Summary Report

2018 Community Health Needs Assessment Report

SDSC Service Area

Butte, Custer, Fall River, Lawrence, Meade,

Oglala Lakota & Pennington Counties, South Dakota

Prepared for:

Same Day Surgery Center

By:

Professional Research Consultants, Inc.
11326 P Street Omaha, NE 68137-2316
www.PRCCustomResearch.com

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Professional Research Consultants, Inc.

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Introduction

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About This Assessment

This Community Health Needs Assessment, a follow-up to similar studies conducted in 2012 and 2015, is a systematic, data-driven approach to determining the health status, behaviors and needs of residents in the service area of Same Day Surgery Center. Subsequently, this information may be used to inform decisions and guide efforts to improve community health and wellness.

A Community Health Needs Assessment provides information so that communities may identify issues of greatest concern and decide to commit resources to those areas, thereby making the greatest possible impact on community health status.

This assessment was conducted on behalf of Same Day Surgery Center by Professional Research Consultants, Inc. (PRC). PRC is a nationally-recognized healthcare consulting firm with extensive experience conducting Community Health Needs Assessments in hundreds of communities across the United States since 1994.

Methodology

This assessment incorporates data from both quantitative and qualitative sources. Quantitative data input includes primary research (the PRC Community Health Survey) and secondary research (vital statistics and other existing health-related data); these quantitative components allow for comparison to benchmark data at the state and national levels. Qualitative data input includes primary research gathered through an Online Key Informant Survey of various community stakeholders.

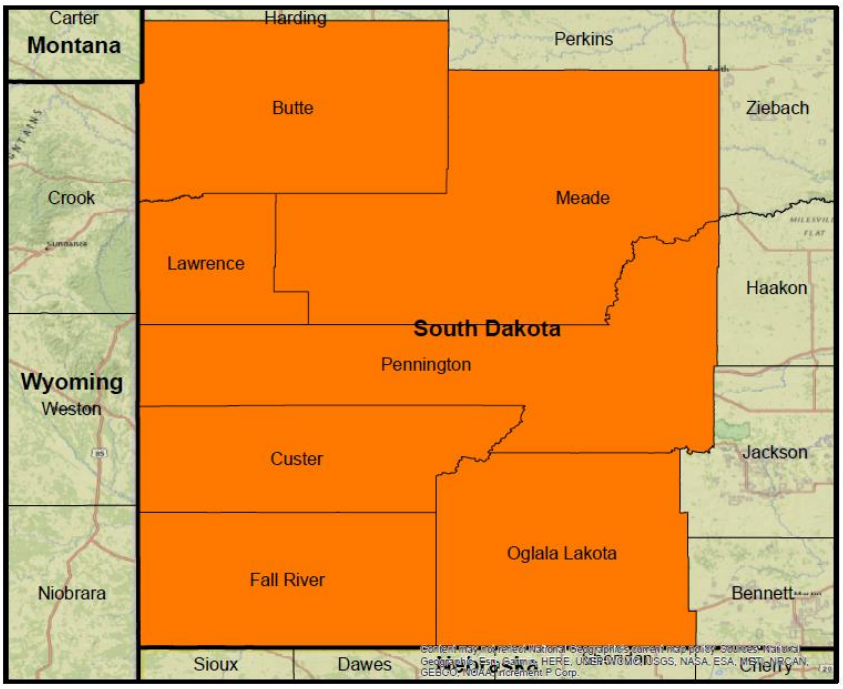
PRC Community Health Survey

Survey Instrument

The survey instrument used for this study is based largely on the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), as well as various other public health surveys and customized questions addressing gaps in indicator data relative to health promotion and disease prevention objectives and other recognized health issues. The final survey instrument was developed by Same Day Surgery Center and PRC.

Community Defined for This Assessment

The study area for the survey effort (referred to as the “SDSC Service Area” or “SDSC” in this report) is comprised of the following counties: Butte, Custer, Fall River, Lawrence, Meade, Oglala Lakota & Pennington Counties, South Dakota. This area represents Same Day Surgery Center’s primary service area and includes those counties from which 80% of the hospital’s admissions are derived; this community definition is illustrated in the following map.



Sample Approach & Design

A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the PRC Community Health Survey. Thus, to ensure the best representation of the population surveyed, a telephone interview methodology — one that incorporates both landline and cell phone interviews — was employed. The primary advantages of telephone interviewing are timeliness, efficiency, and random-selection capabilities.

