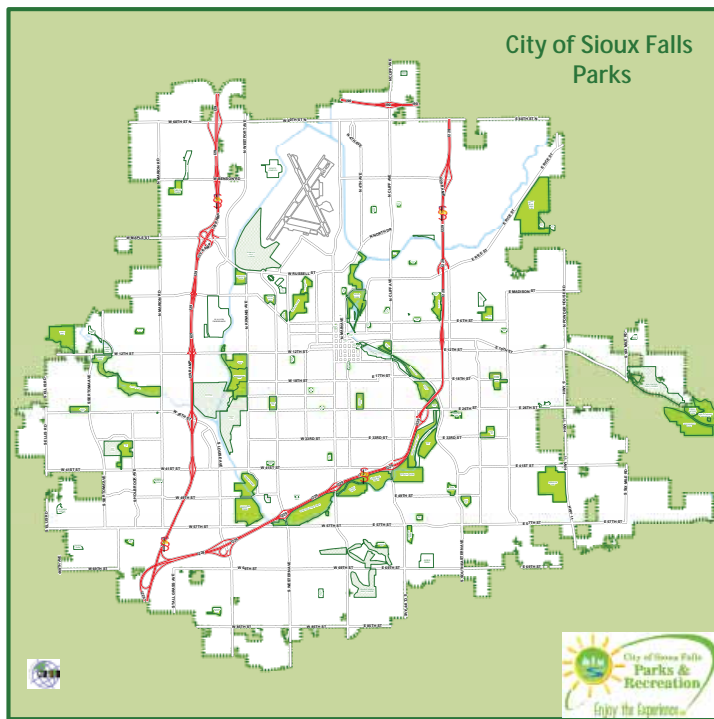
In addition, we planted apple trees and a local youth group added some artwork in the form of decorated pavers that encircle the trees. Not only have we provided opportunity for people to grow their own food, we have enhanced the community within our own organization.

- According to the 2011 Pediatric Nutrition Surveillance System (PedNSS), which assesses weight status of children from low-income families participating in WIC, 32.0 percent of low-income children ages 2 to 5 years in South Dakota are overweight or obese.

Whether discussing adult or childhood overweight or obesity, dieting and physical activity are the treatment mainstays. Each day, adults and children alike need to consume a well-balanced diet that is high in fruits and vegetables and low in fats and sugars.

### CHANGE Tool Assets and Needs

As CHANGE results were reviewed for each sector, assets and needs were identified.

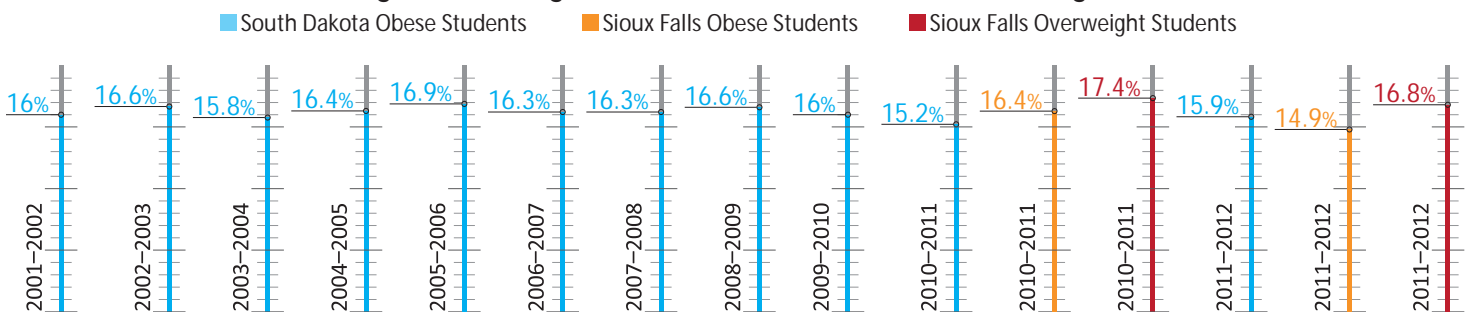


Policy assets are defined as those policies that have been formulated and adopted or once implemented determining to what extent the policy is being enforced and results measured. Policy needs are defined as those policies that range from still being analyzed to the stage where the issue has not yet been identified as a concern or a problem. Environment assets are defined as those activities/initiatives have most to all elements in place in the environment. Environment needs range from a point where some elements are in place in the environment to no elements in place in the environment. Below are several of the assets and needs that have been identified through the CHANGE tool.

#### Nutrition Assets identified are:

- Schools are meeting the nutritional needs of students with school breakfast and lunch programs that meet the US Department of Agriculture School Meal Nutrition Standards.
- Schools provide adequate time to eat school meals (10 minutes for breakfast/20 minutes for lunch from the time students are seated.)
- Most employers provide access to a refrigerator and microwave.
- Most employers support breast-feeding by having maternity care practices, including providing a comfortable space for employees to nurse or pump.
- Most health care settings have incorporated healthy food and beverage options for their patients.

### South Dakota Height and Weight-South Dakota Obese Students, Ages 5-19 Years Old



**Nutrition Needs identified are:**

- Increase the number of residents that are served by transit to enhance access to supermarkets and large grocery stores.
- Provide comfortable, private spaces for women to nurse or pump in public places to support and encourage residents' ability to breast-feed.
- Institute a consistent nutritional labeling program at local restaurants and food venues.
- Institute affordable, healthy food and beverage options in vending machines.
- Provide direct support (money, land, a pavilion, sponsorship, donated advertising) for community-wide nutrition opportunities such as farmers markets and community gardens.

**Did You Know?**

Sioux Falls Parks and Recreation supports community gardens across the city. Garden placement is on a first-come, first-served basis with priority given to people who successfully gardened in the Sioux Falls Community Garden program the previous year. The Sioux Falls Community Garden is a cooperative effort involving the City of Sioux Falls, Minnehaha County Master Gardeners, Minnehaha County Extension Service, and a dedicated group of volunteers, including more than 200 individual gardeners.

- Health care providers to provide regular counseling about the health value of good nutrition during all routine office visits.
- Provide access to free or low-cost weight management and nutrition programs.
- Institute healthy food options at city and company sponsored events.
- Develop a process that allows WIC coupons and food stamps to be utilized at local farmers' markets.

**Live Well Means**

- ✓ Consume five servings of fruits and vegetables each day (1 serving = 1/2 cup raw or 1 cup cooked).
- ✓ Eat foods low in saturated fat, trans fat, and cholesterol.
- ✓ Limit alcohol intake.
- ✓ Drink at least eight 8-ounce glasses of water each day.
- ✓ Make whole grains half of your grains.
- ✓ Vary your veggies in color, taste, and texture.
- ✓ Get your calcium-rich foods.

**Summary**

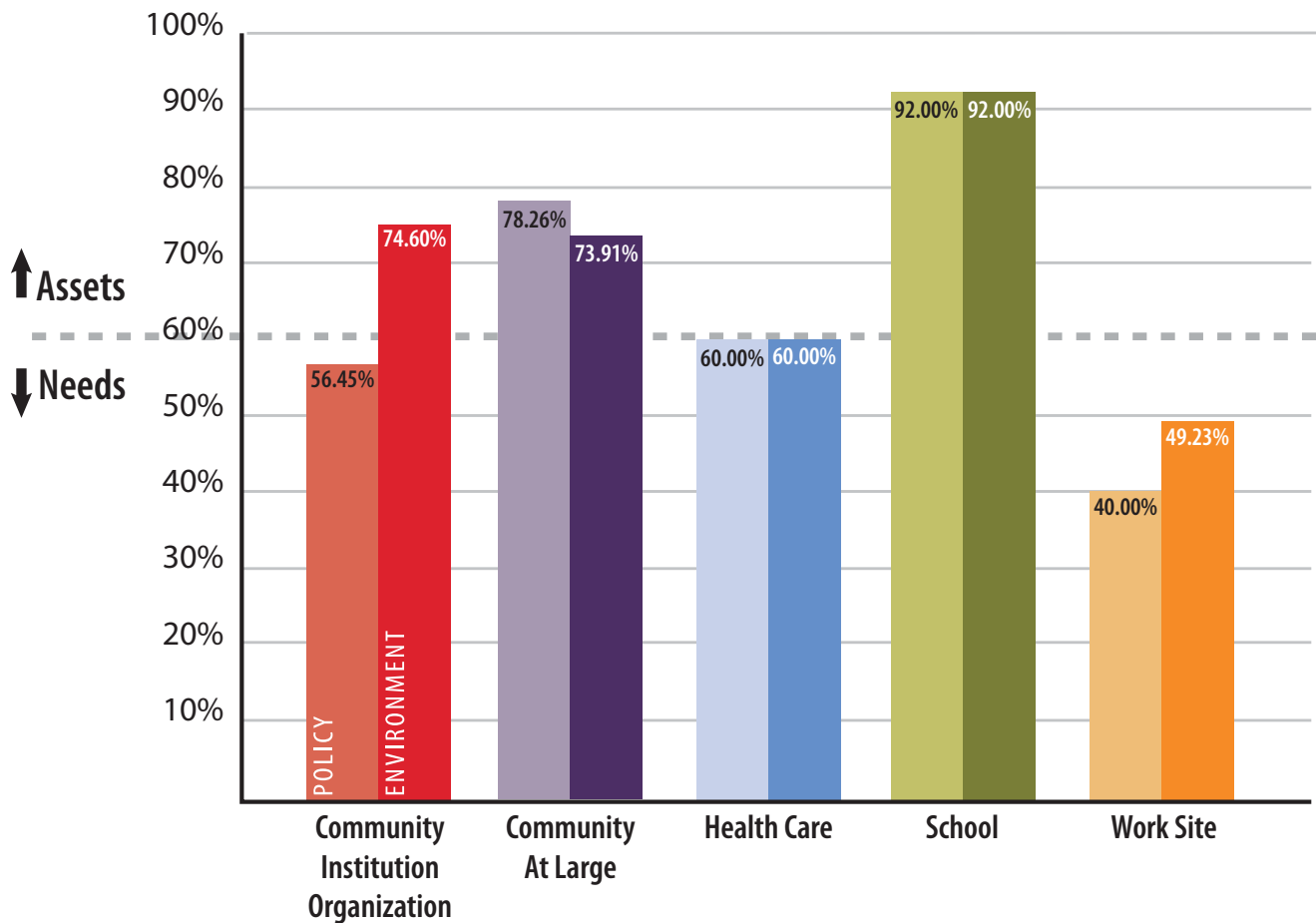
CHANGE tool results indicate that nutrition represents the health topic with the lowest overall performance. The Live Well Survey respondents also identified poor eating habits as one of the top health problems in the city. Improving performance in this area ranges from behavior changes when individuals begin to increase fruit and vegetable consumption and systemic policy and environmental changes that support these behaviors in such settings as schools, health care organizations, and communities.



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4. Prevalence of Obesity in the United States, 2009–2010. [www.cdc.gov/nchs/data/databriefs/db82.htm](http://www.cdc.gov/nchs/data/databriefs/db82.htm).
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9. 2011–2012 South Dakota School Height and Weight Report
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11. South Dakota State University Be Great. Start Here. Online resource available at [www.sdstate.edu/hns/research/index.cfm](http://www.sdstate.edu/hns/research/index.cfm).
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# 2012 CHANGE Assessment Results

## Physical Activity



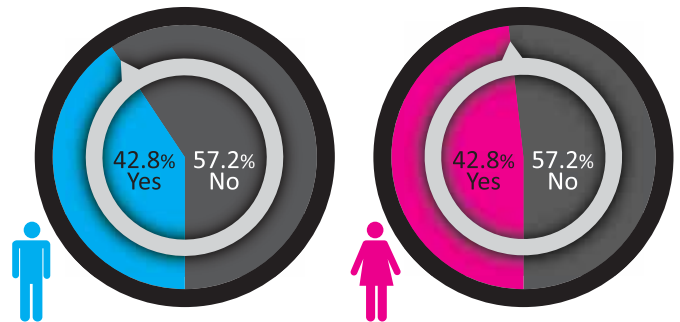
### Physical Activity Overview

Physical activity is a well-established method to improving individual health and reducing a person’s risk for many chronic diseases. Released in 2008, the “Physical Activity Guidelines for Americans” (PAG) is the first-ever publication of national guidelines for physical activity; it suggests a combination of aerobic and muscle strengthening activities for long-term health benefits. The Physical Activity objectives for Healthy People 2020 reflect the strong state of the science supporting the health benefits of regular physical activity among youth and adults, as identified in the PAG. Regular physical activity includes participation in moderate and vigorous physical activities and muscle-strengthening activities.<sup>1</sup>



The Healthy People 2020 Physical Activity objectives highlight how physical activity levels are positively affected by the built environment such as the availability of sidewalks, bike lanes, trails and parks, and policies that improve access to physical activity.<sup>2</sup> This is often defined as a way of life that integrates physical activity into daily routines, also known as active transportation. Supporting active transportation requires policy and environmental enhancements that encourage and support physical activity in such settings as schools, work sites, health care organizations, and communities. Each sector assessed their physical activity policy and environment performance. The

**South Dakota Residents Who Participated in 150 Minutes or More of Aerobic Physical Activity Per Week (Male/Female)**



Did You Know?

**Biking in Sioux Falls**

*Goal: Improve the safety of bicycling in the street.*

*Strategy: Update Share the Road Bicycling ordinances to act as a catalyst to educate bicyclists and motorists alike to the proper methods to bicycle and “share the road.”*

**Where do I ride in the street?** The ordinance updates the guidance on bicycle placement in the street from “a person driving a bicycle at the normal speed of traffic shall ride as close as practicable to the right-hand curb” to new ordinance language that describes two distinct situations. One situation describes when a bicycle and motor vehicle are to “share the lane” and one situation that describes when a bicycle may “take the lane” to signal to a motor vehicle that it is not safe to pass in the same lane.

**How much room should I give a bicycle to safely pass?** The ordinance adds a rule for three-foot passing language for any motor vehicle’s safe pass of a bicycle.

**Where do I ride on a one-way road with two or more lanes?** The updated ordinance adds language to allow a bicycle to ride on the left side (in addition to the right side) of a one-way roadway with more than one lane (i.e., Dakota Avenue downtown).

**In the future will you have shared bicycle lanes and right-turn lanes?** The new ordinance adds the ability to design and construct a shared bicycle and right-turn lane near intersections if needed in the future.

**Can I ride two bicycles within the same lane in Sioux Falls?** Currently, city ordinance requires a bicyclist to ride single-file in all city streets. The new ordinance allows two bicycles to ride side by side within a single lane except when a motor vehicle approaches from behind as allowed in 47 states.

**I always forget how to signal a right-hand turn on a bicycle.** The new ordinance allows for an alternative right-hand turn signal on a bicycle (right hand extended horizontally)

CHANGE Tool results indicate schools achieving the highest performance with work site reporting the lowest performance. Specific questions related to this section are found in the Appendix of this report.

### Prevalence of Physical Activity in Adults

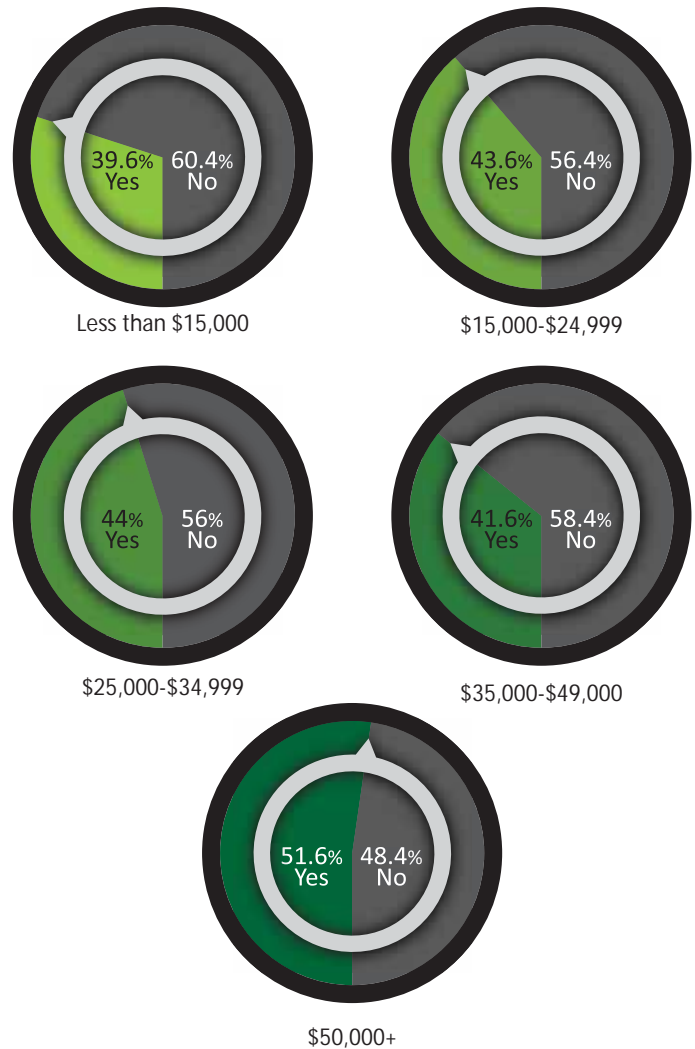
More than 80 percent of adults do not meet the guidelines for both aerobic and muscle-strengthening activities. Similarly, more than 80 percent of adolescents do not do enough aerobic physical activity to meet the guidelines for youth.<sup>3</sup> To meet Healthy People 2020 targets, a multidisciplinary approach is critical to increasing the levels of physical activity and improving health.

In spite of the multiple benefits of regular physical activity, many Americans are not sufficiently active. Those who are inactive are twice as likely to develop heart disease, are prone to obesity, and are more likely to have high blood pressure.<sup>4</sup> According to the 2011 BRFSS report, 46.1 percent of South Dakota adults met the physical activity guideline of 150 minutes per week of aerobic physical activity, only 16 percent of South Dakota adults met both the aerobic and muscle strengthening guidelines of participating in muscle strengthening exercises more than twice a week, and 27 percent of South Dakota adults reported they had no leisure time (outside of work) exercise or physical activity in the past 30 days.<sup>5</sup> As you can see below, females are more likely to be physically active than males (49.3 percent vs. 42.8 percent respectively) and the higher the income level, the greater the likelihood they will participate in physical activity.<sup>6</sup>

Please note, the BRFSS 2011 prevalence data should be considered a baseline year for data analysis and is not directly comparable to previous years of BRFSS data because of the changes in weighting methodology and the addition of the cell phone sampling frame, therefore no trend data nor the ability to compare to Sioux Falls is available.

According to the 2010 BRFSS report, 75.3 percent of adults in South Dakota reported they

### South Dakota Residents Who Participated in 150 Minutes or More of Aerobic Physical Activity Per Week (Income)



participated in physical activity in the past 30 days and 78.6 percent of Sioux Falls adults report that in the past month they have participated in physical activity.<sup>7</sup>

### Live Well Survey

The Live Well Survey assessed respondent's physical activity behaviors. Data showed that female Live Well Survey respondents reported the highest percentage of total respondents by gender that exercises "Sometimes." Male survey respondents reported exercising at a moderate (150 minutes) or vigorous (75 minutes) pace

per week at a slightly higher percentage, 30.9 percent, when compared to females, 28.2 percent; however, fewer males “Never” exercise when compared to female respondents. When data was analyzed by race group, white respondents reported the highest percentage of adults in a family/household who exercise at a moderate to vigorous pace “Always” and “Sometimes,” while Asian respondents “Never” exercised.

In addition, respondents living in zip code 57106 reported the highest percentage of adults in a family/household who exercise on some level per week. Respondents living in zip code 57107 reported the smallest percentage of adults in a family/household who participate in exercise per week. In particular, respondents in zip code 57107 also reported some of the lowest percentages of access to resources to support physical activity, when compared to other zip codes.

## CHANGE Tool

The Live Well Sioux Falls Work Site Sector utilized the CHANGE tool and identified physical activity as their greatest opportunity to be addressed. To review the specific physical activity assessment questions, refer to Section 5 of this report. As one might expect, smaller work sites experience

greater challenges in supporting physical activity initiatives due to both physical and financial resources. There are, however, numerous best practices that are not resource intensive that can result in environmental enhancements to promote increased physical activity. Some examples include providing a safe area to walk or having bike racks available.

## Children and Adolescents

New to Healthy People 2020 are objectives related to policies targeting children (ages 2 through 12) through physical activity in child care settings, television viewing, and computer usage, including recess and physical education in the nation’s elementary schools.

Live Well Survey respondents self-reported information about the physical activity behaviors of children in their household. Respondents indicated that only 19.6 percent of children are “Sometimes” limited to two hours or less of television, computer, and video games. Conversely, a higher percentage of respondents, 24.7 percent, indicated that children in their household “Always” participate in at least one hour of physical activity each day. Research has shown the majority of

## Local Story

### **Sioux Falls Parks and Recreation**

Sioux Falls Parks and Recreation has expanded health offerings in 2012 in cooperation with Live Well Sioux Falls.

Parks and Recreation has long been a place where the community has come to utilize indoor and outdoor recreational facilities—from bike trails to sports leagues—but in 2012, based on our Needs Assessment, we decided to expand our offerings in areas of health and wellness. A section dedicated to healthy living opportunities was added to our Activities Guide. Some exciting new offerings include group fitness classes such as Zumba, Zumba Toning, and Dance Fusion as well as health education classes such as Tobacco Cessation and Healthier Food Choices Away from Home. Healthy lifestyle program offerings have increased from 37 programs in 2011 to 60 programs in 2012; total participants increased from 739 in 2011 to 1,082 in 2012 (January to mid-November).

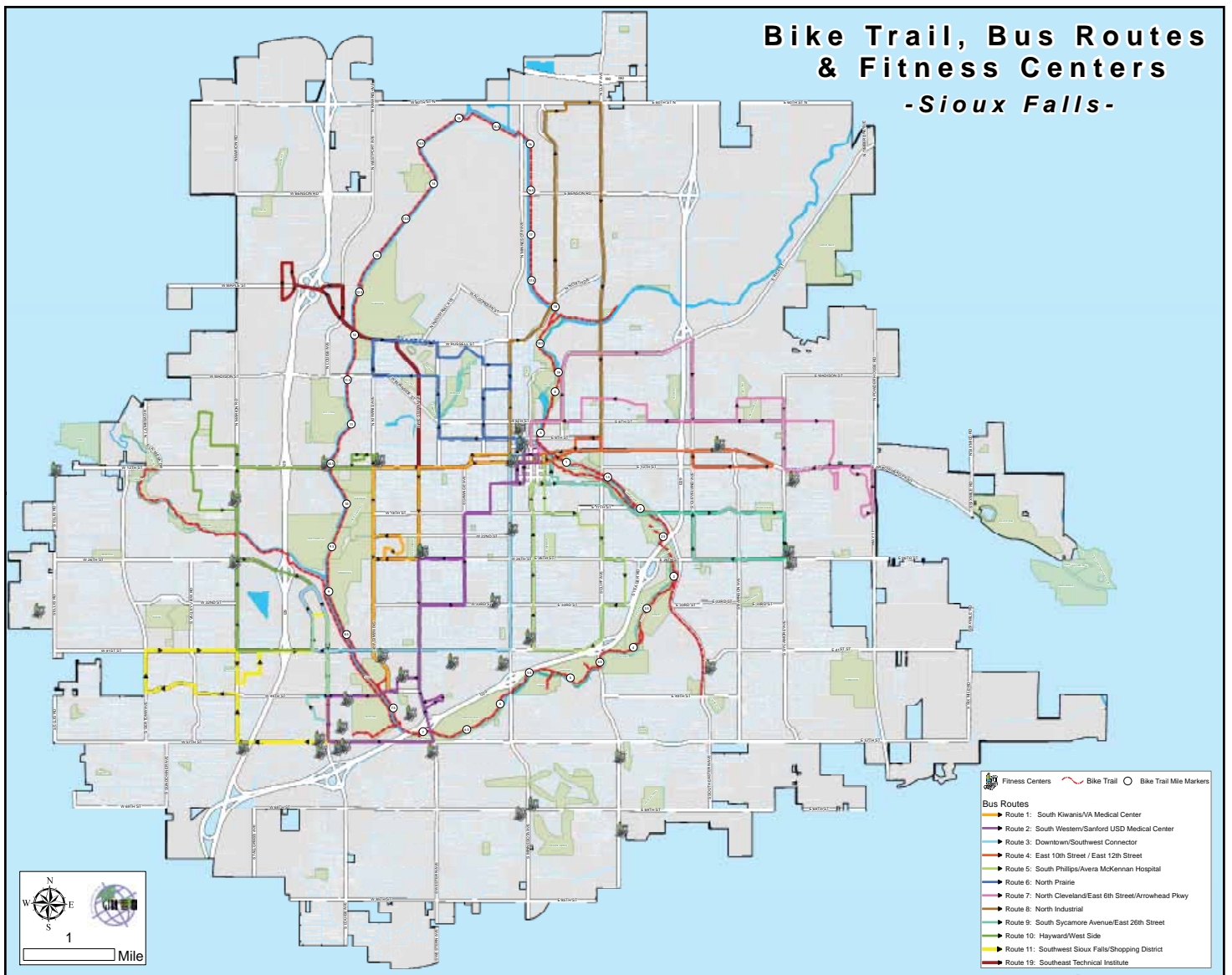
Sioux Falls Parks and Recreation is committed to the Live Well Coalition and plans to continue expanding healthy living programming.

young children are not participating in adequate amounts of physical activity and in excessive amounts of screen-based entertainment. It is likely that physical activity may decline and that screen-based entertainment may increase with age.<sup>8</sup>

Data also shows that a high percentage of children in Live Well Survey respondent households are only “Sometimes” participating in at least one hour of daily physical activity, 19.4 percent. This may be an opportunity to address the physical activity habits of children in Sioux Falls by increasing access to physical activity. Moreover, the prevalence of childhood obesity in South Dakota children 19 years of age and under based on recent data from the 2011 South Dakota

School Height and Weight Report has shown a slight increase, 15.9 percent, from the 2010 data, 15.2 percent.<sup>9</sup>

The National Prevention Council from the office of the Surgeon General states, “All residents should live, work, and learn in an environment that provides safe and accessible options for physical activity, regardless of age, income, or disability status.”<sup>10</sup> As the data shows, personal, social, economic, and environmental factors all play a role in physical activity levels among youth, adults, and older adults.





## Live Well Means

- ✓ Adults should exercise at a moderate pace at least 150 minutes per week or 75 minutes per week at a vigorous pace.
- ✓ Children should exercise a minimum of 60 minutes each day.
- ✓ Moderate-pace exercise examples: hiking, swimming, jogging, actively playing with children, farming.
- ✓ Vigorous-pace exercise examples: soccer, running, vigorously playing with children, manual labor such as digging.

## Understanding Barriers to Physical Activity

Understanding the factors that influence physical activity behaviors is important to ensure the effectiveness of strategies to improve physical activity behaviors.

Research has shown factors associated with adult physical inactivity include advancing age, low income, lack of time, low motivation, perception of great effort needed for exercise, perception of poor health, and being disabled. Older adults may have additional factors that keep them from being physically active, including lack of social support, lack of transportation to facilities, fear of injury, and cost of programs. Factors that positively influence adults include, but are not limited to, post-secondary education, higher income, expectation of benefits, self-efficacy, history of activity in adulthood, social support, access to recreational venues, and safe neighborhoods.

Healthy People 2020 reflects a multidisciplinary approach to promoting physical activity. This approach brings about traditional partnerships, such as that of education and health care, with nontraditional partnerships representing, for example, transportation, urban planning, recreation, and environmental health. This multidisciplinary approach acknowledges that personal, social, economic, and environmental

factors all play a role in physical activity levels among youth, adults, and older adults.

Environmental influences have been shown to be positively associated with physical activity, particularly among children and adolescents, including the presence of sidewalks, having a destination/walking to a particular place, access to public transportation, low traffic density, and access to neighborhood or school play area and/or recreational equipment. Physical activity can be facilitated or constrained by the built environment, although the relationship between individual factors, social factors, and the physical environment is complex and not well understood. Making changes to the built environment should be considered as a means of addressing the related problems of obesity and physical inactivity. The Institute of Medicine has identified that improvements to the built environment that encourage walking and bicycling, such as a well-connected network of off-street trails and paths connecting destinations for such activity, as a priority.<sup>11</sup> Data sources that are representative of the entire nation are needed to monitor key characteristics of the environment, such as the availability of parks and trails, the usage of these spaces, and policies that promote physical activity at work sites, in communities, and in schools.

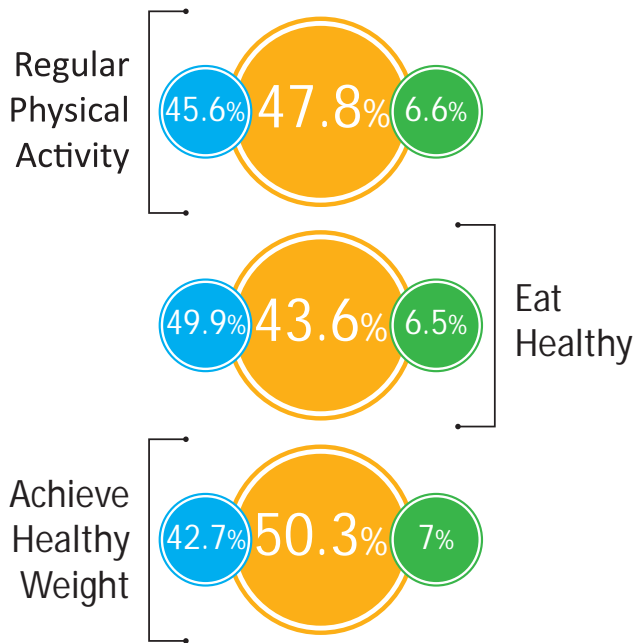
## Live Well Survey

To support the focus of the CHANGE tool, analysis of the Live Well survey focused on understanding respondents physical activity, nutrition and health behaviors. Respondents indicated if they “recently started,” “already do this,” or are “not interested in changing” these behaviors. A higher percentage of respondents, 56.6 percent, indicated they have already “lost weight or maintained a healthy weight” on a regular basis (6 months or more), when compared to 45.6 percent who already are physically active, and 42.7 percent who eat healthy. The percentage of respondents who reported they “recently started or want to start” participating in these behaviors indicates people are ready to make improvements in their health.



**Willingness to Change**

- Recently Started or Want to Change
- Already Doing This Regularly
- Not Interested in Changing at This Time



This information is a very positive message from Sioux Falls residents, because respondents are reporting they want to improve their lifestyles. Most people who are not physically active or eating well are ready to make a change now or in the near future. This data provides the City with an opportunity to identify strategies to support people to make changes. As strategies are identified to support Sioux Falls residents, facilitating focus groups with some of the survey respondents may provide an opportunity to better understand what will help them make the changes they want to make.

**CHANGE Tool Assets and Needs**

**Physical Activity Assets identified are:**

- Provide direct support for community-wide physical activity opportunities.
- Health professionals provide regular counseling about the health value of physical activity.
- The community has developed an extensive land use plan that is being implemented.

- The network of city parks is well maintained.
- All students are required to be physically active during the majority of the time in physical education.
- The Sioux Falls School District has a designated school health coordinator responsible for overseeing school health activities across the district.

**Physical Activity Needs identified are:**

- Enhance access to public transportation within reasonable walking distance throughout the city.
- Require bike facilities (bike boulevards, bike lanes, multiuse paths) be built for all developments to include housing, schools, and commercial areas.
- Provide flexible work arrangements or break times for employees to engage in physical activity.
- Provide a safe area outside to walk or be physically active.
- Implement a walk or bike to school initiative.
- Develop and implement a common referral system to help residents access community-based services or resources for physical activity.

**Did You Know?**

**Sioux Falls Parks and Recreation**

Sioux Falls Parks and Recreation provides access to over 70 city parks. There are athletic fields, playgrounds, green spaces, tourist attraction parks, and much more. Take your family and friends to visit some of the beautiful parks that Sioux Falls has to offer. For a complete listing of locations, visit the Parks and Recreation website at [www.siouxfalls.org/parks](http://www.siouxfalls.org/parks).

## Summary

CHANGE tool indicates that all sectors except work site are achieving the minimum score of 60 percent. Policy and environmental initiatives are required to improve work site physical activity performance. Examples of this include flexible work arrangements, providing bicycle parking, and designating a walking path close to work.

A review of the work site participants also indicated that smaller work sites face greater challenges than larger work sites primarily due to human and capital resources.

## Did You Know?

### Sioux Falls Parks and Recreation

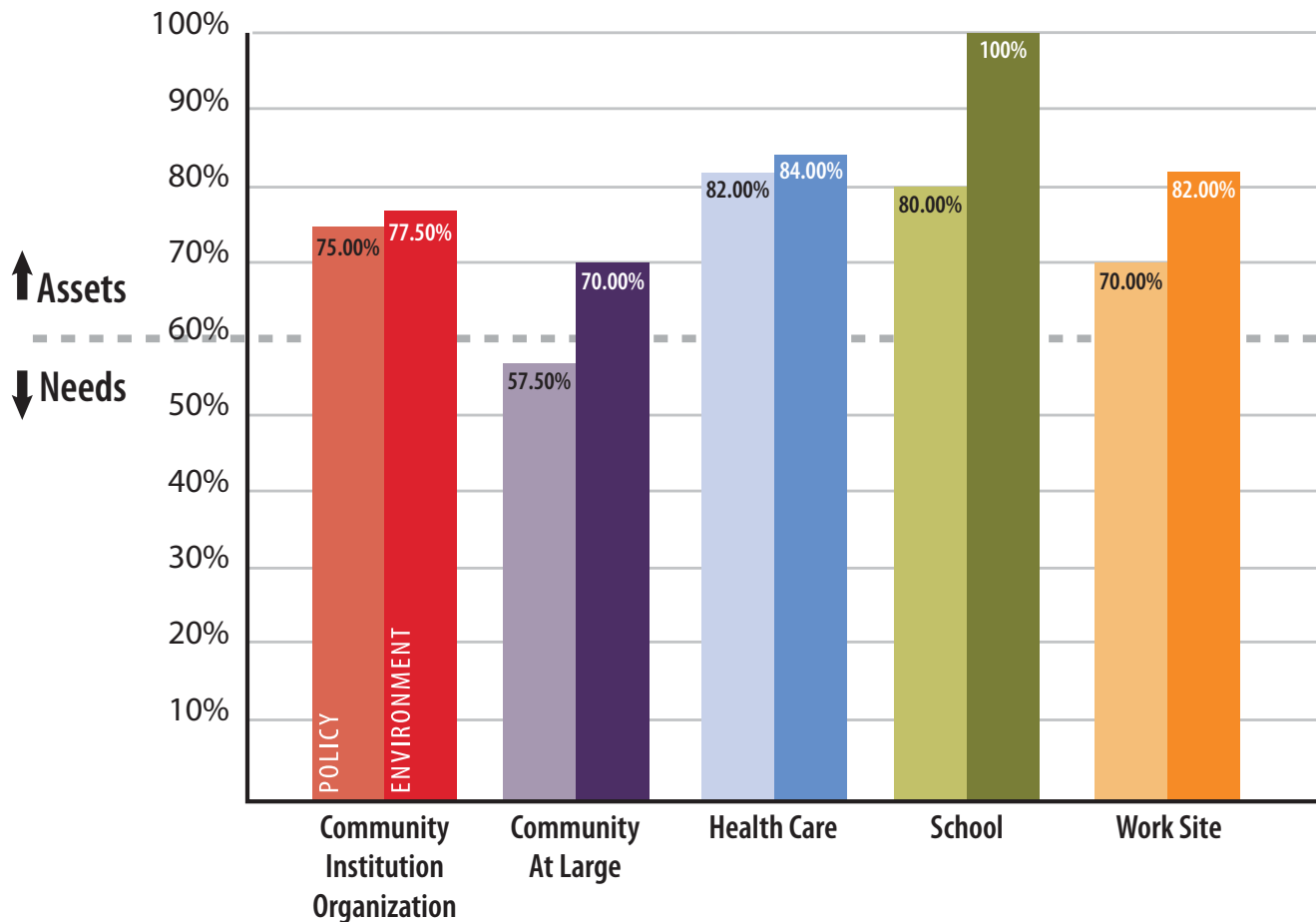
Sioux Falls offers 26 miles of paved bike trails throughout the city for anyone to use. This is a great form of recreation for families and friends to enjoy together. Walking, biking, roller blading, and any other form of nonmotorized locomotion are encouraged! Visit [www.siouxfalls.org](http://www.siouxfalls.org) to see a full map of the Sioux Falls bike trail.



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3. National Prevention Council, National Prevention Strategy, Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General, 2011.
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11. [www.cdc.gov/pcd/issues/2012/11\\_0165.htm](http://www.cdc.gov/pcd/issues/2012/11_0165.htm); Effect of Changes to the Neighborhood Built Environment on Physical Activity.

# 2012 CHANGE Assessment Results

## Tobacco Use

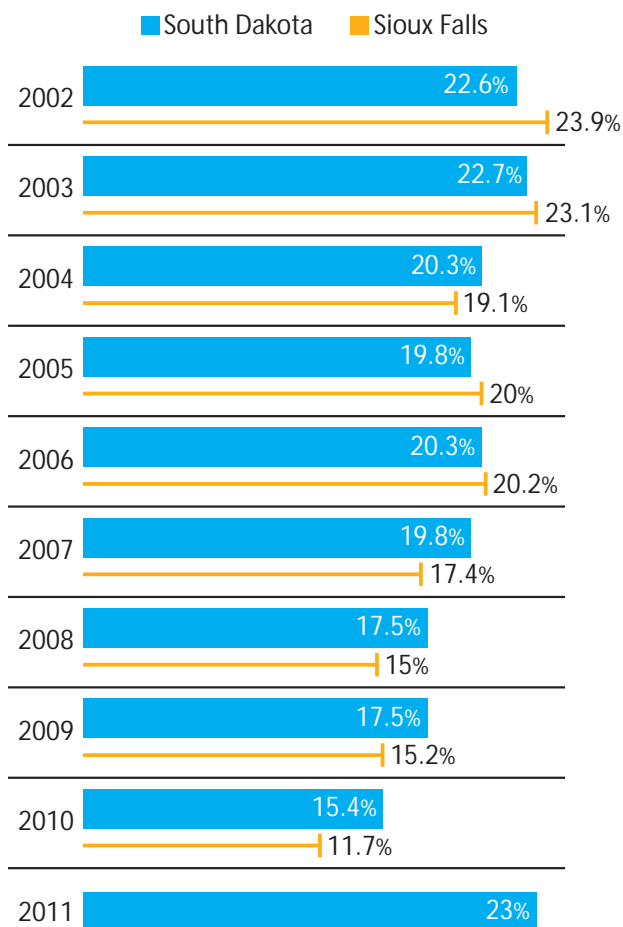


### Tobacco Overview

Tobacco use is the single most preventable cause of disease, disability, and death in the United States. Each year, approximately 443,000 Americans die from tobacco-related illnesses. An estimated 49,000 of these deaths are the result of secondhand smoke exposure. For every person who dies from tobacco use, 20 more people suffer with at least one serious tobacco related illness. Tobacco use costs the United States \$193 billion annually in direct medical expenses and lost productivity, while secondhand smoke costs an additional \$10 billion. This makes tobacco use one of the nation's deadliest and most costly public health challenges.<sup>1, 2</sup>

According to the 2011 South Dakota BRFSS, approximately 23 percent of the adults are current smokers.<sup>3</sup> The BRFSS has 2011 data available for the state; however 2010 data is only available for the Sioux Falls Metropolitan Statistical Area (MSA), which includes Lincoln, McCook, Minnehaha, and Turner Counties regarding adult tobacco use. The 2011 BRFSS prevalence data regarding adult tobacco use is “considered a baseline year for data and analysis and is not comparable to previous year of BRFSS data, due to change in methodology and sampling, thus no trend data is available.”<sup>4</sup> According to the 2010 BRFSS City and County Data, the percentage of Sioux Falls adults who are current smokers has consistently declined from a high of nearly 24 percent in 2002 to the current low of 11.7 percent, which is slightly below the Healthy People 2020 goal of 12 percent.<sup>5, 6</sup> Healthy People 2020 summarizes strategies implemented

**Percent of Sioux Falls MSA Adults Who are Current Smokers**



### Did You Know?

#### City of Sioux Falls Goes Tobacco-Free

Tobacco use by City of Sioux Falls employees is prohibited during paid work hours, which includes paid break times; designated tobacco use areas have been removed from City premises. The use of tobacco products by City employees and customers, contractors, or others doing City business is prohibited in all City-owned and City-shared buildings, facilities, vehicles, parking lots, equipment, work sites, and walkways leading into City facilities

### Local Story

#### South Dakota QuitLine

The South Dakota QuitLine offers free telephone health coaching and medication to all residents. The program currently offers five health coaching telephone calls and eight weeks of medication free of charge.