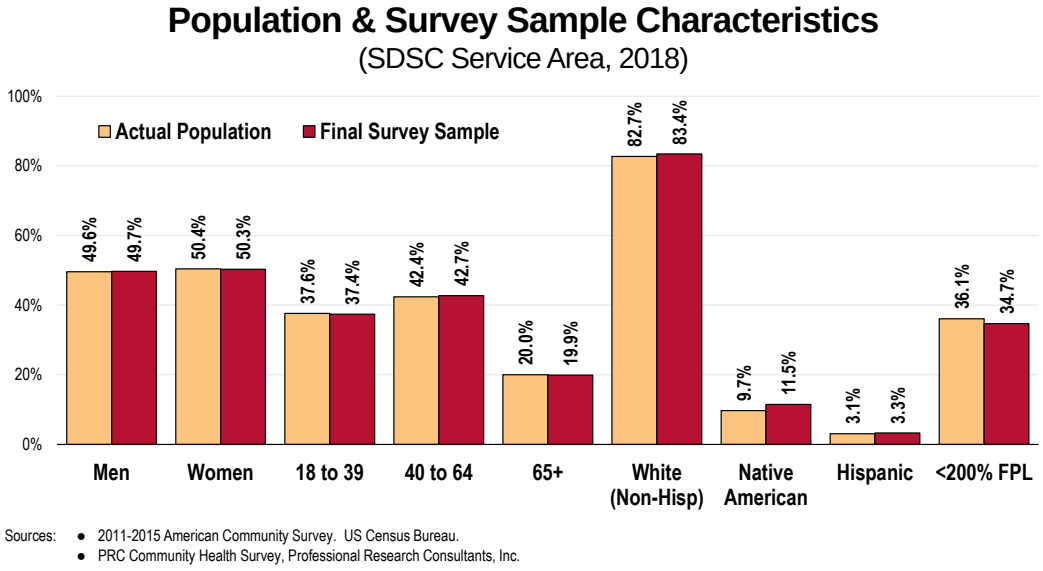
The sample design used for this effort consisted of a random sample of 575 individuals age 18 and older in the SDSC Service Area. Because this study is part of a larger effort involving multiple regions and hospital service areas, the surveys were distributed among various strata. Once the interviews were completed, these were weighted in proportion to the actual population distribution so as to appropriately represent the SDSC Service Area as a whole. All administration of the surveys, data collection, and data analysis was conducted by PRC.

For statistical purposes, the maximum rate of error associated with a sample size of 575 respondents is ±4.1% at the 95 percent confidence level.

Sample Characteristics

To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. While this random sampling of the population produces a highly representative sample, it is a common and preferred practice to “weight” the raw data to improve this representativeness even further. This is accomplished by adjusting the results of a random sample to match the geographic distribution and demographic characteristics of the population surveyed (poststratification), so as to eliminate any naturally occurring bias.

The following chart outlines the characteristics of the SDSC Service Area sample for key demographic variables, compared to actual population characteristics revealed in census data. [Note that the sample consisted solely of area residents age 18 and older; data on children were given by proxy by the person most responsible for that child's healthcare needs, and these children are not represented demographically in this chart.]



Further note that the poverty descriptions and segmentation used in this report are based on administrative poverty thresholds determined by the US Department of Health & Human Services. These guidelines define poverty status by household income level and number of persons in the household *(e.g., the 2018 guidelines place the poverty threshold for a family of four at $25,100 annual household income or lower)*. In sample segmentation: "**low income**" refers to community members living in a household with defined poverty status or living just above the poverty level and earning up to twice (<200% of) the poverty threshold; "**mid/high income**" refers to those households living on incomes which are twice or more (≥200% of) the federal poverty level.

The sample design and the quality control procedures used in the data collection ensure that the sample is representative. Thus, the findings may be generalized to the total population of community members in the defined area with a high degree of confidence.

Online Key Informant Survey

To solicit input from key informants, those individuals who have a broad interest in the health of the community, an Online Key Informant Survey also was implemented as part of this process. A list of recommended participants was provided by Regional Health; this list included names and contact information for key informants (physicians, public health representatives, other health professionals, social service providers, and a variety of other community leaders) throughout the 10-county region that includes Butte County, Crook County, Custer County, Fall River County, Haakon County, Jackson County, Lawrence County, Meade County, Oglala Lakota County, and Pennington County.

Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall. Key informants were contacted by email, introducing the purpose of the survey and providing a link to take the survey online; reminder emails were sent as needed to increase participation. In all, 134 community stakeholders took part in the Online Key Informant Survey, as outlined below:

Online Key Informant Survey Participation		
Key Informant Type	**Number Invited**	**Number Participating**
Physicians	22	9
Public Health Representatives	20	4
Other Health Providers	136	72
Social Services Providers	60	20
Community/Business Leaders	63	29

Final participation included representatives of the organizations outlined below.

- American Red Cross
- Behavior Management Systems
- Belle Fourche Area Community Center
- Bennett County Hospital and Nursing Home
- Black Hills OB/GYN
- Black Hills Pediatrics
- Black Hills Pow Wow Association
- Butte County Sheriff's Office
- Center of the Nation Business Association
- City of Philip
- City of Rapid City
- City of Wall
- Community Health Center of the Black Hills
- Custer Regional Market
- Custer Senior Center
- Feeding South Dakota
- Front Porch Coalition
- Good Shepherd Clinic Spearfish
- Grief Recovery Method
- Health and Human Services
- Hill City Regional Medical Clinic
- Home Plus Homecare and Hospice
- IHS Rapid City Service Unit/Sioux San

- Integrity Insurance
- Lifeways, Inc.
- Local Government
- Native Intelligence Congressional Budget Office
- NeighborWorks Dakota Home Resources
- Northern Hills Training Center
- Office of the Special Trustee Health Administration
- Patient Care Champion
- Pennington County Health and Human Services
- Philip Ambulance Service
- Philip Health Services, Inc.
- Rapid City Area Metropolitan Planning Organization
- Rapid City Fire Department
- Rapid City Regional Health
- Rapid City Regional Hospital Long-Term Care Outreach Program
- Regional Health Behavioral Health Center
- Regional Healthcare Center/ Custer
- Regional Health Lead/Deadwood Hospital
- Regional Health Network Facility
- Regional Health/Rapid City Hospital Family Medicine Residency Program
- Same Day Surgery Center
- Senior Companions of South Dakota
- South Dakota Department of Health
- South Dakota Parent Connection
- South Dakota Psychological Association
- South Dakota School for the Deaf
- Spearfish Regional Hospital
- Spearfish School District
- Sturgis Regional Hospital
- Sturgis Police Department
- Sturgis Regional Market Advisory Council
- Sturgis Regional Medical Clinic
- United Way of the Black Hills
- Volunteers of America
- Wall Health Service
- Westhills Village Retirement Community
- YMCA of Rapid City
- Youth and Family Services, Inc.