In 2011, South Dakota residents had the option of choosing from three NRT medications—patch, gum, or lozenges—or the prescription medications varenicline (Chantix) or bupropion (Zyban). Studies demonstrate that with coaching and a medication regimen people are twice as likely to be successful than trying to quit by medication alone. The SDQL is not just for smokers, it also provides assistance to chewers as well. All health coaching is done locally and not by an out-of-state service. Avera McKennan Corporate Health is a contracted vendor for the telephonic health coaching services with the QuitLine.

The most current data available (2011) reports a 7-month 30-day point prevalence quit rate of 43 percent, which is much higher than the overall 2011 U.S. QuitLine rate of 28.9 percent.



over the last 48 years to reduce the toll tobacco use takes on families and communities. Successful strategies include fully funding tobacco control programs, increasing the price of tobacco products, enacting comprehensive smoke-free policies, controlling access to tobacco products, reducing tobacco advertising and promotion, implementing anti-tobacco media campaigns, and encouraging and assisting tobacco users to quit.<sup>7</sup>

### CHANGE Tool

The success of these national strategies is evident in the CHANGE tool results regarding tobacco use. All five sectors identified their respective environments as places that support the elimination of tobacco use and most all sectors identified corresponding policies. Each sector indicated that the implementation of sector policies was influenced by the implementation of statewide policies. Examples of influential statewide policies include, but are not limited to, a 2002 law banning smoking in most public places and areas of employment, in 2006 the state cigarette tax was raised, and in 2010 voters upheld a law expanding the smoking ban to bars, restaurants, and casinos.

### Live Well Survey

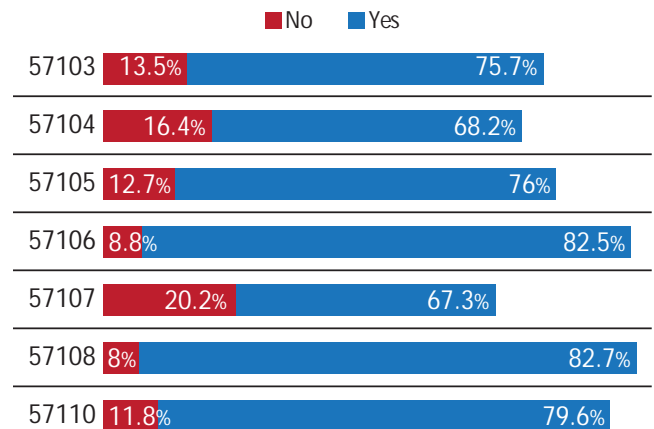
Live Well Survey respondents were asked to identify their top three unhealthy behaviors in Sioux Falls. Nearly 42 percent of the respondents identified smoking/tobacco use as one of the top three unhealthy behaviors.

Given that the tobacco use rate has decreased year over year and that most indoor public spaces are now tobacco free, it is a best practice to learn and understand about tobacco-free outdoor public spaces.

A high percentage of the Live Well resident survey respondents indicated they would support tobacco free parks in Sioux Falls, 77.2 percent compared to 12.1 percent who reported “No” and 10.3 percent who stated “Don’t know/not sure.” Within the five zip code areas of respondents, 57108 reported the highest percentage of support

for tobacco-free parks, 82.7 percent, while zip code 57107 reported the lowest percentage of support for tobacco-free parks, 67.3 percent, as well as one the highest percentages of “Everyday” smokers across zip codes, 16.8 percent. Respondents living in zip code 57104 reported the highest percentage of “Everyday” smokers, 25.5

### Percent of Live Well Survey Respondents Who Would Support Tobacco Free Parks by Zip Code



percent.

Tobacco use is the number one preventable death. In South Dakota alone, 1,205 people died of tobacco use in 2010. Preventing tobacco use, especially at a young age, and helping tobacco users quit can improve the health and quality of life for Americans of all ages. People who stop smoking greatly reduce their risk of disease and premature death. Benefits are greater for people who stop at earlier ages, but quitting tobacco use is beneficial at any age.<sup>8</sup>

The Live Well Survey asked respondents about their tobacco use. Almost half of those Live Well Survey respondents who reported themselves as tobacco users indicated they stopped using tobacco for one day or longer because they were trying to quit using tobacco. In addition, 28.9 percent of respondents who are current tobacco users indicated they were familiar with the South Dakota QuitLine, a free tobacco cessation resource (phone coaching and online assistance) supported through the South Dakota Department of Health, and they would go there if they wanted to quit smoking.<sup>9</sup> However, nearly

23 percent indicated they don't know where to go for assistance in tobacco cessation.

### Tobacco Use and Disease

Common diseases and causes of death linked to tobacco use include cancer; heart disease; lung disease including emphysema, bronchitis, and chronic airway obstruction; premature birth; low birth weight; stillbirth; and infant death. Secondhand smoke causes heart disease and lung cancer in adults and a number of health problems in infants and children, including severe asthma attacks, respiratory infections, ear infections, and sudden infant death syndrome (SIDS). Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontitis and tooth loss. Cigar use causes cancer of the larynx, mouth, esophagus, and lung.<sup>10</sup>

Disparities in tobacco use result in more tobacco-related disease in population subgroups. South Dakota 2011 BRFSS data indicates that Multiracial reflects that 44.2 percent are smokers, "Other" which includes Native Americans/American

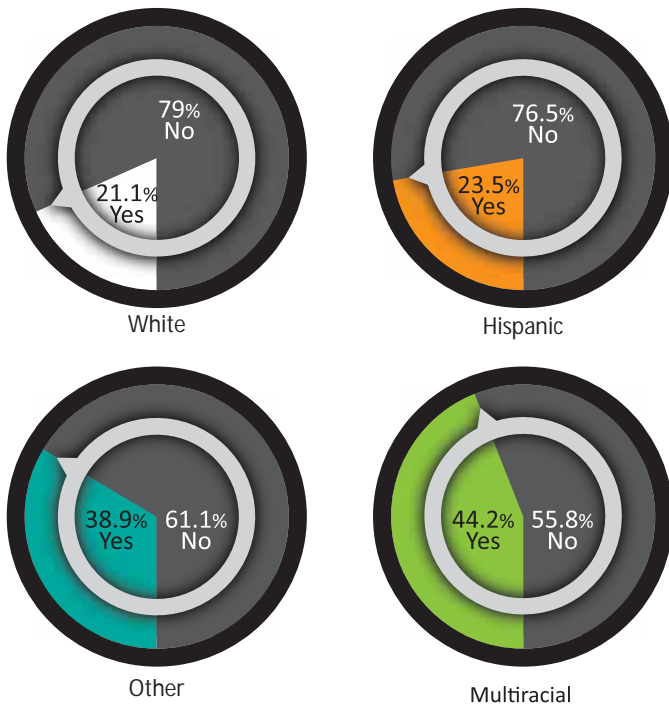
Indians is second at 38.9 percent, and Hispanics represent 23.5 percent compared to white respondents at 21.1 percent.<sup>11</sup>

Cigarette and tobacco smoke, high blood cholesterol, high blood pressure, physical inactivity, obesity, and diabetes are the six major independent risk factors for coronary heart disease that can be modified or controlled. Cigarette smoking is so widespread and

#### Live Well Means

- ✓ If you use tobacco, quit today by calling the South Dakota QuitLine at 1-866-SD-QUITS.
- ✓ Put yourself in situations where you limit "triggers" to smoke.
- ✓ Help a friend or loved one quit using tobacco.
- ✓ Encourage children to get involved with Teens Against Tobacco Use (TATU) at school.
- ✓ Make your home or place of residence smoke-free.

#### South Dakota Adults Who are Current Smokers



significant as a risk factor that the Surgeon General has called it "the leading preventable cause of disease and deaths in the United States."

#### Summary

The CHANGE tool results indicate that most every sector identified tobacco policy and environmental assets above the minimum threshold of 60 percent and some sectors significantly so. As mentioned earlier, the success realized in the area of tobacco can be attributed to strategies implemented over the last 48 years to reduce the toll tobacco use takes on families and communities.

#### CHANGE Tool Assets and Needs

##### Tobacco Assets identified are:

- Tobacco advertising is restricted at point of service.

- Revenue is generated through increased tobacco prices with a portion of the revenue earmarked for tobacco control.
- Health care environments have tobacco-free environments in all indoor and outdoor public spaces.
- Most community institutions and organizations' environments have tobacco-free environments in all indoor and outdoor public spaces.
- Schools provide access to a referral system to help students access tobacco cessation resources and services.
- Some employers provide insurance coverage for tobacco cessation products and services.

**Tobacco Needs identified are:**

- Institute a tobacco-free policy 24/7 for outdoor public places.
- Ban tobacco promotions, promotional offers, and prizes.
- Health care professionals provide regular and consistent counseling about the harm of tobacco use and exposure during all routine office visits.
- Implement a provider reminder system to assess, advise, track, and monitor tobacco use.
- Implement a common referral system to help people access tobacco cessation resources.

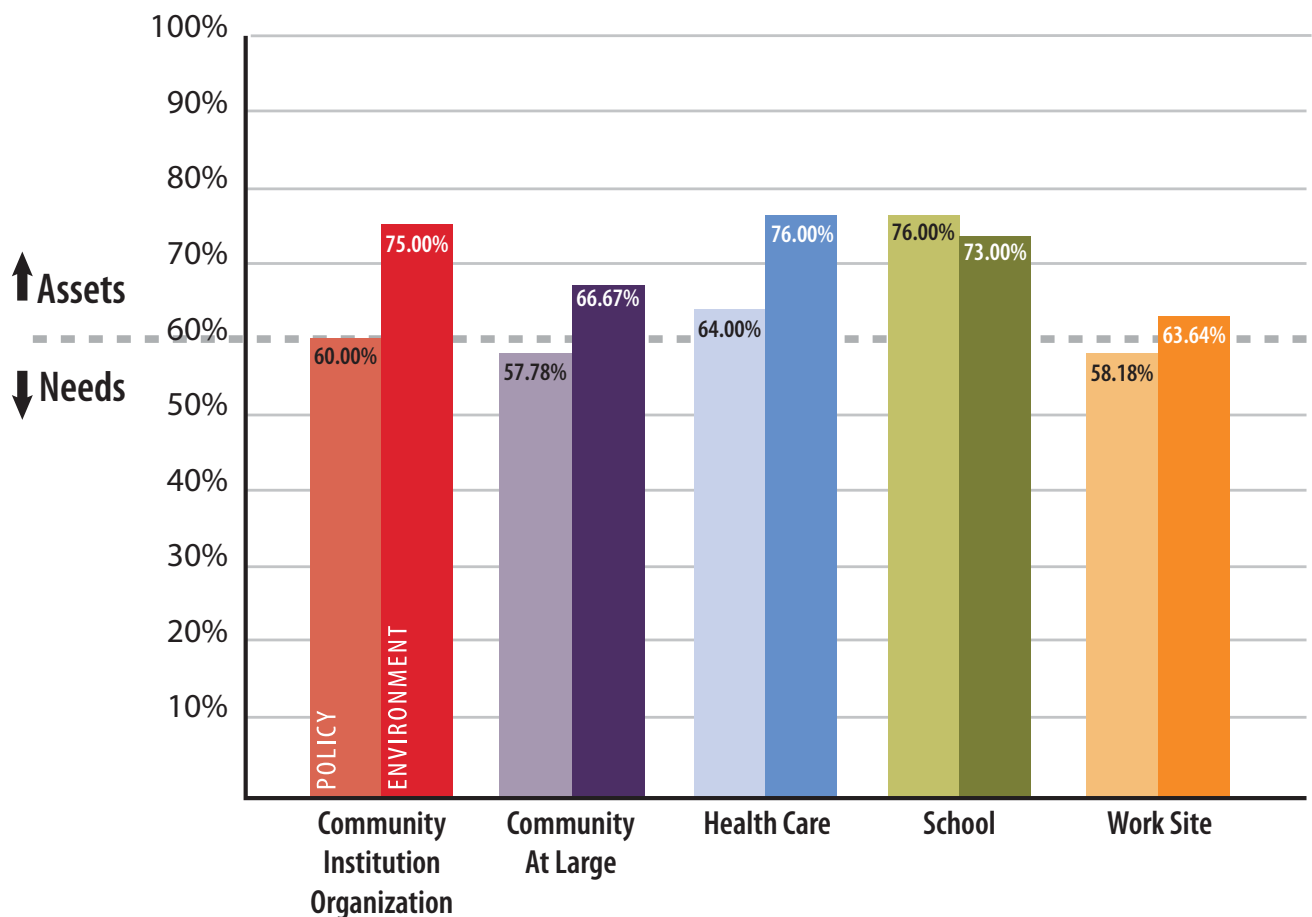


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4. <http://apps.nccd.cdc.gov/BRFSS/display.asp>.
5. Centers for Disease Control and Prevention (CDC). Behavioral Risk factor Surveillance System Survey Questionnaire. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2001 through 2001.
6. [www.healthy people.gov/2020/topics/objectives/2020/overview](http://www.healthy people.gov/2020/topics/objectives/2020/overview).
7. Healthy People 2020 Tobacco Use Objectives. Centers for Disease Control and Prevention National Center for Chronic Disease Prevention and Health Promotion Office on Smoking and Health Mail Stop K-50 Attn: Healthy People 2020 Tobacco Use Objectives 4770 Buford Highway NE Atlanta, GA 30341-3717.
8. [www.healthypeople.gov](http://www.healthypeople.gov)
9. [www.sdquitline.com](http://www.sdquitline.com)
10. Healthy People 2020 Tobacco Use Objectives. Centers for Disease Control and Prevention National Center for Chronic Disease Prevention and Health Promotion Office on Smoking and Health Mail Stop K-50 Attn: Healthy People 2020 Tobacco Use Objectives 4770 Buford Highway NE Atlanta, GA 30341-3717.
11. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2011.



# 2012 CHANGE Assessment Results

## Chronic Disease Management



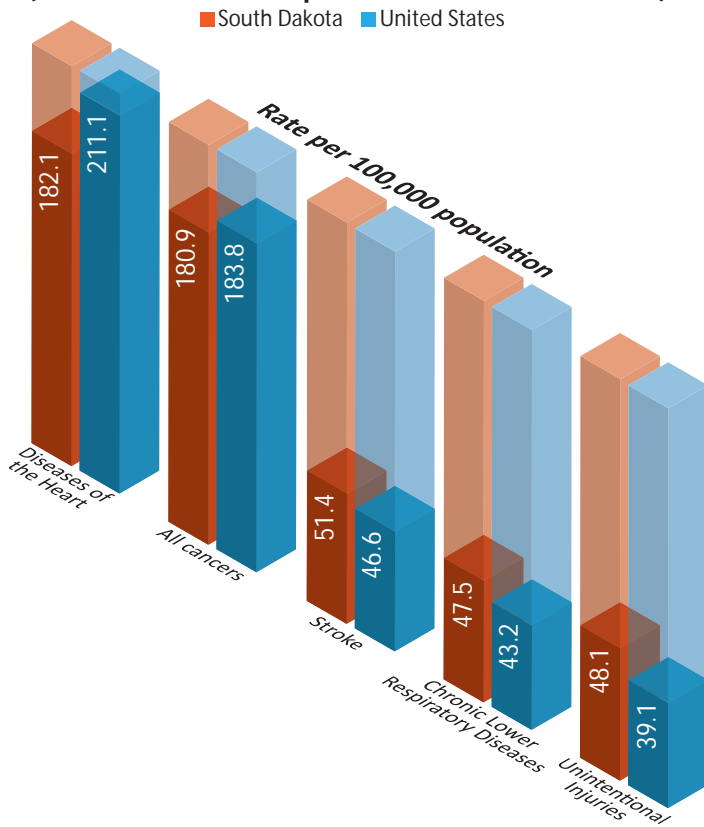
### Chronic Disease Management Overview

Chronic diseases—such as heart disease, stroke, cancer, diabetes, and arthritis—are among the most common, costly, and preventable of all health problems. Four modifiable health risk behaviors—lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption—are responsible for much of the illness, suffering, and early death related to chronic diseases.<sup>1</sup> Access to high quality and affordable measures (including screening and appropriate follow-up) are essential steps in saving lives, reducing disabilities, and lowering costs for medical care.<sup>2</sup>

Chronic conditions currently account for more than 75 percent of health care spending in the United States, and that can be an expensive proposition for employers. Studies have shown that chronic conditions can add about \$3,600 a year per person to employer health care costs. Controlling health care costs requires a multipronged, integrated effort that goes beyond the medical providers and health insurers trying to prevent chronic diseases to the employers supporting healthy workplaces.<sup>4</sup>

with long-term conditions share knowledge, responsibility, and care plans with health care practitioners and/or peers. To be effective it requires system implementation with community social support networks, a range of satisfying occupations and activities relevant to the context, clinical professionals willing to act as partners or coaches, and online resources that are verified and relevant to the country and context. It is a population health strategy as well as an approach to personal health.

5 Most Common Causes of Death in 2005 (South Dakota Compared with United States)<sup>3</sup>



Live Well survey respondents were asked if they have ever been told by a doctor or health professional if they have one or more specific chronic health issues and 24.2 percent indicated they had “vision problems” closely followed by “depression, anxiety, stress, etc.” at 23.6 percent, and 22.8 percent of respondents indicating they

### Did You Know?

#### Sioux Falls School-Based Health Clinics

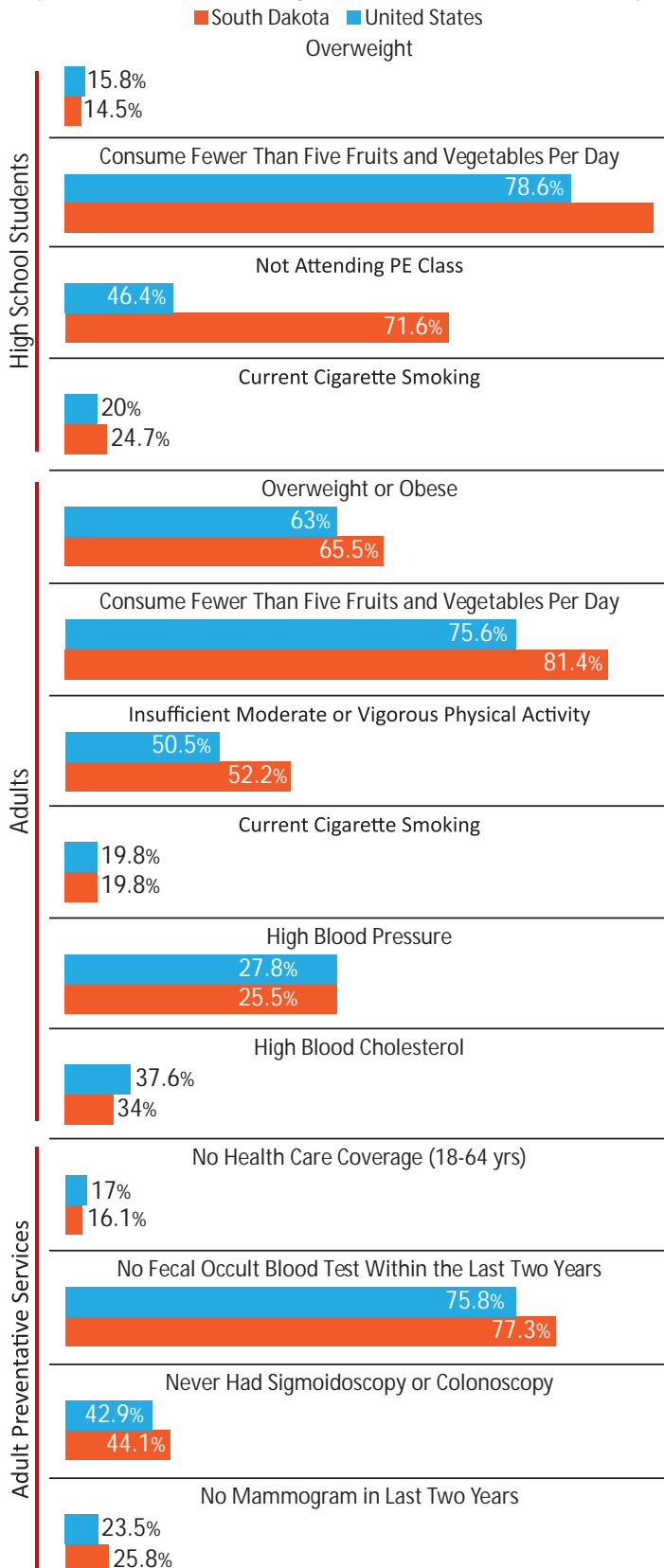
Sioux Falls currently has two school-based health clinics and is building a third. The current locations are Terry Redlin Elementary and Hawthorne Elementary with the newest clinic being built at Hayward Elementary. Children may be cared for at the clinics with parent/guardian consent. Also at the Terry Redlin site, and at the Hayward clinic once it opens, the public may utilize the clinics at any time during business hours.

The services available at our school-based clinics include:

- Physicals.
- Immunizations.
- Medical care for acute injury/illness or chronic health conditions.
- Lab tests.
- Dental.
- Follow-up visits.
- Health education.

Chronic disease management is an integrated approach to managing illness and is often defined as “a system of coordinated health care interventions and communications for populations with conditions in which patient self-care efforts are significant.”<sup>5,6</sup> It can improve quality of life while reducing health care costs by preventing or minimizing the effects of a disease.<sup>7</sup> For people who can access health care practitioners or peer support it is the process whereby persons

**Preventative Services and Risk Factors  
(South Dakota Compared with United States)**



have been told they are “overweight/obese.” The top three health issues—vision problems, overweight/obese, and depression, anxiety, stress, etc.—affect the highest percentage of respondents aged 36–45 and 46–55.

Fortunately, many of these chronic conditions can be prevented or more effectively managed by leading healthier lives, and employers can play an important role by supporting a healthy workplace. Steps that employers can take include encouraging workers to get routine screenings, promoting physical activity in the workplace, and providing healthier options in vending machines and cafeterias. Well-structured, evidence-based wellness programs can have a real impact on a company’s bottom line and can help control health care costs for everyone. Focusing on an employee’s total health can lead to a more energetic, productive workforce that can give your company a competitive edge.

Live Well Survey

Survey respondents were asked about the health of their workplace and those who are employed reported that 32.7 percent of their employer and/or health insurance plans do not reward them for participating in preventive exams while, conversely, 31.8 percent of respondents’

Did You Know?

**Sioux Falls Reduced-Cost Clinics**

Sioux Falls has numerous reduced-cost clinics that are available for residents of all income levels throughout the city.

Falls Community Health/Dental—  
521 North Main Avenue.

Sanford Downtown Health Care—  
401 East Eighth Street.

Avera McKennan Health Care Clinic and  
Downtown Center—300 North Dakota Avenue.

Destiny Outreach Clinic—225 East 11th Street.

employer and/or health insurance plans do reward for participating and preventive exams. A smaller percentage of respondents, 13.7 percent, indicated they “don’t know” if their employer and/or health insurance plans reward them.

One way that the survey identified the participation rate in preventive procedure was to ask respondents to identify preventive procedures they have had in the last year. While the percentage of respondents who had a preventive procedure in the last year is not a direct correlation to employer support for work site wellness, the data does support the importance of chronic disease management and prevention. Blood pressure checks (80.5 percent) were markedly the highest reported preventive procedure respondents had in the last year. Over half of respondents also indicated receiving dental cleaning/X-rays (67.6 percent), a flu shot (59 percent), and vision screening (50.7 percent) in the last year. A small percentage of respondents indicated they received a vascular screening in the last year (3.8 percent). Some data that is important to note is less than half of respondents indicated they received a cholesterol or cardiovascular screening in the last year, while respondents indicated “overweight/obesity” as one of their top health issues they have been diagnosed with by their doctor. High cholesterol and heart disease are health conditions that are known to be complications associated with overweight/obesity.

As discussed previously, it is vital to have ongoing access to a health care provider to support chronic disease management. The Live Well Survey assessed respondents’ access to care. Approximately half of total survey respondents who answered the question, “Do you have one person you think of as your personal doctor or health care provider?” reported they have only one health care provider, while 31.2 percent reported having more than one, and nearly 12 percent reported not having a personal doctor. When asked if there was a time in the past 12 months where they or a family member needed to see a doctor and couldn’t, the majority said there

was not a time where they couldn’t see a doctor. However, over 12 percent indicated they did have a time when they or a family member needed to see a doctor but could not. The major reason respondents indicated for not being able to see a doctor included that they do not have health insurance, the share of the cost was too great, and inability to get in for an appointment.

## Chronic Disease

The Live Well Survey asked questions about specific chronic diseases that are prevalent within our community. In addition to those addressed in the survey tool, an overview of cardiovascular disease, blood pressure, cholesterol, and diabetes is included in this section.

## Cardiovascular Disease

Cardiovascular disease refers to any disease of the heart or vascular system. This includes many conditions including, but not limited to, heart attacks, coronary heart disease, atherosclerosis, hypertension, congestive heart failure, and stroke. Risk factors for cardiovascular disease include high blood pressure, high cholesterol, smoking, inactivity, and being overweight or obese. Individuals with cardiovascular disease experience life-changing difficulties and limitations plus the increased health care costs associated with long-term (chronic) illnesses which, in turn, result in a negative economic impact on communities.

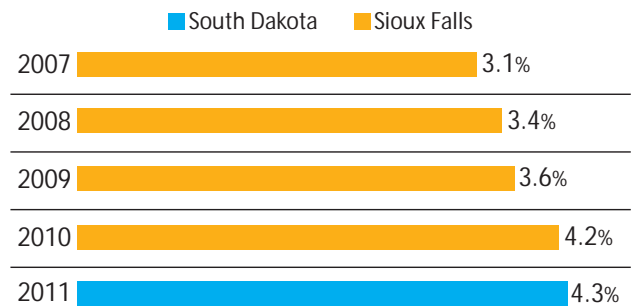
According to preliminary data from the National Vital Statistics Report, the leading cause of deaths in the United States in 2011 is diseases of the heart.<sup>8</sup> According to the CDC in 2010, the leading cause of death was heart disease, followed by cancer and then stroke.<sup>9</sup>

The 2010 BRFSS data also reported that the number of persons reporting they have been told by a health care professional that they have angina or cardiovascular disease remains flat at 4.2 percent.<sup>10</sup> The 2010 BRFSS reported that 3.3 percent of the Sioux Falls MSA residents indicated a doctor, nurse, or other health care



professional has told them that they have had a heart attack (myocardial infarction).<sup>11</sup> This represents a slight increase over 2009 BRFSS results of 2.7 percent. The number of the Sioux Falls MSA residents that indicated a doctor, nurse, or other health care professional has told them that they have had a stroke remained constant at 1.8 percent.<sup>12</sup>

### Percent of Sioux Falls MSA Populations That Have Been Told They Have Angina/Coronary Heart Disease



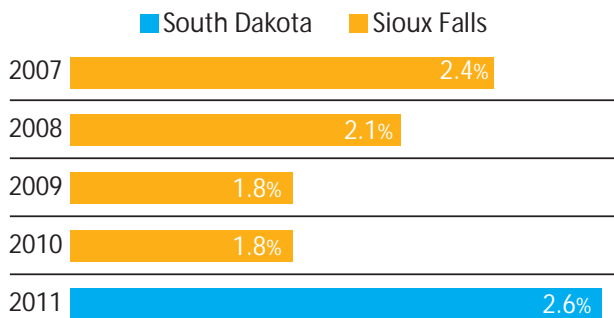
### Risk Factors of Cardiovascular Disease

Hypertension is the term used to describe high blood pressure. Often, there are no symptoms, which is why it is referred to as a “silent killer.” For most patients, high blood pressure is found when they visit their health care provider or have it checked elsewhere. Because there are no symptoms, people can develop heart disease and kidney problems without knowing they have high blood pressure. The most current 2009 BRFSS data indicates that the number of people living in the Sioux Falls MSA that have been told they have high blood pressure has continued to increase since 2003.<sup>13</sup>

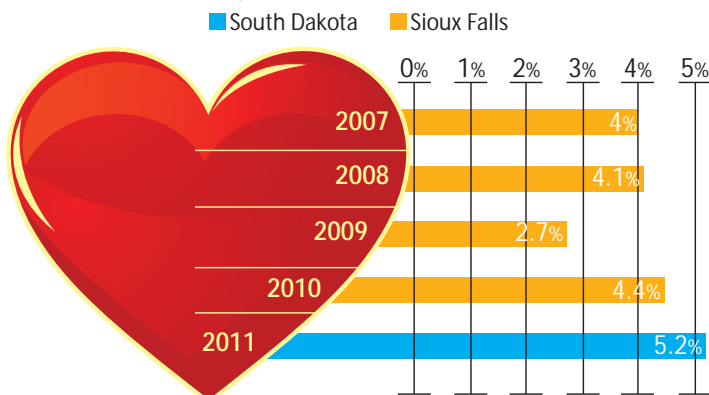
In the U.S., 76.4 million adults have been diagnosed with high blood pressure, and approximately 33 percent of them do not know they have it.<sup>14</sup> Clinical preventive services, such as routine screenings for hypertension, are key to reducing death and disability and improving the nation’s health. These services both prevent and detect illnesses and diseases at more treatable stages.

In 2010, The Big Squeeze initiative was introduced to Sioux Falls through a partnership that includes many Live Well Sioux Falls Coalition members. This month-long initiative focuses on performing blood pressure screenings and delivering education to Sioux Falls residents. The mission of The Big Squeeze is to increase awareness of hypertension (high blood pressure) and the need for screenings throughout the Sioux

### Percent of Sioux Falls MSA Populations That Have Been Told They Have had a Stroke



### Percent of Populations That Have Been Told They Have had a Heart Attack

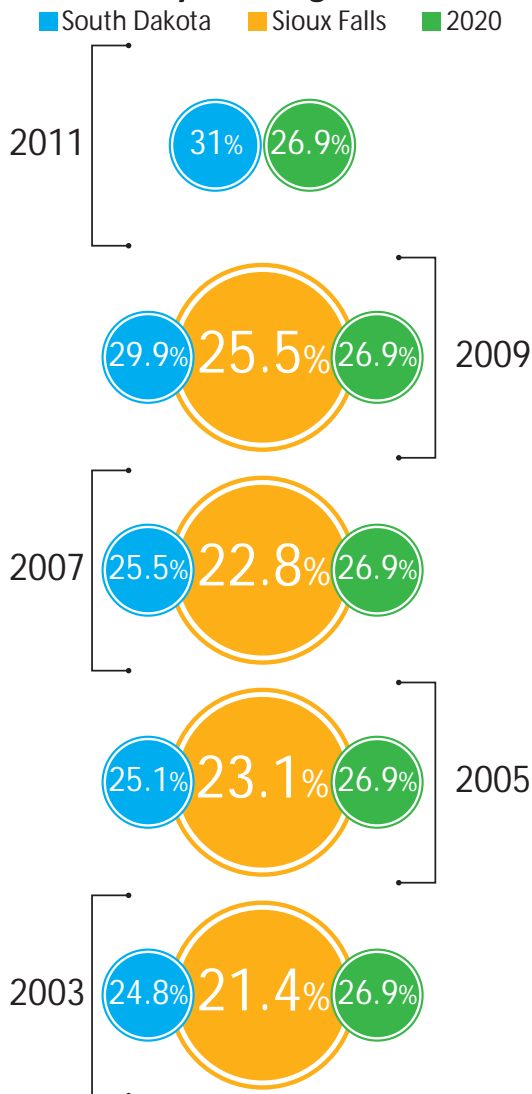


2012 Big Squeeze Results

Normal	At Risk	High
Systolic less than 120	Systolic 120–139	Systolic 140+
Diastolic less than 80	Diastolic 80–89	Diastolic 90+
35%	48%	17%

Falls community. By participating in a screening, Sioux Falls residents have the opportunity to determine whether their blood pressure is in a normal range and, if it is not, to then take action and see their health care provider. The initiative also works with health care providers to ensure that patients receive education and tools to manage blood pressure when it is above the normal range. While it is a “silent killer,” it can be controlled. In 2012 the goal of 5,000 screenings was exceeded to a total of 5,350 total screenings performed. Of those 5,350 screened, 65 percent had at risk (120-139/80-89) or high (>140/>90) blood pressure readings.

Percent of Sioux Falls MSA Population That Have Been Told They Have High Blood Pressure



Did You Know?

The Big Squeeze

The Big Squeeze is an annual month-long initiative where a group of public and private partners work together to screen as many blood pressures in Sioux Falls as possible.

High blood pressure is a serious health concern that can cause heart attacks, strokes, and heart failure. The worst part about high blood pressure is that it is a “silent killer.” There aren’t any symptoms until it is too late and someone experiences a serious medical problem.

Anyone can be part of the annual Big Squeeze event. All it takes is for someone in an organization to care about their own health and the health of their coworkers to get this great event started. For more information, contact Jen Johnson at [jjjohnson@siouxfalls.org](mailto:jjjohnson@siouxfalls.org) or 367-8031.

Cholesterol

High blood cholesterol is also a significant contributing factor for cardiovascular disease. Cholesterol is a waxy substance that’s found in the fats (lipids) in your blood. While your body needs cholesterol to continue building healthy

cells, having high cholesterol can increase your risk of heart disease.

When you have high cholesterol, you may develop fatty deposits in your blood vessels. Eventually, these deposits make it difficult for enough blood to flow through your arteries. Your heart may not

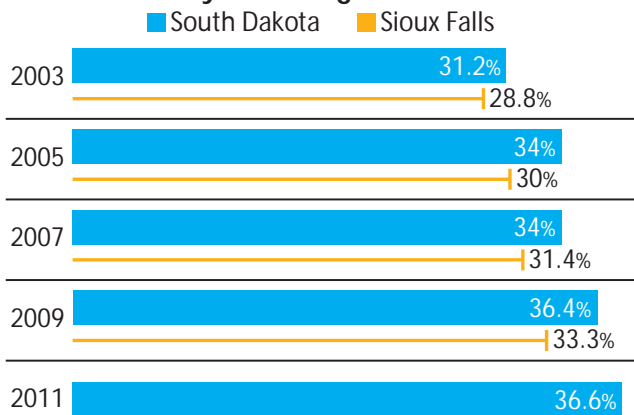
get as much oxygen-rich blood as it needs, which increases the risk of a heart attack. Decreased blood flow to your brain can cause a stroke.<sup>15</sup>

### Diabetes

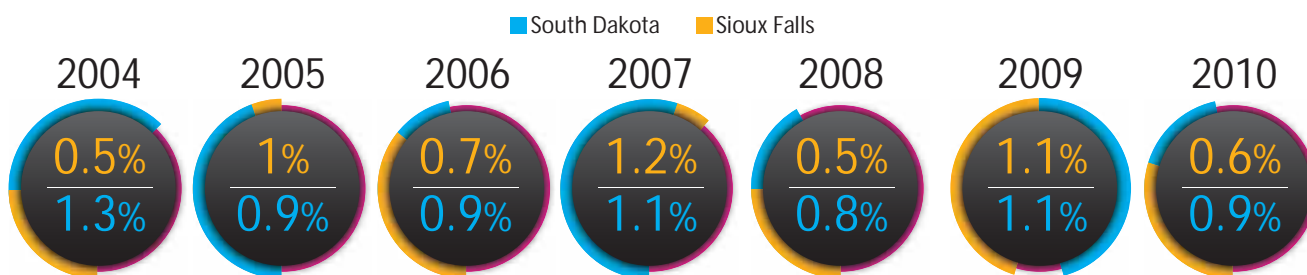
Diabetes is a disease in which your blood glucose or sugar levels are too high. Glucose comes from the foods that we consume. Insulin is a hormone that assists the glucose to get into your cells, providing the cells with an energy source. With type 1 diabetes, the body does not produce insulin. With type 2 diabetes (more common), your body does not use the circulating insulin properly. With both types of diabetes, the glucose stays in your blood stream and cannot be used properly by your body.<sup>16</sup>

Gestational diabetes is a common complication of pregnancy. Gestational diabetes can lead to perinatal complications in mother and child and substantially increases the likelihood of cesarean section. Gestational diabetes is also a risk factor for subsequent development of type 2 diabetes after pregnancy.<sup>17</sup> A number of types of diabetes exist with type 2 being the most common form. The Diabetes Prevention program showed that

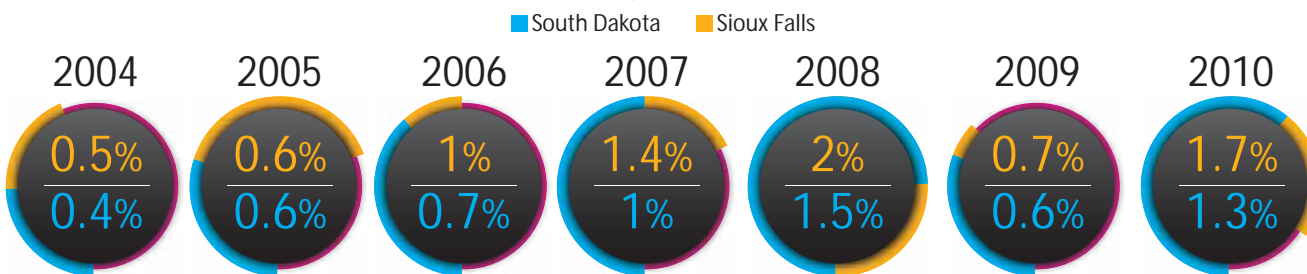
Percent of Adults Who Have Been Told That They Have High Blood Cholesterol



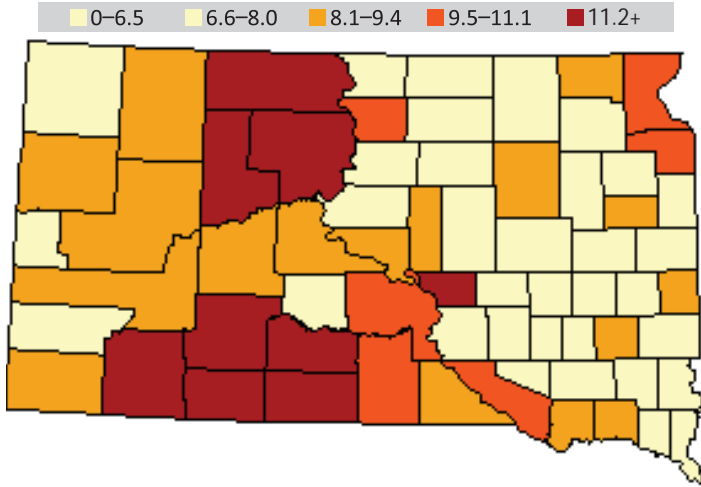
Percent of People in the Sioux Falls MSA That Have Been Told By A Doctor That They Have Prediabetes



Percent of People in the Sioux Falls MSA That Have Been Told By A Doctor That They Have Pregnancy Related Diabetes



**County Level Estimates of Diagnosed Diabetes Percentage of Adults in South Dakota (2009)<sup>23</sup>**



people at high risk for type 2 diabetes could sharply lower their chances of developing the disorder through diet and exercise.<sup>18</sup>

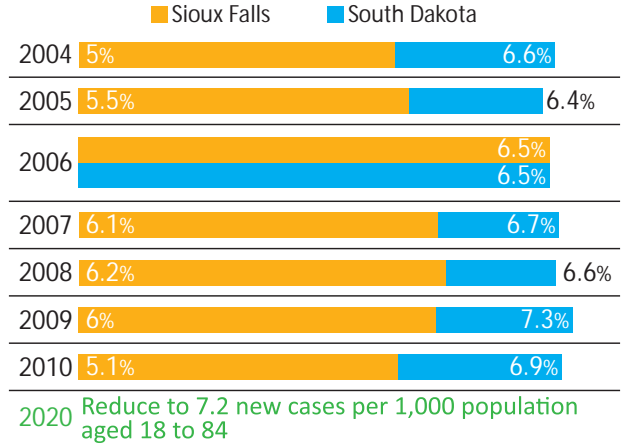
Diabetes contributes to an increase in cardiovascular disease risk by 2 to 4 times, as well as peripheral vascular disease and kidney disease. In the United States, diabetes is the leading cause of nontraumatic amputations, blindness among working-aged adults, and end-stage renal disease.<sup>19</sup> Diabetes can also cause emotional distress and impair self-care. It is not uncommon for those with diabetes to become overwhelmed because of their care needs. Not surprisingly, depression, anxiety, and other mental health disorders are more prevalent among people with diabetes.