Through this process, input was gathered from several individuals whose organizations work with low-income, minority, or other medically underserved populations.

Minority/medically underserved populations represented:

> *Abused/neglected children, African-Americans, Asians, behavioral health, cancer patients, children, chronically ill, college students, diabetics, disabled, elderly, farmers/ranchers, Hispanics, HIV/AIDS, homeless, immigrants/refugees/seasonal workers, incarcerated, low income, Medicare/Medicaid, mentally ill, Native Americans, rural, single parents, substance abusers, Title 19, undocumented, unemployed/underemployed, uninsured/underinsured, veterans*

In the online survey, key informants were asked to rate the degree to which various health issues are a problem in their own community. Follow-up questions asked them to describe why they identify problem areas as such and how these might better be addressed. Results of their ratings, as well as their verbatim comments, are included throughout this report as they relate to the various other data presented.

NOTE: These findings represent qualitative rather than quantitative data. The Online Key Informant Survey was designed to gather input regarding participants' opinions and perceptions of the health needs of the residents in the area. Thus, these findings are not necessarily based on fact.

Public Health, Vital Statistics & Other Data

A variety of existing (secondary) data sources was consulted to complement the research quality of this Community Health Needs Assessment. Data for the SDSC Service Area were obtained from the following sources (specific citations are included with the graphs throughout this report):

- Center for Applied Research and Environmental Systems (CARES)
- Centers for Disease Control & Prevention, Office of Infectious Disease, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
- Centers for Disease Control & Prevention, Office of Public Health Science Services, Center for Surveillance, Epidemiology and Laboratory Services, Division of Health Informatics and Surveillance (DHIS)
- Centers for Disease Control & Prevention, Office of Public Health Science Services, National Center for Health Statistics
- Community Commons
- ESRI ArcGIS Map Gallery
- National Cancer Institute, State Cancer Profiles
- OpenStreetMap (OSM)
- US Census Bureau, American Community Survey
- US Census Bureau, County Business Patterns
- US Census Bureau, Decennial Census
- US Department of Agriculture, Economic Research Service
- US Department of Health & Human Services
- US Department of Health & Human Services, Health Resources and Services Administration (HRSA)
- US Department of Justice, Federal Bureau of Investigation
- US Department of Labor, Bureau of Labor Statistics

Benchmark Data

Trending

Similar surveys were administered in the SDSC Service Area in 2012 and 2015 by PRC on behalf of Same Day Surgery Center. Trending data, as revealed by comparison to prior survey results, are provided throughout this report whenever available. Historical data for secondary data indicators are also included for the purposes of trending.

State Risk Factor Data

Statewide risk factor data are provided where available as an additional benchmark against which to compare local survey findings; these data are reported in the most recent *BRFSS (Behavioral Risk Factor Surveillance System) Prevalence and Trend Data* published by the Centers for Disease Control and Prevention and the US Department of Health & Human Services. State-level vital statistics are also provided for comparison of secondary data indicators.

Nationwide Risk Factor Data

Nationwide risk factor data, which are also provided in comparison charts, are taken from the *2017 PRC National Health Survey*; the methodological approach for the national study is similar to that employed in this assessment, and these data may be generalized to the US population with a high degree of confidence. National-level vital statistics are also provided for comparison of secondary data indicators.

Healthy People 2020

Healthy People provides science-based, 10-year national objectives for improving the 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.

Healthy People 2020 is the product of an extensive stakeholder feedback process that is unparalleled in government and health. It integrates input from public health and prevention experts, a wide range of federal, state and local government officials, a consortium of more than 2,000 organizations, and perhaps most importantly, the public. More than 8,000 comments were considered in drafting a comprehensive set of Healthy People 2020 objectives.

Determining Significance

Differences noted in this report represent those determined to be significant. For survey-derived indicators (which are subject to sampling error), statistical significance is determined based on confidence intervals (at the 95 percent confidence level) using question-specific samples and response rates. For the purpose of this report, “significance,” of secondary data indicators (which do not carry sampling error but might be subject to reporting error) is determined by a 5% variation from the comparative measure.

Information Gaps

While this assessment is quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might in some ways limit the ability to assess all of the community’s health needs.

For example, certain population groups — such as the homeless, institutionalized persons, or those who only speak a language other than English or Spanish — are not represented in the survey data. Other population groups — for example, pregnant women, lesbian/gay/bisexual/transgender residents, undocumented residents, and members of certain racial/ethnic or immigrant groups — might not be identifiable or might not be represented in numbers sufficient for independent analyses.

In terms of content, this assessment was designed to provide a comprehensive and broad picture of the health of the overall community. However, there are certainly medical conditions that are not specifically addressed.