According to the Centers for Disease Control and Prevention (CDC) 25.8 million people of all ages, or 8.3 percent of the U.S. population, have diabetes. Another 18.8 million people have been given a diagnosis and another 7 million people are undiagnosed.<sup>20</sup> In 2010, 41,821 or 6.9 percent of South Dakotans over the age of 17 had been told they have type 2 diabetes.<sup>21</sup> According to the CDC, 35 percent of U.S. adults aged 20 years or older, 59 million Americans, have prediabetes. Based on this formula, South Dakota would have more than 200,000 people with prediabetes.<sup>22</sup>

The BRFSS data reported specific to Sioux Falls, when comparing 2009 to 2010, indicates

the percentage of people in the Sioux Falls MSA that have been told by a doctor that they have diabetes and the percentage of people in the Sioux Falls MSA that have been told by a doctor that they have prediabetes have both experienced a slight decline; while the percentage of people in the Sioux Falls MSA that have been told by a

**Percent of People in the Sioux Falls MSA That Have Been Told By A Doctor That They Have Diabetes<sup>25</sup>**



doctor that they have pregnancy-related diabetes has increased from .7 percent to 1.7 percent.<sup>24</sup>

Additional consideration needs to be given to women of childbearing age, as excess weight increases the risk of gestational diabetes mellitus (GDM). Data from the 2010 BRFSS report for the Sioux Falls MSA indicates the following:

Prediabetes is a condition in which individuals have blood glucose levels higher than normal, but not high enough to be officially classified as a diabetic. People with prediabetes have an increased risk of developing type 2 diabetes, heart disease, and stroke. There are several controllable factors that cause diabetes. These include being overweight/obese and not exercising enough.<sup>26</sup>

Disparities in Diabetes Risk

People from minority populations are more frequently affected by type 2 diabetes. Minority groups constitute 25 percent of all adult patients with diabetes in the United States and represent the majority of children and adolescents with



type 2 diabetes. African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans and Native Hawaiians and other Pacific Islanders are at particularly high risk for the development of type 2 diabetes. Diabetes prevalence rates among American Indians are 2 to 5 times those of whites.<sup>27</sup> On average, African American adults are 1.7 times as likely and Mexican Americans and Puerto Ricans are twice as likely to have the disease as non-Hispanic whites of similar age.<sup>28</sup>

### Barriers to Progress in Diabetes Care

Barriers to progress in diabetes care include systems problems (challenges due to the design of health care systems) and the troubling increase in the number of people with diabetes, which may result in a decrease in the attention and resources available per person to treat diabetes.

### Did You Know?

#### Mental Health

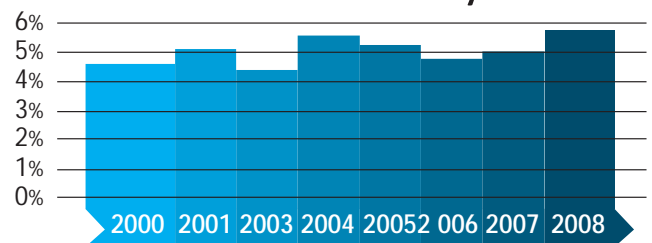
Southeastern Behavioral Health is a mental health clinic that is available to all residents. Southeastern Behavioral Health, a private, nonprofit agency, has emphasized the importance of emotional wellness—not only for individuals but also for entire communities, serving the four-county area of Lincoln, McCook, Minnehaha and Turner Counties. Since 1952, Southeastern has listened to the behavioral health care issues facing the Sioux Empire and responded with the appropriate services. Southeastern is one of 11 Community Mental Health Centers (CMHC) in South Dakota and is dedicated to providing the citizens of this state with top quality, professional services to keep our individuals, families, schools, workplaces, and communities emotionally strong and healthy. Today, Southeastern serves more than 4,000 children, adults, and families each year.

### Mental Health and Mental Disorders

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society.<sup>29</sup>

As a general health question, the 2010 South Dakota BRFSS asked respondents about the status of their mental health.<sup>30</sup> This measure has been tracked through BRFSS since 2000; however, data specific to the Sioux Falls MSA is not available.

**Percent of Adult Respondents Reporting Their Mental Health Status as Not Good for 20–30 of the Past Days**



Mental health and physical health are closely connected. Mental health plays a major role in people’s ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people’s ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person’s ability to participate in treatment and recovery.<sup>31</sup>

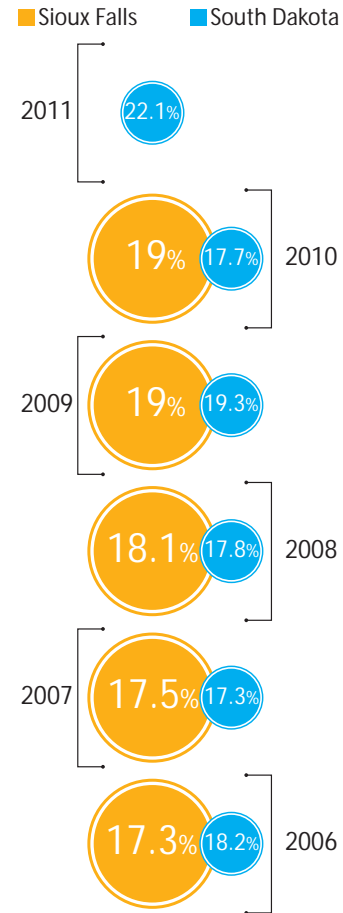
Depression is an illness that may coexist with other behavior factors, such as substance abuse. Excessive alcohol worsens depression symptoms, thus increasing the severity of the already present depression. Substance abuse associated with depression can lead to treatment noncompliance and can complicate disease treatment. Of Live Well Survey respondents, 23.6 percent indicated they had “depression, anxiety, stress, etc.”

## Substance Abuse

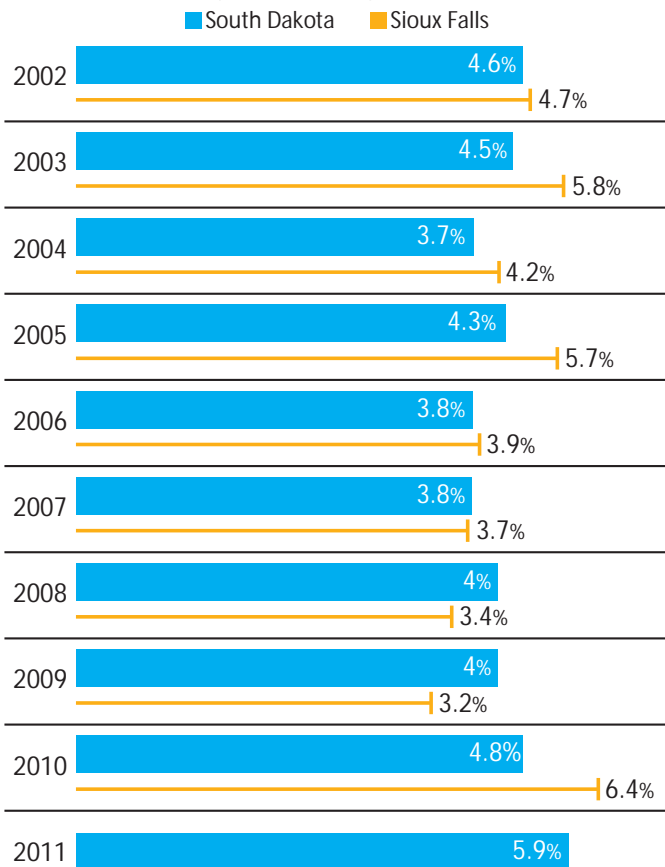
2010 BRFSS data specific to alcohol consumption in the Sioux Falls MSA:

Live Well Survey Respondents were asked to rank the top three unhealthy behaviors in the Sioux Falls community, and 45.6 percent of the respondents identified alcohol abuse as the top unhealthy behavior in Sioux Falls. Additionally, when asked to indicate significant problems in the community, 32.9 percent of respondents identified substance abuse (alcohol, drug, prescription use) as a significant problem.

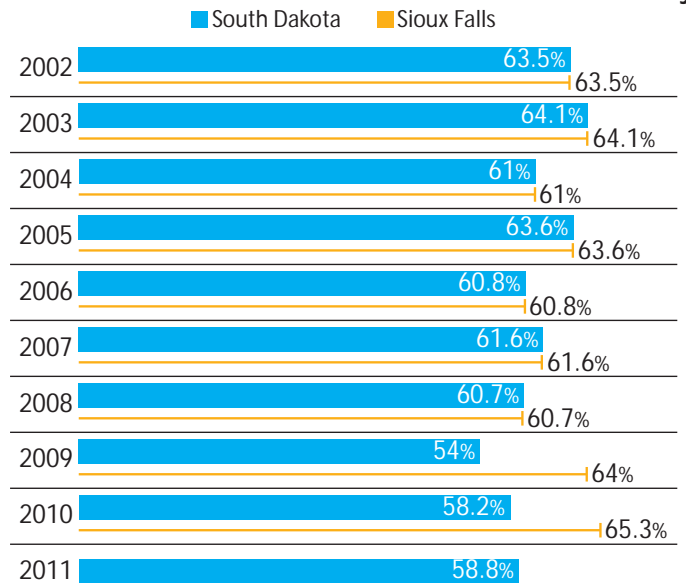
### Percent of Sioux Falls MSA Adults Who Say They are Binge Drinkers<sup>32</sup>



### Percent of Sioux Falls MSA Adults Who Say They are Heavy Drinkers



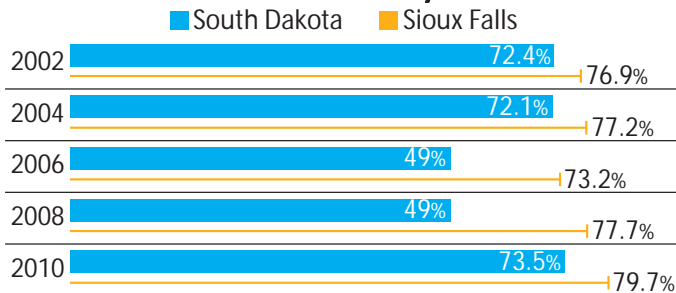
### Percent of Sioux Falls MSA Adults Who Have Had at Least One Drink of Alcohol Within the Past 30 Days



## Oral Health Care

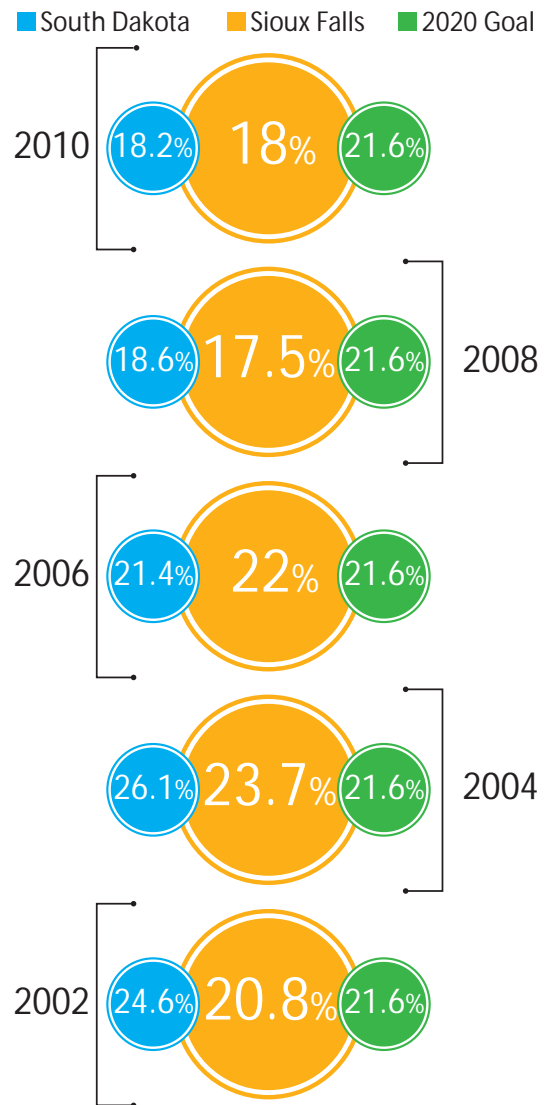
Good oral health is essential to overall health and well-being. Oral disease, from cavities to oral cancer, cause pain and disability for many Americans. Health behaviors that can lead to poor oral health include tobacco use, excessive alcohol use, and poor dietary choices.

**Percent of Sioux Falls MSA Residents That Report Visiting A Dentist or Dental Clinic Within the Past Year for Any Reason**



Barriers that can limit a person’s use of preventive interventions and treatment include limited access to and availability of dental services, lack of awareness of the need for care, cost, and fear of dental procedures.<sup>33</sup> There are also social determinants that affect oral health. In general, people with lower levels of education and income, and people from specific racial/ethnic groups, have higher rates of disease. People with disabilities and other health conditions, like diabetes, are more likely to have poor dental health.<sup>34</sup>

**Percent of Sioux Falls MSA Adults Aged 65+ Who Have Had All Their Natural Teeth Extracted**



### Local Story

#### Wellmark Blue Cross and Blue Shield of South Dakota

As the health insurance market leader, it’s our responsibility to walk the talk when it comes to living a healthful lifestyle. Our employees can earn financial incentives throughout the year by participating in wellness programs, events, and activities, starting with a wellness health screening and completing a well-being assessment each fall.

Wellmark makes it easy to do this with our on-site wellness center as well as a variety of other tools, including challenges, a wellness book club, nutrition and fitness programs, and access to trainers and nutritionists. Wellmark employees use their breaks to work out at the in-house exercise facilities or to walk outside. They also have online resources available to help them reach and maintain their goals.

Information on oral health is not collected annually in BRFSS. The MSA-specific data is limited with only partial data collected every other year beginning in year 2002 and continuing through 2010. BRFSS reported the following information specific to oral health care in the Sioux Falls MSA.<sup>35</sup>

Comparing the 2008 BRFSS data to 2010 data for the Sioux Falls MSA indicates that adults that have had any permanent teeth extracted, remained flat (35.3 percent to 35.7 percent respectively); adults aged 65-plus who have had all their natural teeth extracted reflects significant increase (14.8 percent to 21.3 percent respectively); on a more positive side the number reporting they had visited the dentist or dental clinic within the last year for any reason also reflects a significant increase (77.5 percent to 81.2 percent respectively). Respondents who have no oral health/dental care insurance coverage accounted for 17 percent of people who have not visited a dentist or dental clinic within the past 2 years; however, a small percentage of respondents (5.6 percent) with dental insurance coverage reported their last visit to a dentist or dental clinic was within the past 2 years.

Major improvements have occurred in the nation’s oral health but oral health still remains a public health concern. Lack of access to dental care for all ages remains a public health challenge.

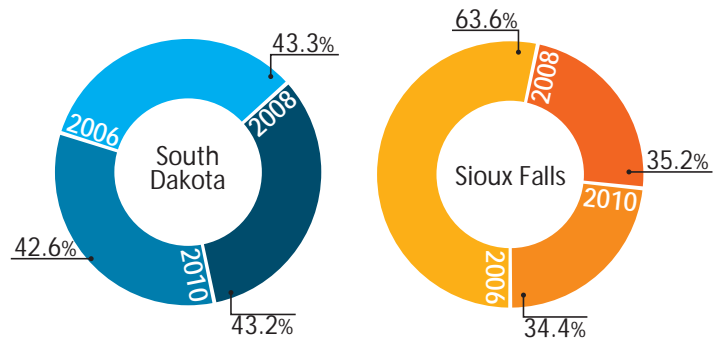
### CHANGE Tool Assets and Needs

#### Chronic Disease Management Assets identified are:

- Schools are meeting the nutritional needs of students with special health care or dietary requirements (allergies, diabetes, physical disabilities).
- Schools provide chronic disease self-management education to individuals identified with chronic conditions or diseases (diabetes, asthma).

- Most health care providers measure weight and height to calculate body mass index (BMI) for every patient at each visit.
- Most health care providers provide routine follow-up counseling and education to patients to help address chronic diseases and related risk factors.

Percent of Sioux Falls MSA Adults That Have Reported Having Had Permanent Teeth Extracted



- Most employers provide access to chronic disease self-management programs (i.e., Weight Watchers for overweight/obesity).
- Most employers provide access to free or low-cost employee health risk appraisal or health screenings.
- Employers have an emergency response plan to address health emergencies.
- Most provide health insurance to their workforce.

#### Chronic Disease Management Needs identified are:

- Establish a common curricula or training to raise awareness of the symptoms of heart attacks and strokes.
- Emotional health services are limited and not available in all settings.
- Consistently promote chronic disease prevention (post signs to remind employees to get blood pressure measured, quit smoking or avoid secondhand smoke, encourage fruit and vegetable consumption).



- Expand the availability of employee assistance services to employees and families.
- Implement a common message that is supported by strategies to educate residents on the importance of obesity prevention, controlling high blood pressure, controlling cholesterol, blood sugar or insulin levels, heart attack and stroke symptoms, and preventive care.
- Provide cardiopulmonary resuscitation training to students.
- Develop a citywide approach to chronic disease management to increase patient adherence to chronic disease treatment.

## Summary

Based on the CHANGE tool, each of the sectors indicated that policies are at varying stages of development however, even if a policy is not present, overall their environments support chronic disease management activities. Policy development is an opportunity to support systemic environmental stability.