IRS Form 990, Schedule H Compliance

For non-profit hospitals, a Community Health Needs Assessment (CHNA) also serves to satisfy certain requirements of tax reporting, pursuant to provisions of the Patient Protection & Affordable Care Act of 2010. To understand which elements of this report relate to those requested as part of hospitals' reporting on IRS Form 990 Schedule H, the following table cross-references related sections.

IRS Form 990, Schedule H (2017)	See Report Page
Part V Section B Line 3a *A definition of the community served by the hospital facility*	5
Part V Section B Line 3b *Demographics of the community*	32
Part V Section B Line 3c *Existing health care facilities and resources within the community that are available to respond to the health needs of the community*	151
Part V Section B Line 3d *How data was obtained*	5
Part V Section B Line 3e *The significant health needs of the community*	14
Part V Section B Line 3f *Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups*	Addressed Throughout
Part V Section B Line 3g *The process for identifying and prioritizing community health needs and services to meet the community health needs*	15
Part V Section B Line 3h *The process for consulting with persons representing the community's interests*	7
Part V Section B Line 3i *The impact of any actions taken to address the significant health needs identified in the hospital facility's prior CHNA(s)*	158

Summary of Findings

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Significant Health Needs of the Community

The following "Areas of Opportunity" represent the significant health needs of the community, based on the information gathered through this Community Health Needs Assessment and the guidelines set forth in Healthy People 2020. From these data, opportunities for health improvement exist in the area with regard to the following health issues (see also the summary tables presented in the following section).

The Areas of Opportunity were determined after consideration of various criteria, including: standing in comparison with benchmark data (particularly national data); identified trends; the preponderance of significant findings within topic areas; the magnitude of the issue in terms of the number of persons affected; and the potential health impact of a given issue. These also take into account those issues of greatest concern to the community stakeholders (key informants) giving input to this process.

Areas of Opportunity Identified Through This Assessment	
Access to Health Services	• Routine Medical Care [Children] • Ratings of Local Healthcare
Cancer	• Cancer is a leading cause of death. • Skin Cancer Prevalence
Diabetes	• Diabetes ranked as a top concern in the Online Key Informant Survey.
Heart Disease & Stroke	• Cardiovascular disease is a leading cause of death. • Blood Pressure Screening • Blood Cholesterol Screening
Infant Health & Family Planning	• Teen Births
Injury & Violence	• Unintentional Injury Deaths ○ Including Motor Vehicle Crash Deaths • Firearm-Related Deaths • Children's Bicycle Helmet Usage
Mental Health	• "Fair/Poor" Mental Health • Symptoms of Chronic Depression • Psychoses is by far the leading diagnosis for inpatient hospital admissions; depressive neuroses is also among the top 5 leading diagnoses. • Suicide Deaths • Mental Health ranked as a top concern in the Online Key Informant Survey.
Nutrition, Physical Activity, & Weight	• Fruit/Vegetable Consumption • Low Food Access • Reliance on Food Banks/Free Meals • Obesity (Adults) • Medical Advice on Weight • Nutrition, Physical Activity, & Weight ranked as a top concern in the Online Key Informant Survey.

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Areas of Opportunity (continued)	
Potentially Disabling Conditions	• Caregiving
Sexually Transmitted Diseases	• Gonorrhea Incidence • Chlamydia Incidence
Substance Abuse	• Cirrhosis/Liver Disease Deaths • Illicit Drug Use • Substance Abuse ranked as a top concern in the Online Key Informant Survey.
Tobacco Use	• Cigarette Smoking Prevalence • Environmental Tobacco Smoke Exposure at Home

Prioritization of Health Needs

The Same Day Surgery Center Board of Directors reviewed the findings of the December 2018 Community Health Needs Assessment (CHNA). These had previously been presented to the Rapid City Regional Hospital's Patient and Family Advisory Council and other community groups including Live Well Black Hills, Community Services Connection, and Rapid City Community Conversations' Healers and Transformers. These groups reviewed the areas of opportunity identified in the CHNA and provided input on potential priority areas of focus. The Same Day Surgery Center Board of Directors will support two of the priority areas chosen by Regional Health's senior executive leadership based on organizational resources and expertise, as well as feedback from the community.

- Cancer
- Diabetes

Summary Data

Comparisons With Benchmark Data

The following tables provide an overview of indicators in the SDSC Service Area. These data are grouped to correspond with the Focus Areas presented in Healthy People 2020.

Reading the Data Summary Tables

In the following charts, SDSC Service Area results are shown in the larger, blue column. *Tip: Indicator labels beginning with a "%" symbol are taken from the PRC Community Health Survey; the remaining indicators are taken from secondary data sources.*

The columns to the right of the SDSC Service Area column provide trending comparisons (trending from the earliest data year available), as well as comparisons between local data and any available regional, state, and national findings, or Healthy People 2020 targets. Symbols indicate whether the SDSC Service Area compares favorably (☀), unfavorably (🌧), or comparably (⛅) to these external data.

Note that blank table cells signify that data are not available or are not reliable for that area and/or for that indicator.

Social Determinants	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Linguistically Isolated Population (Percent)	0.3	⛅ 0.3	☀ 1.4	☀ 4.5		
Population in Poverty (Percent)	12.7	⛅ 12.4	⛅ 14.0	☀ 15.1		
Population Below 200% FPL (Percent)	32.8	⛅ 32.4	⛅ 32.1	⛅ 33.6		
Children Below 200% FPL (Percent)	43.2	⛅ 42.6	⛅ 40.5	⛅ 43.3		
No High School Diploma (Age 25+, Percent)	7.0	⛅ 7.0	☀ 8.8	☀ 13.0		
Unemployment Rate (Age 16+, Percent)	3.7	⛅ 3.7	⛅ 3.6	⛅ 4.1		🌧 3.0
% Worry/Stress Over Rent/Mortgage in Past Year	26.9	⛅ 27.0		⛅ 30.8		
% Low Health Literacy	19.6	⛅ 20.2		⛅ 23.3		

Social Determinants (continued)	SDSC Service Area	SDSC Service Area vs. Benchmarks				TREND
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	
% Homeless at Some Point in the Past 2 Years	2.4	2.3				2.5
% Relied on a Food Bank/Free Meals in the Past Year	9.5	9.2				5.8
% Household Mental Illness ACE	12.7	12.3				
% Household Substance Abuse ACE	27.9	28.2				
% Incarcerated Household Member ACE	8.0	8.5				
% Parental Separation or Divorce ACE	30.6	30.7				
% Intimate Partner Violence ACE	15.6	16.0				
% Physical Abuse ACE	16.6	16.5				
% Emotional Abuse ACE	31.3	31.2				
% Sexual Abuse ACE	10.2	10.3				
% 4+ Adverse Childhood Experiences (High ACEs Score)	16.9	17.4				
			better	similar	worse	

Overall Health	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% "Fair/Poor" Overall Health	15.7	15.3	13.0	18.1		14.5
% Activity Limitations	22.2	22.4	20.8	25.0		22.7
% Caregiver to a Friend/Family Member	28.1	28.3		20.8		
			better	similar	worse	

Access to Health Services	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% [Age 18-64] Lack Health Insurance	11.8	11.6	10.3	13.7	0.0	14.5
% Difficulty Accessing Healthcare in Past Year (Composite)	38.8	39.4		43.2		40.1
% Difficulty Finding Physician in Past Year	8.8	8.8		13.4		8.6
% Difficulty Getting Appointment in Past Year	18.2	19.2		17.5		18.1
% Cost Prevented Physician Visit in Past Year	15.4	15.4	8.9	15.4		16.7
% Transportation Hindered Dr Visit in Past Year	3.9	3.9		8.3		9.5
% Inconvenient Hrs Prevented Dr Visit in Past Year	12.5	12.2		12.5		13.8
% Language/Culture Prevented Care in Past Year	0.1	0.1		1.2		
% Cost Prevented Getting Prescription in Past Year	10.5	11.1		14.9		11.1
% Skipped Prescription Doses to Save Costs	8.9	8.9		15.3		14.4

Access to Health Services (continued)	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% Difficulty Getting Child's Healthcare in Past Year	4.8	4.6		5.6		4.0
Primary Care Doctors per 100,000	82.5	81.0	85.3	87.8		76.1
% Have a Specific Source of Ongoing Care	77.4	77.3		74.1	95.0	75.4
% Have Had Routine Checkup in Past Year	68.3	68.5	68.6	68.3		59.8
% Child Has Had Checkup in Past Year	77.7	77.9		87.1		78.1
% Two or More ER Visits in Past Year	8.2	7.9		9.3		9.8
% Rate Local Healthcare "Fair/Poor"	20.8	20.6		16.2		16.9
% Outmigration for Care	26.7	26.8				31.1
			better	similar	worse	

Cancer	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Cancer (Age-Adjusted Death Rate)	153.2	153.0	158.0	158.5	161.4	173.8
Lung Cancer (Age-Adjusted Death Rate)	41.1	40.5	40.3	40.3	45.5	
Prostate Cancer (Age-Adjusted Death Rate)	17.9	18.3	19.8	19.0	21.8	
Female Breast Cancer (Age-Adjusted Death Rate)	14.2	14.3	19.0	20.3	20.7	

Cancer (continued)	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Colorectal Cancer (Age-Adjusted Death Rate)	15.7	15.6	16.2	14.1	14.5	
Female Breast Cancer Incidence Rate	122.4	120.3	130.7	123.5		
Prostate Cancer Incidence Rate	81.7	81.6	116.8	114.8		
Lung Cancer Incidence Rate	59.7	59.6	58.7	61.2		
Colorectal Cancer Incidence Rate	41.3	40.9	44.8	39.8		
% Cancer (Other Than Skin)	7.4	7.2	7.0	7.1		4.9
% Skin Cancer	9.6	9.5	6.3	8.5		6.3
% [Women 50-74] Mammogram in Past 2 Years	80.3	80.0	78.7	77.0	81.1	75.0
% [Women 21-65] Pap Smear in Past 3 Years	71.7	71.5	81.2	73.5	93.0	75.8
% [Age 50-75] Colorectal Cancer Screening	77.0	76.3	65.8	76.4	70.5	63.3
			better	similar	worse	

Dementias, Including Alzheimer's Disease	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Alzheimer's Disease (Age-Adjusted Death Rate)	26.8	26.3	36.0	28.4		30.0
			better	similar	worse	

Diabetes	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Diabetes (Age-Adjusted Death Rate)	21.2	20.8	23.8	21.1	20.5	20.4
% Diabetes/High Blood Sugar	9.9	9.8	7.9	13.3		11.7
% Borderline/Pre-Diabetes	6.6	6.7	1.5	9.5		7.2
% [Non-Diabetes] Blood Sugar Tested in Past 3 Years	46.9	47.4		50.0		52.1
			better	similar	worse	