## Live Well Means

- ✓ Engage in preventive exams such as blood pressure, cholesterol, BMI, and cardiovascular fitness.
- ✓ Ensure employees/staff are trained in CPR and AED use.
- ✓ Provide access to chronic disease self-management education programs to individuals identified with chronic diseases or conditions.
- ✓ Adopt curricula or training to raise awareness of the signs and symptoms of heart attacks and strokes.
- ✓ Have an emergency response plan (such as an AED) in place.
- ✓ Educate everyone about the importance of calling 9-1-1.

## Local Story

### Face It TOGETHER® Sioux Falls

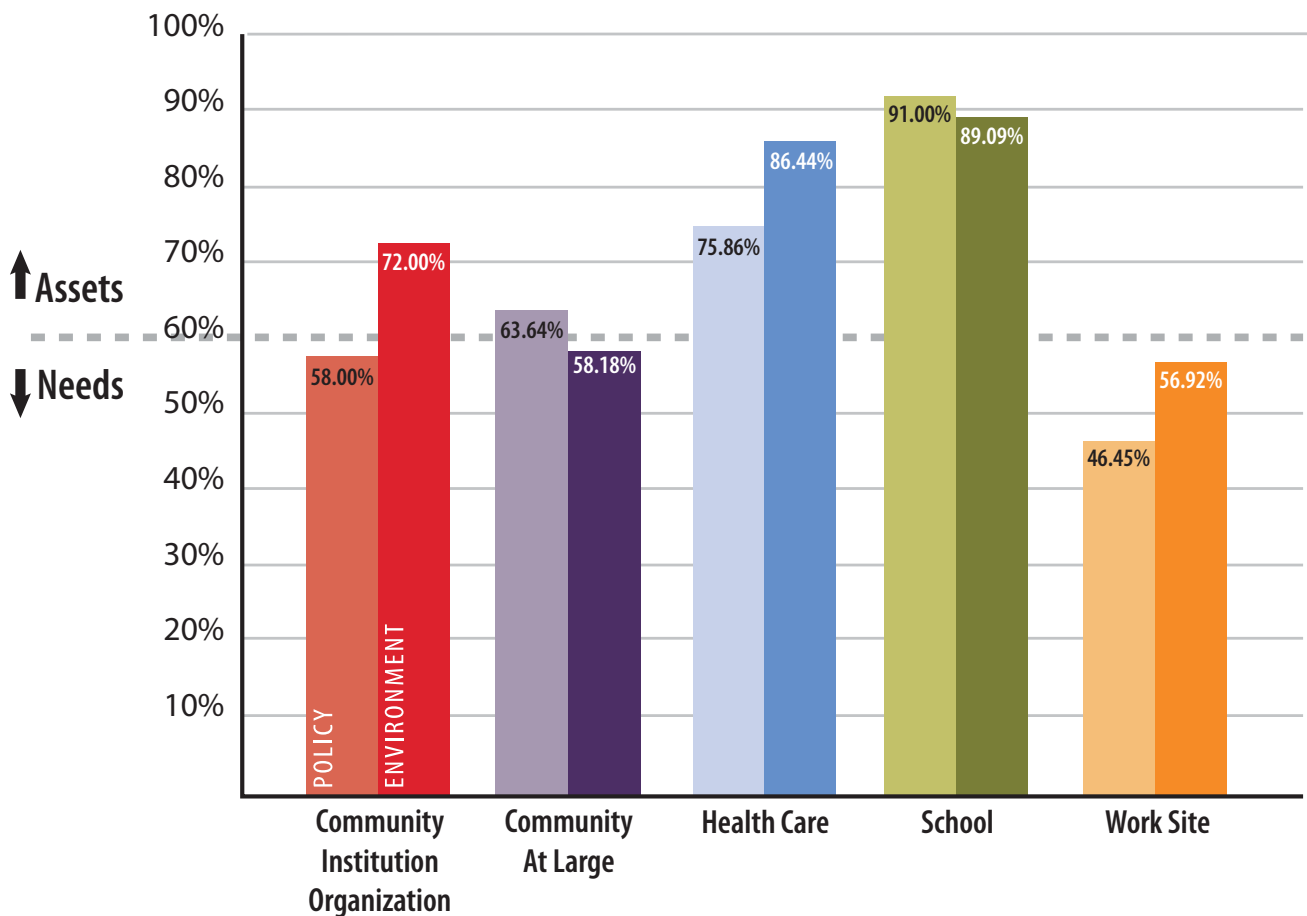
Face It TOGETHER® Sioux Falls was established in 2009 as the result of a community-wide town hall process to identify shared solutions to addiction. The organization's vision is a community that understands and treats addiction the same as any other chronic disease.

The nonprofit is dedicated to system change and social transformation around addiction. It serves as a public face and voice for recovery by providing free peer-to-peer recovery support services and leading advocacy and awareness efforts to eliminate stigma and fundamentally transform the way our community deals with this chronic disease. Its programs include a groundbreaking Employer's Initiative that extends recovery support and education into 22 workplaces across Sioux Falls, reaching a third of the area's workforce.

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# 2012 CHANGE Assessment Results

## Leadership



### Leadership Overview

A healthy community boasts leaders in organizations of all types who are committed to solving today's and tomorrow's critical public health problems. These leaders support and implement community health improvements necessary to make a community an inviting place to live. Change leadership is the driving force that fuels large-scale transformation and sustainable policies and environmental practices.

Change leaders provide the direction, inspiration, and bring together needed partnerships and resources to ensure success in making Sioux Falls the healthiest community in the region. Leaders also ensure there is an active plan to sustain a community's ongoing ability and commitment to work together to establish, advance, and maintain effective strategies that continuously improve health and quality of life for all.<sup>1</sup>

The nature of the CHANGE tool leadership assessment questions is slightly different than the assessment questions for the health topics of nutrition, physical activity, tobacco, and chronic disease. The leadership policy and environmental assessment speaks more to how leadership engages community members where they live, work, worship, play, and learn; the philosophy of how leadership shapes policies and sustainable environments that promote health and quality of life; and the degree to which leadership creates sustainable improvements that address the root causes of chronic disease, just to mention a few. The results of the leadership assessment

## Did You Know?

### Sioux Area Metro

Sioux Area Metro, otherwise known as SAM, is the public transportation that is available to Sioux Falls residents and visitors. Anyone is allowed to use this service, which helps decrease traffic congestion, decrease gas emissions, and support an active lifestyle. SAM has Flash Cards available that are just like a credit card where you load a dollar or pass value. When you board the bus, wave the card near the fare box—no cash needed! Visit the website at [www.siouxfalls.org/sam](http://www.siouxfalls.org/sam) for more information.

do not have a single national or statewide statistic to measure performance. Our leadership performance is self-reported by sector members and is measured by the results experienced in creating a culture of healthy living at the community level and to effectively impact the burden of chronic disease.

## Local Story

### City of Sioux Falls Health and Wellness

Employee health is serious business at the City of Sioux Falls. In 2007, the City became the first municipality in South Dakota to hire a full-time staff person solely devoted to the health and well-being of its employee group. Since that time employee wellness has become an integral part of the City's culture:

Leaders implement employee wellness initiatives based on the unique and individual needs of their work group.

Each year nearly 75 percent of the employee group participates in the annual health screening.

In 2011, the City went tobacco-free and a reported 42 employees are now celebrating a tobacco-free life.

Each year more than 50 percent of the employee group participates in wellness activities and events.

In 2012, the Healthy Eating and Staying Active Guidelines were implemented, helping both employees and work groups to make good choices in nutrition and physical activity.

Wellness is becoming an essential component of employee training, reward, and recognition.

Employee health is a recognized important factor in the successful performance of the organization!



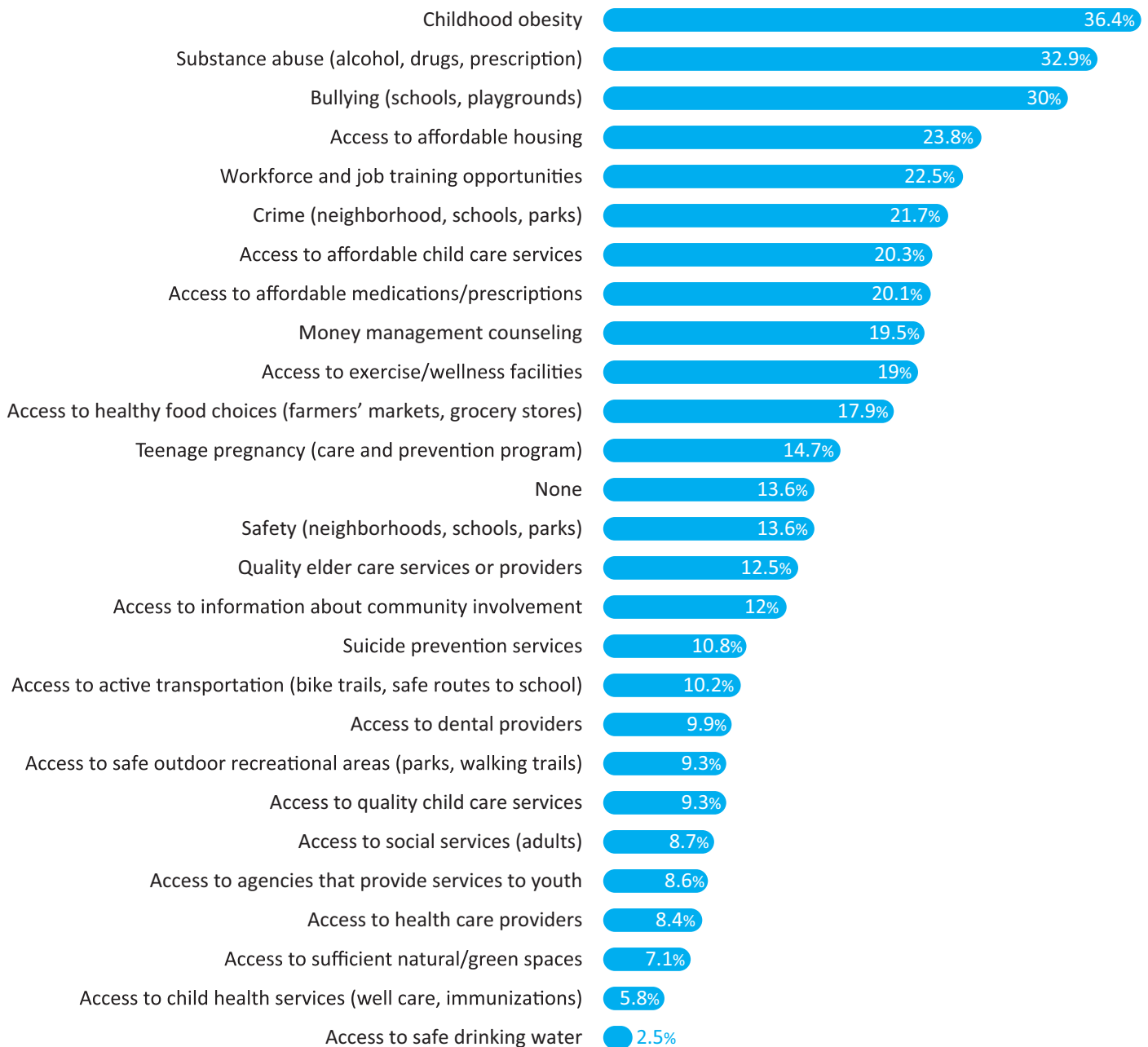
## CHANGE Tool Assets and Needs

As you review results across the sectors, our leadership performance as defined through the CHANGE tool assessment reflects wide variation. While there are variations of size, complexity, and resource availability in each of the sectors, there are common themes.

### Leadership Assets identified are:

- Most all sector participants provide health insurance for their employees; however, very few reimburse employees for health or wellness activities.
- Larger employers generally have a health promotion budget targeted at employees' general health and wellness. This extends to incentives for participating in health screenings and health risk assessments.

### Significant Community Problems Identified by Live Well Survey Respondents



- City leadership allocates funding for public shared use paths, public parks and greenways, pedestrian enhancements, and bicycle enhancements.
- There is a safety management program to ensure safe public transportation.
- Most larger sector participants have a health promotion budget, someone responsible for coordinating wellness promotions and the opportunity to gather feedback from employees and/or their constituents.
- Health care sector is focused on educating patients about the importance of healthy lifestyles and the value of good nutrition, adequate physical activity, and eliminating tobacco usage.
- Health care sector has instituted an electronic medical record system and patient registry to provide feedback on a patient's condition and compliance with the prescribed treatment regimen.

Common themes identified through the CHANGE tool assessment are also evident when reviewing the needs across all sectors.

#### **Leadership Needs identified are:**

- Few sectors represented participate in community coalitions and partnerships (e.g., food policy council, tobacco-free partnership, neighborhood safety coalition) to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure).
- Few sectors represented participate in the public policy process to highlight the need for community changes to address chronic disease and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure).
- Offer annual cultural competence training for all health workers for optimal care of all patients regardless of race/ethnicity, culture, or background.

### Local Story

#### **American Heart Association—Fit-Friendly Work Sites Recognition Program**

Adult Americans spend a majority of their waking hours at work, and many are in sedentary careers. With obesity costing American businesses \$12.7 billion per year in medical expenses and \$225.8 billion in health-related productivity losses, any program that increases employee wellness will impact the bottom line.

The American Heart Association's Fit-Friendly Work Sites Recognition program recognizes employers who champion the health of their employees by creating a wellness program within the workplace. To qualify, employers must fulfill criteria such as offering employees physical activity support, increasing healthy eating options at work, and promoting a wellness culture.

Locally, several companies have received Fit-Friendly Work Site designations, including DAKOTACARE, Sioux Steel, the Avera Heart Hospital, LodgeNet, and Wellmark. For more information on the Fit-Friendly Work site program, contact Chrissy Meyer at [Chrissy.Meyer@heart.org](mailto:Chrissy.Meyer@heart.org).

- Adopt organizational or performance objectives pertaining to employee health and well-being.
- Provide office-based incentives (e.g., discounted insurance premiums, gift certificates) to employees participating in health risk assessments, initiatives, or support groups that promote chronic disease prevention measures (e.g., quit smoking, log miles walked, blood pressure or cholesterol screening).
- Enhance access to childhood overweight prevention and treatment services to reduce health disparities.

## Live Well Survey

Live Well Survey respondents were also asked to provide their perceptions of significant community problems. Change leadership is required to affect the problem areas Live Well Survey respondents identified. Areas recognized as significant problems in the community include: access to affordable housing (23.8 percent), workforce and job training opportunities (22.5 percent), and crime (neighborhood, schools, parks) (21.7 percent).

Today, chronic disease accounts for 7 in 10 deaths and affects the quality of life of 90 million Americans. The increasing burden of chronic disease and unhealthy lifestyles requires immediate and sustained action from all community members, which requires leadership.<sup>2</sup>

More than ever, community leaders understand that improving the health and well-being of individuals and families means changing health-related behaviors, which means addressing factors that influence those behaviors. In light of

## Live Well Means

- ✓ Provide employees with work site wellness activities.
- ✓ Allow employees to get to their own, or their kids', doctor's appointments.
- ✓ Participate in community coalitions (tobacco cessation, food policy council, blood pressure awareness) to address chronic diseases and associated risk factors.
- ✓ Develop a mission that includes commitment for employee health and well-being in your workplace.
- ✓ Promote mixed land use.
- ✓ Provide employees with a health insurance plan.
- ✓ Provide access to opportunities for professional development or continued education to staff/employers.

## Local Story

### Sanford Fit Program

Sanford Health takes children's health and well-being very seriously, and the Sanford fit program works to make it seriously fun.

Since starting in 2010, the fit initiative promotes and activates lifelong healthy habits and behaviors for children and families. Like many programs, it informs and educates kids and families on the importance of eating right and moving more, but from there the similarities end.

What makes it truly unique is fit also emphasizes how emotions and attitudes (MOOD) and sleep and energy levels (RECHARGE) have a direct influence on nutritional choices (FOOD) and activity levels (MOVE).

Then, Fit bookends education to Captivate—Educate—Activate kids to make good choices by getting their attention, getting in a nugget of information, and triggering a moment of action using fun and fresh approaches on the web (<http://fit.SanfordHealth.org>) and mobile devices and through child care, schools, and other channels.

changing funding opportunities and increased competition for resources, communities need to ensure they maintain the capacity to work in partnership with Live Well Sioux Falls coalition members to identify and address public health challenges, and that their resulting health initiatives can have sustainable impact.<sup>3</sup>

Sustainability is not just about funding. From the outset, sustainability requires an approach that emphasizes the development of a community coalition to engage partners, and align policies and focus areas. Live Well Sioux Falls has brought together a diverse group of committed community

leaders to form the Live Well Sioux Falls Coalition. They have completed the assessment process and collaboratively defined policy, systems, and environmental strategic initiatives that are to be implemented over a period of years.

Through committed leadership and broad partner involvement, Live Well Sioux Falls will grow our community focus on health promotion, be able to catalyze action across society, and implement the strategic directions and priorities required for Sioux Falls to become the healthiest community in the region.

### Summary

The CHANGE tool indicated wide performance variation across all sectors for both policy

and environmental needs. Two areas that are constant across all sectors and that are in need of improvement include the level of leadership participation in community coalitions and partnerships to address each of the health topics plus the level of leadership participation in the public policy process that will highlight the need for community changes to address each of the health topics. While in some organizations participation in both of these areas may be present, when expanded to address broader systemic change, the level of participation falls off. Strong leadership in these areas and others mentioned throughout the CHANGE tool are fundamental to achieving identified strategies that over time will result in an overall improved health status.



1. CDC's Healthy Communities Program Centers for Disease Control and Prevention National Center for Chronic Disease Prevention and Health Promotion Division of Adult and Community Health, 4770 Buford Highway, NE Mail Stop K-93 Atlanta, GA 30341-3717, [www.cdc.gov/healthycommunitiesprogram](http://www.cdc.gov/healthycommunitiesprogram).
2. [www.kaiseredu.org/en/Topics/Costs-and-Spending.aspx](http://www.kaiseredu.org/en/Topics/Costs-and-Spending.aspx).
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# Opportunity

## Section 4



## Healthy Community Design

*Goal: To further promote planning and design of the community to make healthy living easy and accessible.*

### Phase 1 (2013–2014)

Live Well Sioux Falls will make recommendations for imparting healthy community design concepts into the Events Center plans.



Nutrition



Tobacco



Physical Activity



Leadership



Community At Large

## Tobacco-Free Living

*Goal: To prevent and reduce tobacco use.*

### Phase 1 (2013–2014)

Live Well Sioux Falls, in partnership with Sioux Falls Parks and Recreation, will support and promote the implementation of a tobacco-free youth recreation policy for City of Sioux Falls' playgrounds and facilities where youth activities take place.

### Phase 2 (2014–2015)

Live Well Sioux Falls will provide advocacy and implementation assistance for outdoor public spaces.



Tobacco



Leadership



Community At Large



Health Care



Community Institutions/  
Organizations

## Healthy Community Design

*Goal: To further promote planning and design of the community to make healthy living easy and accessible.*

### Phase 1 (2013–2014)

Live Well Sioux Falls will coordinate a Healthy Community Design summit intended for City, county, school, community, and development leaders to evaluate current environmental and policy factors influencing the health habits of residents and facilitate recommendations that improve health and well-being through community design.

### Phase 2 (2014–2015)

Live Well Sioux Falls will implement the multi-department Live Well Sioux Falls: Commute Active! grant-funded project to increase the number of Sioux Falls residents who are physically active both for recreation and for active transportation.

### Phase 3 (2015–2016)

Live Well Sioux Falls will develop a minimum of one public health goal to be included in the City of Sioux Falls' comprehensive planning that guides the future of our community.



Physical Activity



Leadership



Community At Large



Schools



Community Institutions/  
Organizations

## High Impact Quality Clinical Preventive Services

*Goal: Each Sioux Falls resident will seek out or be provided a health risk assessment.*

### Phase 1 (2013–2014)

Live Well Sioux Falls will develop LiveWellSiouxFalls.org, a community resource guide for healthy living.

### Phase 2 (2014–2015)

Live Well Sioux Falls will provide community level education on the benefits of a health risk assessment and engaging health care professionals in all disciplines regarding patient counseling and promotion on healthy choices.

### Phase 3 (2015–2016)

Live Well Sioux Falls will coordinate the development and adoption of a universal health risk assessment to be delivered in the primary care setting to all users of the (universal) health care system.



Nutrition Physical Activity Disease Tobacco Leadership



Community At Large Health Care

## High Impact Quality Clinical Preventive Services

*Goal: Increase control of high blood pressure and high cholesterol.*

### Phase 1 (2013–2014)

Live Well Sioux Falls will increase the number of residents who participate in The Big Squeeze events from 5,000 to 7,500.

### Phase 2 (2014–2015)

Live Well Sioux Falls will increase the number of residents who participate in The Big Squeeze events from 7,500 to 10,000.

### Phase 3 (2015–2016)

Live Well Sioux Falls will increase the number of residents who participate in The Big Squeeze events from 10,000 to 15,000.



Disease



Health Care



Schools



Community At Large



Work Sites



Community Institutions/Organizations



## Coalition Management and Advocacy

*Goal: Maintain a high level of engagement in the community coalition; encourage, activate, and support their work in public advocacy for healthy community policy and design.*

### Phase 1 (2013–2014)

Live Well Sioux Falls will gain commitment and coordinate the Live Well coalition to be highly active and effective in shaping the health of our community.

### Phase 2 (2014–2015)

Through LiveWellSiouxFalls.org, Live Well Sioux Falls will develop and maintain a resident and community organization toolkit to assist advocates in providing feedback to City officials and community leaders.

### Phase 3 (2015–2016)

Through LiveWellSiouxFalls.org, Live Well Sioux Falls will develop and maintain a resource center that links residents to healthy living services and tools offered by various health-related organizations throughout the community.



Nutrition



Physical Activity



Disease



Leadership



Community At Large



Community Institutions/  
Organizations



Health Care



Work Sites



Schools

## Leadership

*Goal: To develop a sustainability plan for Live Well Sioux Falls that ensures health in all decisions of community shaping and design.*

### Phase 1 (2013–2014)

Live Well Sioux Falls will form a City Director level steering committee for the purpose of approving multidepartment grant and pilot opportunities, determine the best avenue to include health in all decisions, and determine the long-term sustainability and budgeting plan for Live Well.

### Phase 2 (2014–2015)

The City of Sioux Falls Health Department will develop and maintain a division of public health prevention and promotion.



Leadership



Community At Large

## Nutrition

*Goal: Increase the number of Sioux Falls residents who have access to healthy and affordable food options*

### Phase 1A (2013–2014)

Live Well Sioux Falls will partner with South Dakota State University School of Nursing to implement a pilot project to reduce childhood obesity.

### Phase 1B (2013–2014)

Live Well Sioux Falls will convene an 18-month Food Policy Advisory Group to bring together stakeholders from diverse food-related sectors to examine how the food system is operating and make recommendations to public officials and community leaders in shaping public policy and improving coordination between existing programs.



## Work Site Wellness

*Goal: Increase the number of community businesses who maintain best in practice work site wellness programming.*

### Phase 1 (2013–2014)

Live Well Sioux Falls will partner with WorkWell South Dakota to deliver a work site wellness leadership conference and corporate wellness challenge to the business community.

### Phase 2 (2014–2015)

Through LiveWellSiouxFalls.org, Live Well Sioux Falls will develop and maintain resources, best practices, training, and networking for implementing work site wellness across the Sioux Falls business community.



Leadership



Work Sites

For more information on how to get involved with Live Well Sioux Falls, please contact the Sioux Falls Health Department at 367-8760.



Live Well  
Sioux Falls

**Physical Activity**

**Nutrition**

**Tobacco**

**Leadership**

**Chronic Disease**

**Demographics**

# Section 5

**District**

**After School**





## Live Well Assessment Team Members

**Adam Roach**  
CSF Community Development

**\*Alicia Collura**  
CSF Health

**Alicia Luther**  
CSF Parks & Recreation

**Amy Meyers**  
Augustana College

**Bob O'Connell**  
Chamber of Commerce

**Carrie McLeod**  
Sanford

**Christina Heckenlaible**  
Sioux Empire United Way

**Colleen Moran**  
CSF Attorney

**Dave Fleck**  
Sioux Falls Construction

**Deb Schuttloffel**  
Perkins Restaurants

**Diane Cogley**  
Southeastern Behavioral Health

**James Larsen**  
CSF Police

**Jan Clary**  
CSF Engineering

**Janelle Zerr**  
CSF Finance

**Janson Exner**  
CSF Health

**\*Jean Reed**  
IMPACT Consulting

**Jeff DesLauriers**  
CSF Engineering

**Jeff Helm**  
CSF Fire Rescue

**\*Jen Johnson**  
CSF Health

**Jenny McDonald**  
Sanford

**\*\*Jill Franken**  
CSF Health

**Judy Kendall**  
CSF Health

**Kandy Jamison**  
Howalt McDowell

**Katie Wick**  
CSF Health

**Lonna Jones**  
CSF Dental

**Mark Blackburn**  
Augustana College

**Mary Michaels**  
American Heart Association

**Molly Satter**  
Sioux Falls School District

**Monie Siemonsma**  
Citibank

**Dr. Nalo Johnson**  
Spectrum SD

**Nicole Soles**  
Regency Hotels

**Dr. Paul Amundson**  
DAKOTACARE

**\*Rana DeBoer**  
CSF Human Resources

**Russ Sorenson**  
CSF Planning and Building  
Services

**Sam Trebilcock**  
CSF Planning and Building  
Services

**Sandra Melstad**  
South Dakota State Department  
of Health

**Sara Weber**  
Chamber of Commerce

**Shannon Ausen**  
CSF Engineering

**Teresa Miller**  
Avera

**Trisha Dohn**  
DAKOTACARE

**Vicki Harkness**  
CSF Health

### Key

\*Live Well Sioux Falls  
Core Team

\*\*City of Sioux Falls Director

\*\*\*City of Sioux Falls  
Multimedia Support

City of Sioux Falls (CSF)

---

## Live Well Contributors

**Amy Olson**

Avera

**Bill Ladwig**

Lewis Drug

**\*\*Bill O'Toole**

CSF Human Resources

**Brad Willie**

Novartis

**\*\*\*Brenda Boyer**

CSF Central Services

**Brian Christiaanson**

CSF Fire Rescue

**Brittney Meyer**

South Dakota State University

**Chad Huwe**

CSF Engineering

**Charles Shafer**

CSF Health

**Cheryl Pitzyl**

Avera

**Chris Anderson**

CSF GIS

**Chrissy Meyer**

American Heart Association

**\*\*Darrin Smith**

CSF Community Development

**Dave Huntimer**

CSF Police

**Dr. Dave Kapaska**

Avera

**\*\*Dave Pfeifle**

CSF Attorney

**Denise Hoffman-Kary**

Nichols Media

**Denise Kolba**

American Cancer Society

**\*\*Don Kearney**

CSF Parks and Recreation

**Donna Keeler**

Urban Indian Health

**Doreen Miller**

Sanford

**\*\*Doug Barthel**

CSF Police

**Erik Gaikowskii**

American Cancer Society

**Evan Nolte**

Chamber of Commerce

**Fran Rice**Sioux Empire Tobacco-Free  
Coalition**Galynn Huber**

CSF Street

**Gina Rowe**

SDSU Extension

**Heather Stephenson**

CSF Library

**Heath Hoftiezer**

CSF Engineering

**Jeff Rink**

Hy-Vee

**Janet Kittens-Lalley**

HelpLine

**Jay Powell**

Sioux Empire United Way

**Jennifer Stalley**

American Cancer Society

**Dr. Jerry Walton**

Retired—Sanford

**Jill Biltoft**

CSF Parks &amp; Recreation

**\*\*James Sideras**

CSF Fire Rescue

**Jodi Fick**

CSF Library

**Karla Lubben**

Sanford Parish Nurse

**Kaylee Amundson**

Lewis Drug

**Kelby Mieras**

CSF Parks &amp; Recreation

**Kendra Siemonsma**

CSF Project Manager

**Kira Kimball**

Sanford

**Kris Graham**

Southeastern Behavioral Health

**Linda Ahrendt**South Dakota Department of  
Health**Linda Redder**

American Lung Association

**Lyn Schiefelbein**

Nichols Media

**Maggie Elliot**

CSF GIS Mapping

**Margarett Hegge**

South Dakota State University

**Marilee Johnson-Geary**

Urban Indian Health

**\*\*Mark Cotter**

CSF Public Works

**Mary Hitzemann**

Facelt TOGETHER Sioux Falls

Live Well Contributors (continued)

**\*\*Mary Johns**  
CSF Library

**Mary Wolf**  
Avera

**Mathew Christensen**  
South Dakota Department of Health

**Matt McGarvey**  
Wellmark

**Megan Myers**  
American Cancer Society

**Michelle Erpenbach**  
CSF Council

**Michelle LaValle**  
Avera

**Mike Begeman**  
Sanford

**\*\*Mike Cooper**  
CSF Planning and Building Services

**Mike Huether**  
CSF Mayor

**Dr. Pam Homan**  
Sioux Falls School District

**Pat Robinson**  
Multi-Cultural Center

**Randall Beck**  
Argus Leader

**Randolph Troxell**  
Novartis

**Reggan LaBore**  
Urban Indian Health

**Richard Murphy**  
CSF Production Specialist

**Roberta Olson**  
South Dakota State University

**Sara Hicks**  
Lewis Drug

**Sara Jennings**  
AARP

**Stephanie Perry**  
Wellmark

**Steve VanAartsen**  
CSF GIS

**\*\*Sue Quanbeck Etten**  
CSF Central Services

**Teresa DeBoer**  
Raven Industries

**Teri Roost**  
Marketing and Media

**Tony Tiefenthaler**  
Sanford

**\*\*Tracy Turbak**  
CSF Finance

**\*\*\*Tyler Ahlers**  
CSF Central Services

**Key**

- \*Live Well Sioux Falls Core Team
- \*\*City of Sioux Falls Director
- \*\*\*City of Sioux Falls Multimedia Support
- City of Sioux Falls (CSF)

**The City of Sioux Falls Health Department especially thanks:**

- Live Well Core Team
- City of Sioux Falls Directors
- Multimedia Support
- South Dakota Department of Health

The following pages are CHANGE Tool health topic questions for each sector.



## Community At Large

### Physical Activity


 Asset	 Room for Growth	 Cannot Influence
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To what extent does the community:	Policy Response	Environment Response
1. Require sidewalks to be built for all developments (e.g., housing, schools, commercial)?		
2. Adopt a land use plan?		
3. Require bike facilities (e.g., bike boulevards, bike lanes, bike ways, multiuse paths) to be built for all developments (e.g., housing, schools, commercial)?		
4. Adopt a complete streets plan to support walking and biking infrastructure?		
5. Maintain a network of walking routes (e.g., institute a sidewalk program to fill gaps in the sidewalk)?		
6. Maintain a network of biking routes (e.g., institute a bike lane program to repave bike lanes when necessary)?		
7. Maintain a network of parks (e.g., establish a program to repair and upgrade existing parks and playgrounds)?		
8. Provide access to parks, shared-use paths and trails, or open spaces within reasonable walking distance of most homes?		
9. Institute mixed land use?		
10. Require sidewalks to comply with the Americans with Disabilities Act (ADA) (i.e., all routes accessible for people with disabilities)?		
11. Provide access to public recreation facilities (e.g., parks, play areas, community and wellness centers) for people of all abilities?		
12. Enhance access to public transportation (e.g., bus stops, light rail stops, van pool services, subway stations) within reasonable walking distance?		
13. Provide street traffic calming measures (e.g., road narrowing, central islands, roundabouts, speed bumps) to make areas (e.g., neighborhoods, major intersections) where people are or could be physically active (e.g., walk, bike) safer?		
14. Adopt strategies (e.g., neighborhood crime watch, lights) to enhance personal safety in areas (e.g., playgrounds, parks, bike lanes, walking paths, neighborhoods) where people are or could be physically active (e.g., walk, bike)?		

## Community At Large























### Nutrition

To what extent does the community:

	Policy Response	Environment Response
1. Adopt strategies to encourage food retailers (e.g., grocery, corner, or convenience stores; bodegas) to provide healthy food and beverage options (e.g., fresh produce) in underserved areas?		
2. Encourage community gardens?		
3. Enhance access to public transportation (e.g., bus stops, light rail stops, van pool services, subway stations) to supermarkets and large grocery stores?		
4. Provide access to farmers' markets?		
5. Accept Women, Infants and Children (WIC) Farmers' Market Nutrition Program vouchers, or Food Stamp Benefits at local farmers' markets?		
6. Connect locally grown foods to local restaurants and food venues?		
7. Promote (e.g., signage, product placement, pricing strategies) the purchase of fruits and vegetables at local restaurants and food venues?		
8. Institute healthy food and beverage options at local restaurants and food venues?		
9. Institute nutritional labeling (e.g., "low fat," "light," "heart healthy," "no trans fat") at local restaurants and food venues?		
10. Provide smaller portion sizes at local restaurants and food venues?		
11. Ban local restaurants and retail food establishments from cooking with trans fats?		
12. Adopt strategies to recruit supermarkets and large grocery stores in underserved areas (e.g., provide financial incentives, lower operating costs, provide job training services)?		
13. Provide comfortable, private spaces for women to nurse or pump in public places (e.g., government buildings, restaurants, retail establishments) to support and encourage residents' ability to breast-feed?		
14. Protect a woman's right to breast-feed in public places?		



















## Community At large Tobacco

To what extent does the community:

	Policy Response	Environment Response
1. Institute a smoke-free policy 24/7 for indoor public places?		
2. Institute a tobacco-free policy 24/7 for indoor public places?		
3. Institute a smoke-free policy 24/7 for outdoor public places?		
4. Institute a tobacco-free policy 24/7 for outdoor public places?		
5. Ban tobacco advertisement (e.g., restrict point-of-purchase advertising or product placement)?		
6. Ban tobacco promotions, promotional offers, and prizes?		
7. Regulate the number, location, and density of tobacco retail outlets?		
8. Restrict the placement of tobacco vending machines (including self-service displays)?		
9. Enforce the ban of selling single cigarettes?		
10. Increase the price of tobacco products and generate revenue with a portion of the revenue earmarked for tobacco control efforts (e.g., taxes, mitigation fees)?		
11. Provide access to a referral system for tobacco cessation resources and services, such as a quitline (e.g., 1-800-QUIT-NOW)?		























## Community At large Chronic Disease Management

To what extent does the community:

	Policy Response	Environment Response
1. Enhance access to chronic disease self-management programs (e.g., Weight Watchers for overweight/obesity)?		
2. Adopt strategies to educate its residents on the importance of obesity prevention?		
3. Adopt strategies to educate its residents on the importance of controlling high blood pressure?		
4. Adopt strategies to educate its residents on the importance of controlling cholesterol?		
5. Adopt strategies to educate its residents on the importance of controlling blood sugar or insulin levels?		
6. Adopt strategies to educate its residents on heart attack and stroke symptoms and when to call 9-1-1?		
7. Adopt strategies to educate its residents on the importance of preventive care?		
8. Provide emergency medical services (e.g., 9-1-1, transport system)?		
9. Adopt strategies to address chronic disease health disparities?		

## Community At large Leadership

To what extent does the community:

	Policy Response	Environment Response
1. Participate in community coalitions and partnerships (e.g., food policy council, tobacco-free partnership, neighborhood safety coalition) to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure)?		
2. Participate in the public policy process to highlight the need for community changes to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure)?		
3. Finance public shared-use paths or trails (by passing bonds, passing millages, levying taxes, or getting grants)?		
4. Finance public recreation facilities (by passing bonds, passing millages, levying taxes, or getting grants)?		
5. Finance public parks or greenways (by passing bonds, passing millages, levying taxes, or getting grants)?		
6. Finance public sports facilities (by passing bonds, passing millages, levying taxes, or getting grants)?		
7. Finance pedestrian enhancements (e.g., sidewalks, street crossing enhancements)?		
8. Finance bicycle enhancements (e.g., bike lanes, bike parking, road diets)?		
9. Address the community's operating budget to make walking, bicycling, or other physical activities a priority?		
10. Promote mixed land use through regulation or other incentives?		
11. Institute a management program to improve safety within the transportation system?		



# Community Institutions and Organizations

## Physical Activity

 Asset	 Room for Growth	 Cannot Influence
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To what extent does the community:	Policy Response	Environment Response
1. Promote stairwell use (e.g., make stairs appealing, post motivational signs near stairs to encourage physical activity)?		
2. Provide a safe area outside (e.g., through lighting, signage, crime watch) to walk or be physically active?		
3. Designate a walking path on or near building property?		
4. Encourage non-motorized commutes (e.g., active transportation such as walk or bike) to the facility?		
5. Enhance access to public transportation (e.g., bus stops, light rail stops, van pool services, subway stations) within reasonable walking distance?		
6. Provide access to on-site fitness center, gymnasium, or physical activity classes?		
7. Provide a changing room or locker room with showers?		
8. Provide bicycle parking (e.g., bike rack, shelter) for patrons?		
9. Provide access to a broad range of competitive and noncompetitive physical activities that help to develop the skills needed to participate in lifetime physical activities?		
10. Provide opportunity for unstructured play or leisure-time physical activity?		
11. Prohibit using physical activity as a punishment?		
12. Restrict screen time to less than 2 hours per day for children over 2 years of age?		
13. Provide direct support (e.g., money, land, pavilion, recreational facilities, sponsorship, advertising) for supporting community-wide physical activity opportunities (e.g., sports teams, walking clubs)?		

## Community Institutions and Organizations

### Nutrition

















To what extent does the community:

	Policy Response	Environment Response
1. Institute healthy food and beverage options in vending machines?		
2. Institute healthy food and beverage options at institution-sponsored meetings and events?		
3. Institute healthy food and beverage options in on-site cafeteria and food venues?		
4. Institute healthy food purchasing (e.g., to reduce the caloric, sodium, and fat content of foods offered) for cafeteria and on-site food venues?		
5. Institute healthy food preparation practices (e.g., steaming, low fat, low salt, limiting frying) in on-site cafeteria and food venues?		
6. Institute pricing strategies that encourage the purchase of healthy food and beverage options?		
7. Ban marketing (e.g., counter advertisements, posters, other print materials) of less than healthy foods and beverages on-site?		
8. Provide smaller portion sizes in on-site cafeteria and food venues?		
9. Institute nutritional labeling (e.g., "low fat," "light," "heart healthy," "no trans fat") at on-site cafeteria and food venues?		
10. Provide safe, unflavored, cool drinking water at no cost to patrons?		
11. Prohibit using food as a reward or punishment?		
12. Provide direct support (e.g., money, land, pavilion, sponsorship, advertising) for supporting community-wide nutrition opportunities (e.g., farmers' markets, community gardens)?		
13. Provide a comfortable, private space for women to nurse or pump to support and encourage patrons' ability to breast-feed?		

## Community Institutions and Organizations

















### Tobacco

To what extent does the community:

	Policy Response	Environment Response
1. Institute a smoke-free policy 24/7 for indoor public places?		
2. Institute a tobacco-free policy 24/7 for indoor public places?		
3. Institute a smoke-free policy 24/7 for outdoor public places?		
4. Institute a tobacco-free policy 24/7 for outdoor public places?		
5. Ban tobacco vending machine sales (including self-service displays)?		
6. Ban tobacco promotions, promotional offers, and prizes?		
7. Ban tobacco advertisement (e.g., restrict point-of-purchase advertising, product placement)?		
8. Implement a referral system to help patrons to access tobacco cessation resources and services, such as a quitline (e.g., 1-800-QUIT-NOW)?		