Heart Disease & Stroke	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Diseases of the Heart (Age-Adjusted Death Rate)	151.2	150.4	153.0	167.0	156.9	159.3
Stroke (Age-Adjusted Death Rate)	29.6	29.1	35.9	37.1	34.8	35.1
% Heart Disease (Heart Attack, Angina, Coronary Disease)	7.0	6.9		8.0		7.9
% Stroke	3.1	3.1	2.2	4.7		3.8
% Blood Pressure Checked in Past 2 Years	94.0	94.2		90.4	92.6	96.9
% Told Have High Blood Pressure (Ever)	36.3	36.2	30.0	37.0	26.9	36.4
% [HBP] Taking Action to Control High Blood Pressure	91.7	91.2		93.8		84.0
% Cholesterol Checked in Past 5 Years	82.8	82.7	74.0	85.1	82.1	88.4
% Told Have High Cholesterol (Ever)	26.6	26.6		36.2	13.5	31.6

Heart Disease & Stroke (continued)	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% [HBC] Taking Action to Control High Blood Cholesterol	82.7	82.3		87.3		85.4
% 1+ Cardiovascular Risk Factor	86.5	86.9		87.2		85.1
			better	similar	worse	

Infant Health & Family Planning	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Low Birthweight Births (Percent)	7.1	7.1	6.5	8.2	7.8	7.3
Infant Death Rate	6.9	7.0	6.0	5.9	6.0	8.2
Teen Births per 1,000 (Age 15-19)	49.8	49.6	37.2	36.6		53.5
			better	similar	worse	

Injury & Violence	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Unintentional Injury (Age-Adjusted Death Rate)	57.8	57.2	50.7	43.7	36.4	50.5
Motor Vehicle Crashes (Age-Adjusted Death Rate)	19.9	19.9	16.2	11.1	12.4	
Firearm-Related Deaths (Age-Adjusted Death Rate)	15.3	15.4	11.9	12.0	9.3	
Homicide (Age-Adjusted Death Rate)	3.9	3.8	3.1	5.6	5.5	

Injury & Violence (continued)	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Violent Crime Rate	313.5	305.8	338.3	379.7		
% Victim of Violent Crime in Past 5 Years	1.7	1.6		3.7		3.0
% Victim of Domestic Violence (Ever)	13.7	13.5		14.2		11.1
% Child [Age 5-17] "Always" Wears Bicycle Helmet	26.9	26.4		48.8		38.8
% Child [Age 0-17] "Always" Uses Seat Belt/Car Seat	90.6	90.4		85.6		87.6
			better	similar	worse	

Kidney Disease	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Kidney Disease (Age-Adjusted Death Rate)	8.1	8.0	7.2	13.2		9.6
% Kidney Disease	2.9	2.8	2.4	3.8		1.8
			better	similar	worse	

Mental Health	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% "Fair/Poor" Mental Health	12.2	12.7		13.0		6.6
% Diagnosed Depression	16.8	17.0	15.7	21.6		15.0
% Symptoms of Chronic Depression (2+ Years)	31.7	32.0		31.4		21.2

Mental Health (continued)	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% Typical Day Is "Extremely/Very" Stressful	10.4	10.1		13.4		7.9
Suicide (Age-Adjusted Death Rate)	22.8	22.7	19.2	13.0	10.2	17.7
% Taking Rx/Receiving Mental Health Trtmt	13.2	13.1		13.9		
% Have Ever Sought Help for Mental Health	29.7	30.3		30.8		
% [Those With Diagnosed Depression] Seeking Help	93.5	93.8		87.1		70.3
% Unable to Get Mental Health Svcs in Past Yr	2.0	2.1		6.8		
			better	similar	worse	

Nutrition, Physical Activity & Weight	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% Food Insecure	18.2	17.8		27.9		
% Eat 5+ Servings of Fruit or Vegetables per Day	31.1	30.6		33.5		45.4
% "Very/Somewhat" Difficult to Buy Fresh Produce	20.9	21.3		22.1		25.3
% Medical Advice on Diet/Nutrition in Past Year	34.9	35.1				33.0
Population With Low Food Access (Percent)	31.0	30.8	34.3	22.4		
% No Leisure-Time Physical Activity	19.5	19.5	18.9	26.2	32.6	21.9

Nutrition, Physical Activity & Weight (continued)	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% Meeting Physical Activity Guidelines	19.8	19.4	19.2	22.8	20.1	
% Medical Advice on Exercise in Past Year	40.8	40.1				41.2
Recreation/Fitness Facilities per 100,000	14.8	14.2	13.9	11.0		11.6
% Overweight (BMI 25+)	72.4	73.3	66.9	67.8		70.9
% Healthy Weight (BMI 18.5-24.9)	25.4	24.6	31.8	30.3	33.9	27.6
% [Overweights] Trying to Lose Weight	55.9	55.9		61.3		
% Obese (BMI 30+)	35.0	35.7	29.6	32.8	30.5	27.0
% Medical Advice on Weight in Past Year	18.8	18.4		24.2		18.4
% [Overweights] Counseled About Weight in Past Year	21.8	21.1		29.0		22.2
% Child [Age 5-17] Healthy Weight	61.1	62.0		58.4		67.8
% Children [Age 5-17] Overweight (85th Percentile)	18.6	18.6		33.0		32.3
% Children [Age 5-17] Obese (95th Percentile)	8.7	8.3		20.4	14.5	11.6
% Child [Age 2-17] Physically Active 1+ Hours per Day	61.1	61.0		50.5		55.9
			better	similar	worse	

Oral Health	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% Have Dental Insurance	60.8	60.4		59.9		58.5
% [Age 18+] Dental Visit in Past Year	63.1	62.7	70.3	59.7	49.0	59.0
% Child [Age 2-17] Dental Visit in Past Year	84.8	85.6		87.0	49.0	76.7
			better	similar	worse	

Potentially Disabling Conditions	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% Multiple Chronic Conditions	55.9	55.9		56.8		
% [50+] Arthritis/Rheumatism	32.1	31.9		38.3		38.3
% [50+] Osteoporosis	8.7	8.6		9.4	5.3	9.7
% Sciatica/Chronic Back Pain	21.4	21.6		22.9		22.5
% Eye Exam in Past 2 Years	57.2	56.7		55.3		62.8
			better	similar	worse	

Respiratory Diseases	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
CLRD (Age-Adjusted Death Rate)	42.2	43.3	41.5	40.9		51.3
Pneumonia/Influenza (Age-Adjusted Death Rate)	14.6	14.5	17.0	14.6		15.4
% [Adult] Currently Has Asthma	7.5	7.4	6.2	11.8		10.3
% Adults Asthma (Ever Diagnosed)	12.9	12.7	9.2	19.4		
% [Child 0-17] Currently Has Asthma	5.1	4.9		9.3		10.0
% Child [Age 0-17] Asthma (Ever Diagnosed)	8.1	7.7		11.1		
% COPD (Lung Disease)	10.1	10.1	5.2	8.6		14.2
			better	similar	worse	

Sexually Transmitted Diseases	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Chlamydia Incidence Rate	603.2	586.4	493.1	456.1		457.4
Gonorrhea Incidence Rate	131.1	127.4	105.6	110.7		55.4
			better	similar	worse	

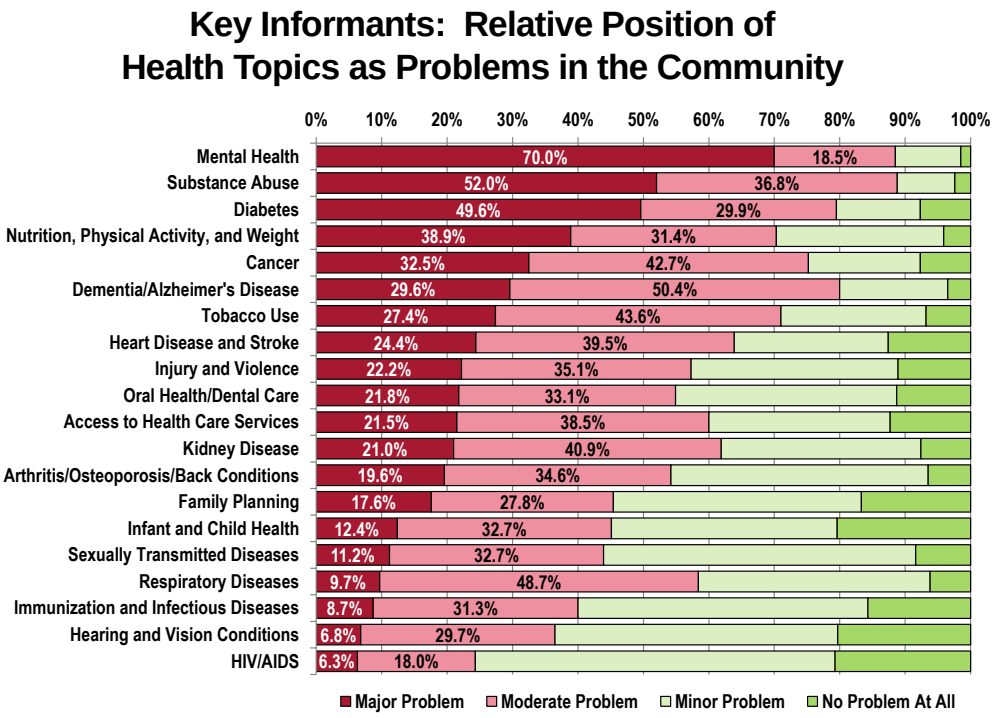
Substance Abuse	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
Unintentional Drug-Related Deaths (Age-Adjusted Death Rate)	6.7	6.4	6.0	14.3	11.3	7.7
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	24.6	23.9	16.3	10.6	8.2	13.3
% Current Drinker	62.2	62.4	59.0	55.0		58.1
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	18.0	17.9	19.3	20.0	24.4	
% Excessive Drinker	19.7	19.9		22.5	25.4	19.2
% Drinking & Driving in Past Month	0.7	0.8	4.0	5.2		1.3
% Illicit Drug Use in Past Month	2.9	2.8		2.5	7.1	0.8
% Used Opiates/Opioids in the Past Year	19.7	19.3				
% Ever Sought Help for Alcohol or Drug Problem	5.2	5.1		3.4		5.1
% Life Negatively Affected by Substance Abuse	38.2	38.7		37.3		
			better	similar	worse	