## Community Institutions and Organizations Chronic Disease Management

To what extent does the community:

	Policy Response	Environment Response
1. Provide access to chronic disease self-management programs (e.g., Weight Watchers for overweight/obesity)?		
2. Provide access to an on-site nurse?		
3. Provide an on-site medical clinic to monitor and address chronic diseases and related risk factors (e.g., high blood pressure, high cholesterol, elevated blood sugar levels)?		
4. Provide routine screening, follow-up counseling and education to patrons to help address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, hypertension, high cholesterol, elevated blood sugar levels, tobacco use and exposure)?		
5. Adopt curricula or training to raise awareness of the signs and symptoms of heart attacks and strokes?		
6. Adopt curricula or training to raise awareness of the importance of calling 9-1-1 immediately when someone is having a heart attack or stroke?		
7. Promote chronic disease prevention to patrons (e.g., post signs reminding patrons to get blood pressure checked, quit smoking, avoid secondhand smoke)?		
8. Have an emergency response plan (e.g., appropriate equipment such as Automatic External Defibrillator or instructions for action) in place?		

## Community Institutions and Organizations Leadership

To what extent does the community:

	Policy Response	Environment Response
1. Provide incentives to patrons participating in chronic disease prevention measures (e.g., quit smoking, log miles walked, blood pressure or cholesterol screening)?		
2. Participate in the public policy process to highlight the need for community changes to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure)?		
3. Have a wellness coordinator?		
4. Have a wellness committee?		
5. Have a health promotion budget?		
6. Have a mission statement (or a written policy statement) that includes the support of or commitment to patron health and well-being?		
7. Implement a needs assessment when planning a health promotion program?		
8. Evaluate health promotion programs?		
9. Provide opportunities for patron feedback (e.g., interest, satisfaction, adherence) about health promotion programs?		
10. Participate in community coalitions and partnerships (e.g., food policy council, tobacco-free partnership, neighborhood safety coalition) to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure)?		



Health Care  
Physical Activity

 Asset	 Room for Growth	 Cannot Influence
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To what extent does the community:

Policy Response

Environment Response

1. Promote stairwell use (e.g., make stairs appealing, post motivational signs near stairs to encourage physical activity) to patients, visitors, and staff?



2. Assess patients' physical activity as part of a written checklist or screening used in all routine office visits?



3. Provide regular counseling about the health value of physical activity during all routine office visits?



4. Implement a referral system to help patients access community-based resources or services for physical activity?



## Health Care

### Nutrition





To what extent does the community:

	Policy Response	Environment Response
1. Implement breast-feeding initiative for future or current moms?		
2. Assess patients' nutrition as part of a written checklist or screening used in all routine office visits?		
3. Provide regular counseling about the health value of good nutrition during all routine office visits?		
4. Provide free or low cost weight management or nutrition programs?		
5. Implement a referral system to help patients access community-based resources or services for nutrition?		
6. Institute healthy food and beverage options in vending machines?		
7. Institute healthy food and beverage options served to their patients?		
8. Institute healthy food and beverage options in the on-site cafeteria and food venues?		
9. Institute pricing strategies that encourage the purchase of healthy food and beverage options?		
10. Institute healthy food purchasing (e.g., to reduce the caloric, sodium, and fat content of foods offered) for cafeteria and on-site food venues?		
11. Institute healthy food preparation practices (e.g., steaming, low fat, low salt, limiting frying) in on-site cafeteria and food venues?		
12. Institute nutritional labeling (e.g., "low fat," "light," "heart healthy," "no trans fat") at the on-site cafeteria and food venues?		
13. Ban marketing (e.g., counter advertisements, posters, other print materials) of less than healthy foods and beverages on-site?		
14. Provide smaller portion sizes in on-site cafeteria and food venues?		

## Health Care

### Tobacco

To what extent does the community:

	Policy Response	Environment Response
1. Institute a smoke-free policy 24/7 for indoor public places?		
2. Institute a tobacco-free policy 24/7 for indoor public places?		
3. Institute a smoke-free policy 24/7 for outdoor public places?		
4. Institute a tobacco-free policy 24/7 for outdoor public places?		
5. Assess patients' tobacco use as part of written checklist or screening used in all routine office visits?		
6. Assess patients' exposure to tobacco smoke as part of written checklist or screening used in all routine office visits?		
7. Provide regular counseling about the harm of tobacco use and exposure during all routine office visits?		
8. Implement a referral system to help patients access tobacco cessation resources and services, such as a quitline (e.g., 1-800-QUIT-NOW)?		
9. Provide access to free or low-cost pharmacological quitting aids for their patients?		
10. Implement a provider-reminder system to assess, advise, track, and monitor tobacco use?		

## Health Care

### Chronic Disease

To what extent does the community:

	Policy Response	Environment Response
1. Implement a referral system to help patients access community-based resources or services for chronic disease management?		
2. Provide routine follow-up counseling and education to patients to help address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, hypertension, high cholesterol, elevated blood sugar levels, tobacco use and exposure)?		
3. Provide screening for chronic diseases in adults with risk factors?		
4. Measure weight and height, and calculate appropriate body mass index (BMI) for every patient at each visit?		
5. Adopt a plan or process to increase patient adherence to chronic disease (e.g., cardiovascular disease, diabetes) treatment?		
6. Institute a systematic approach to the processes of diabetes care?		
7. Institute the latest emergency heart disease and stroke treatment guidelines (e.g., Joint National Committee 7, American Heart Association)?		
8. Provide access to resources and training for using a stroke rating scale?		
9. Provide specialized stroke care units?		
10. Provide specialized heart disease units?		

## Health Care Leadership




To what extent does the community:

	Policy Response	Environment Response
1. Participate in community coalitions and partnerships (e.g., food policy council, tobacco-free partnership, neighborhood safety coalition) to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure)?		
2. Participate in the public policy process to highlight the need for community changes to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure)?		
3. Enhance access to childhood overweight prevention and treatment services to reduce health disparities?		
4. Promote high standards of modifiable risk factor (e.g., poor nutrition, physical inactivity, tobacco use and exposure) practice to health care and provider associations?		
5. Institute standardized treatment and prevention protocols that are consistent with national evidence-based guidelines to prevent heart disease, stroke, and related risk factors?		
6. Institute an electronic medical records system and patient data registries to provide immediate feedback on a patient's condition and compliance with the treatment regimen?		
7. Adopt the Chronic Care Model in hospitals?		
8. Provide patient services using provider care teams that cross specialties (e.g., physician/pharmacist teams)?		
9. Provide access to medical services outside of regular working hours (e.g., late evenings, weekends)?		
10. Promote collaboration between health care professionals (e.g., physicians and specialists) for managing chronic diseases (e.g., cardiovascular disease, diabetes)?		
11. Partner with community agencies to provide free or low-cost chronic disease health screenings, follow-up counseling, and education for those at risk?		
12. Institute annual cultural competence training for all health workers for optimal care of all patients (regardless of their race/ethnicity, culture, or background)?		



## School Physical Activity

To what extent does the community:

 Asset	 Room for Growth	 Cannot Influence
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Policy Response	Environment Response
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1. Ban using or withholding physical activity as a punishment?



2. Require that students are physically active during the majority of time in physical education class?



3. Provide access to a broad range of competitive and noncompetitive physical activities that help to develop the skills needed to participate in lifetime physical activities?



4. Implement a walk or bike to school initiative?























5. Ensure the availability of proper equipment and facilities (including playground equipment, physical activity equipment, and athletic or fitness facilities) that meet safety standards?



## School Nutrition



To what extent does the community:

	Policy Response	Environment Response
1. Ensure that students are provided only healthy food and beverage options beyond the school food services (e.g., all vending machines, school stores, and food brought for celebrations)?		
2. Institute school breakfast and lunch programs that meet the U.S. Department of Agriculture School Meal Nutrition Standards?		
3. Ensure that healthy food preparation practices (e.g., steaming, low fat, low salt, limited frying) are always used in the school cafeteria or on-site food services?		
4. Ban marketing (e.g., counter advertisements, posters, other print materials) of less than healthy foods and beverages on-site?		
5. Promote and market (e.g., through counter advertisements, posters or other print materials) only healthy food and beverage options?		
6. Provide adequate time to eat school meals (10 minutes for breakfast/20 minutes for lunch, from the time students are seated)?		
7. Ban using food as a reward or punishment for academic performance or behavior?		
8. Provide safe, unflavored, cool drinking water throughout the school day at no cost to students?		
9. Provide school garden (e.g., access to land, container gardens, raised beds) and related resources (e.g., staff volunteer time, financial incentives)?		
10. Ensure that multiple channels, including classroom, cafeteria and communications with parents, are used to promote healthy eating behaviors?		

## School Tobacco













To what extent does the community:

1. Implement a referral system to help students access tobacco cessation resources or services?

Policy Response	Environment Response
	

## School Chronic Disease

To what extent does the community:

	Policy Response	Environment Response
1. Provide chronic disease self-management education to individuals identified with chronic conditions or diseases (e.g., diabetes, asthma)?		
2. Meet the nutritional needs of students with special health care or dietary requirements (e.g., allergies, diabetes, physical disabilities)?		
3. Provide opportunities to raise awareness among students of the signs and symptoms of heart attack and stroke?		
4. Ensure students are aware of the importance of calling 9-1-1 for emergencies?		
5. Ensure cardiopulmonary resuscitation (CPR) training is made available to students?		
6. Engage families in the development of school plans (e.g., school diabetes management plans) to effectively manage students with chronic diseases or conditions?		

## School Leadership













To what extent does the community:

	Policy Response	Environment Response
1. Participate in community coalitions and partnerships (e.g., food policy council, tobacco-free partnership, neighborhood safety coalition) to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure)?		
2. Participate in the public policy process to highlight the need for community changes to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure)?		
3. Have a school building health group (e.g., school health committee) comprised of school personnel, parents, students, and community partners that help plan and implement the health activities at the school building?		
4. Have an individual who is responsible for leading school health activities within the school building?		
5. Have a health promotion budget?		
6. Have a written mission or position statement that includes the commitment to student health and well-being?		
7. Recruit teachers (e.g., physical education, health) with appropriate training, education, and background?		
8. Provide training and support to food service and other relevant staff to meet nutrition standards for preparing healthy meals?		
9. Provide access to opportunities for professional development or continued education to staff (e.g., physical education, health, school nurse, food service manager)?		
10. Provide training for all teachers and staff on school physical activity, nutrition, and tobacco prevention policies?		
11. Permit only health-promoting fund raising efforts such as non-food options or only healthy food and beverage options, physical activity-related options (e.g., fun-run), or community service options (e.g., car wash, directing parking at school events)?		



School  
After School

To what extent does the community:

	Policy Response	Environment Response
1. Ban using or withholding physical activity as a punishment?		
2. Ban using food as a reward or punishment for academic performance or behavior?		
3. Provide access to physical activity programs (e.g., intramural, extracurricular, interscholastic)?		
4. Ensure appropriate active time during after-school programs or events?		
5. Institute healthy food and beverage options during after school programs?		
6. Prohibit the sale of sugar-sweetened beverages outside of school hours?		

## School District





















To what extent does the community:

	Policy Response	Environment Response
1. Require 225 minutes per week of physical education for all middle school and high school students?		
2. Require 150 minutes per week of physical education for all elementary school students?		
3. Provide 20 minutes of recess daily for students in elementary school?		
4. Ensure that students are not provided waivers or exemptions from participation in physical education for other school and community activities, such as band, chorus, Reserve Officers' Training Corps (ROTC), sports participation, or community volunteering?		
5. Require that either fruits or vegetables or both are available wherever foods and beverages are offered?		
6. Eliminate the sale and distribution of less than healthy foods and beverages during the school day?		
7. Prohibit the sale of sugar-sweetened beverages (can exclude flavored, fat-free milk) during the school day?		
8. Institute a tobacco-free policy 24/7?		
9. Ban tobacco advertising on school property, at school events, and in written educational materials and publications?		
10. Ban tobacco promotions, promotional offers, and prizes on school property, at school events, and in written educational materials and publications?		

## School

### District (continued)

To what extent does the community:

	Policy Response	Environment Response
11. Ensure access to a full-time, qualified health care provider (e.g., registered school nurse) in every school?		
12. Establish a case management plan for students with identified chronic diseases or conditions (e.g., asthma, diabetes, epilepsy) in consultation with their families, medical providers, and school staff?		
13. Ensure immediate and reliable access to prescribed medications (e.g., inhaler, insulin, epinephrine pen) for chronic disease management throughout school day?		
14. Have a district health group (e.g., school health council) comprised of school personnel, parents, students, and community partners that help plan and implement district health activities?		
15. Have a designated school health coordinator who is responsible for overseeing school health activities across the district?		
16. Monitor schools' compliance with the implementation of the district school wellness policy enacted as a result of the Child Nutrition and WIC Reauthorization Act of 2004 (i.e., requires that all school districts that participate in the National School Lunch Program have local wellness policies)?		
17. Allow the use of school buildings and facilities by the public during nonschool hours (e.g., joint use agreement)?		
18. Adopt a physical education curriculum for all students in grades pre-K to grade 12, as part of a sequential physical education course of study, consistent with state or National Physical Education Standards?		
19. Adopt a nutrition education curriculum, designed to help students adopt healthy eating behaviors, for all students in grades pre-K to grade 12, as part of a sequential health education course of study, consistent with state or National Health Education Standards?		
20. Adopt a tobacco-use prevention curriculum for all students in grades pre-K to grade 12, as part of a sequential health education course of study, consistent with state or National Health Education Standards?		

## Work Site Physical Activity

 Asset	 Room for Growth	 Cannot Influence
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To what extent does the community:	Policy Response	Environment Response
1. Promote stairwell use (e.g., make stairs appealing, post motivational signs near stairs to encourage physical activity)?		
2. Provide flexible work arrangements or break times for employees to engage in physical activity?		
3. Encourage nonmotorized commutes (e.g., active transportation such as walk or bike) to work?		
4. Enhance access to public transportation (e.g., bus stops, light rail stops, van pool services, subway stations) within reasonable walking distance?		
5. Support clubs or groups (e.g., walking, biking, hiking) to encourage physical activity among employees?		
6. Provide a safe area outside (e.g., through lighting, signage, crime watch) to walk or be physically active?		
7. Designate a walking path on or near building property?		
8. Provide access to on-site fitness center, gymnasium, or physical activity classes?		
9. Provide a changing room or locker room with showers?		
10. Provide access to off-site workout facility or subsidized membership to local fitness facility?		
11. Provide bicycle parking (e.g., bike rack, shelter) for employees ?		
12. Implement activity breaks for meetings that are longer than one hour?		
13. Provide direct support (e.g., money, land, pavilion, recreational facilities, sponsorship, advertising) for supporting community-wide physical activity opportunities (e.g., sports teams, walking clubs)?		

## Work Site

### Nutrition

To what extent does the community:

	Policy Response	Environment Response
1. Institute healthy food and beverage options at company-sponsored meetings and events?		
2. Institute healthy food and beverage options in vending machines?		
3. Institute healthy food and beverage options in on-site cafeteria and food venues?		
4. Institute healthy food purchasing practices (e.g., to reduce the caloric, sodium, and fat content of foods offered) for on-site cafeteria and food venues?		
5. Institute healthy food preparation practices (e.g., steaming, low fat, low salt, limiting frying) in on-site cafeteria and food venues?		
6. Ban marketing of less than healthy foods and beverages on site, including through counter advertisements, posters, and other print materials?		
7. Provide smaller portion sizes in on-site cafeteria and food venues?		
8. Provide safe, unflavored, cool drinking water at no cost to employees?		
9. Institute nutritional labeling (e.g., "low fat," "light," "heart healthy," "no trans fat") at the work site's cafeteria and on-site food service?		
10. Institute pricing strategies that encourage the purchase of healthy food and beverage options?		
11. Provide refrigerator access for employees?		
12. Provide microwave access for employees?		
13. Provide a sink with water faucet access for employees?		
14. Provide direct support (e.g., money, land, a pavilion, sponsorship, donated advertising) for community-wide nutrition opportunities (e.g., farmers' markets, community gardens)?		
15. Support breast-feeding by having maternity care practices, including providing a comfortable, private space for employees to nurse or pump?		























## Work Site Tobacco

To what extent does the community:

	Policy Response	Environment Response
1. Institute a smoke-free policy 24/7 for indoor public places?		
2. Institute a tobacco-free policy 24/7 for indoor public places?		
3. Institute a smoke-free policy 24/7 for outdoor public places?		
4. Institute a tobacco-free policy 24/7 for outdoor public places?		
5. Ban tobacco vending machine sales (including self-service displays)?		
6. Provide insurance coverage for tobacco cessation services ?		
7. Provide insurance coverage for tobacco cessation products (e.g., pharmacological quitting aids, medicines)?		
8. Ban tobacco promotions, promotional offers, and prizes?		
9. Ban tobacco advertisements (e.g., restrict point-of-purchase advertising, or product placement)?		
10. Implement a referral system to help employees access tobacco cessation resources or services, such as a quitline (e.g., 1-800-QUIT-NOW)?		








## Work Site Chronic Disease

To what extent does the community:

	Policy Response	Environment Response
1. Provide routine screening, follow-up counseling and education to employees to help address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, hypertension, high cholesterol, elevated blood sugar levels, tobacco use and exposure)?		
2. Provide access to an on-site occupational health nurse?		
3. Provide an on-site medical clinic to monitor and address chronic diseases and related risk factors (e.g., high blood pressure, high cholesterol, elevated blood sugar levels)?		
4. Provide paid time off to attend health promotion programs or classes?		
5. Provide employee insurance coverage for preventive services and quality medical care?		
6. Provide access to a free or low-cost employee health risk appraisal or health screenings?		
7. Provide access to chronic disease self-management programs (e.g., Weight Watchers for overweight/obesity)?		
8. Adopt curricula or training to raise awareness of the signs and symptoms of heart attacks and strokes?		
9. Adopt curricula or training to raise awareness of the importance of calling 9-1-1 immediately when someone is having a heart attack or stroke?		
10. Promote chronic disease prevention (e.g., post signs reminding employees to get blood pressure checked, quit smoking, or avoid secondhand smoke) to employees?		
11. Adopt an emergency response plan (e.g., appropriate equipment such as Automatic External Defibrillator, instructions for employee action)?		

## Work Site Leadership

To what extent does the community:

	Policy Response	Environment Response
1. Reimburse employees for preventive health or wellness activities?		
2. Participate in the public policy process to highlight the need for community changes to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure)?		
3. Have a wellness coordinator?		
4. Have a wellness committee?		
5. Have a health promotion budget?		
6. Have a mission statement (or a written policy statement) that includes the support of or commitment to employee health and well-being?		
7. Adopt organizational or performance objectives pertaining to employee health and well-being?		
8. Provide employees with a health insurance plan?		
9. Provide office-based incentives (e.g., discounted insurance premium, gift certificates) to employees participating in health risk assessments, initiatives, or support groups that promote chronic disease prevention measures (e.g., quit smoking, log miles walked, blood pressure or cholesterol screening)?		
10. Implement a needs assessment when planning a health promotion program?		
11. Evaluate company-sponsored health promotion programs?		
12. Provide opportunities for employee feedback (e.g., employee interest, satisfaction, adherence) about health promotion programs?		
13. Participate in community coalitions and partnerships (e.g., food policy council, tobacco-free partnership, neighborhood safety coalition) to address chronic diseases and related risk factors (e.g., poor nutrition, physical inactivity, tobacco use and exposure)?		

We hope this Community Health Needs Assessment is helpful to you.

Should you have questions, need additional information,  
or want to become involved with the Live Well Team, please contact:

Sioux Falls Health Department  
521 North Main  
Sioux Falls, SD 57104  
605-367-8760

Ask for the Community Health Needs Assessment Coordinator.

Thank you for your interest and support.