Tobacco Use	SDSC Service Area	SDSC Service Area vs. Benchmarks				
		vs. Regional Health	vs. SD	vs. US	vs. HP2020	TREND
% Current Smoker	22.2	22.0	18.1	16.3	12.0	23.8
% Someone Smokes at Home	14.5	14.0		10.7		14.1
% [Nonsmokers] Someone Smokes in the Home	3.6	3.5		4.0		6.6
% [Household With Children] Someone Smokes in the Home	12.0	11.5		7.2		7.3
% [Smokers] Have Quit Smoking 1+ Days in Past Year	47.7	47.6		34.7	80.0	56.4
% [Smokers] Received Advice to Quit Smoking	58.7	57.3		58.0		63.9
% Currently Use Vaping Products	4.8	4.5		3.8		
% Use Smokeless Tobacco	5.0	5.0	5.9	4.4	0.3	5.8
% Smoke Cigars	1.0	1.0		7.5	0.2	2.8
			better	similar	worse	

Summary of Key Informant Perceptions

In the Online Key Informant Survey, community stakeholders were asked to rate the degree to which each of 20 health issues is a problem in their own community, using a scale of "major problem," "moderate problem," "minor problem," or "no problem at all." The following chart summarizes their responses; these findings also are outlined throughout this report, along with the qualitative input describing reasons for their concerns. (Note that these ratings alone do not establish priorities for this assessment; rather, they are one of several data inputs considered for the prioritization process described earlier.)

Note that key informant findings reflect input from stakeholders throughout the broader 10-county region.



Data Charts &
Key Informant Input

The following sections present data from multiple sources, including the random-sample PRC Community Health Survey, public health and other existing data sets (secondary data), as well as qualitative input from the Online Key Informant Survey. Data indicators from these sources are intermingled and organized by health topic. To better understand the source data for specific indicators, please refer to the footnotes accompanying each chart.

Professional Research Consultants, Inc.

Community Characteristics

Population Characteristics

Land Area, Population Size & Density

Data from the US Census Bureau reveal the following statistics for our community relative to size, population, and density.

Total Population
(Estimated Population, 2012-2016)

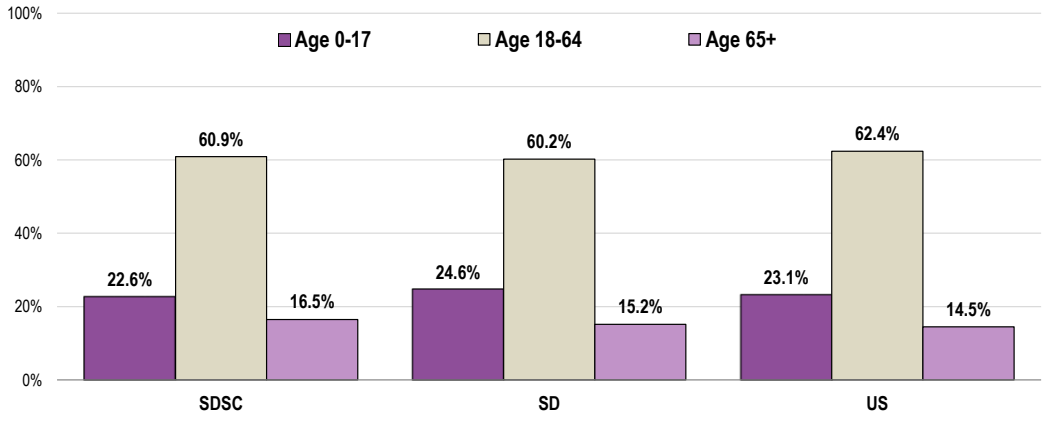
	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
SDSC Service Area	184,586	12,594.39	14.66
SD	851,058	75,810.54	11.23
United States	318,558,162	3,532,068.58	90.19

Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved November 2018 from Community Commons at http://www.chna.org.

Age

It is important to understand the age distribution of the population, as different age groups have unique health needs that should be considered separately from others along the age spectrum.

Total Population by Age Groups, Percent
(2012-2016)

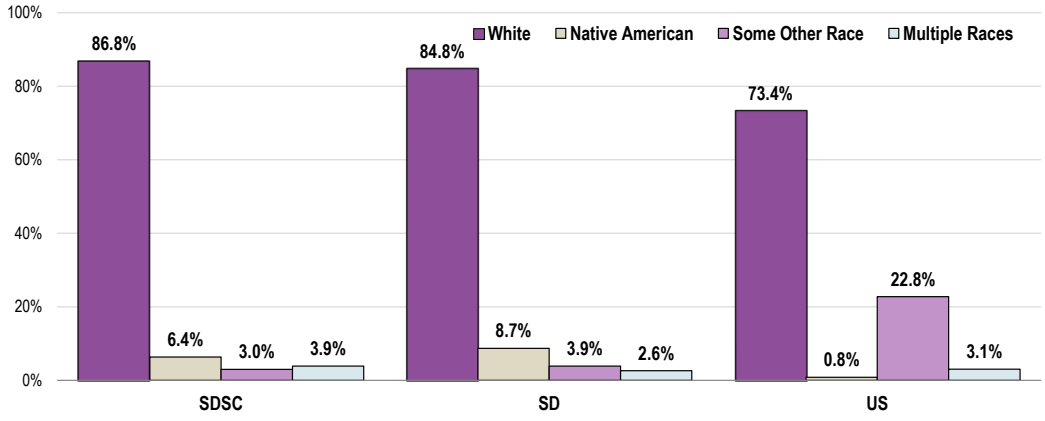


Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved November 2018 from Community Commons at http://www.chna.org.

Race & Ethnicity

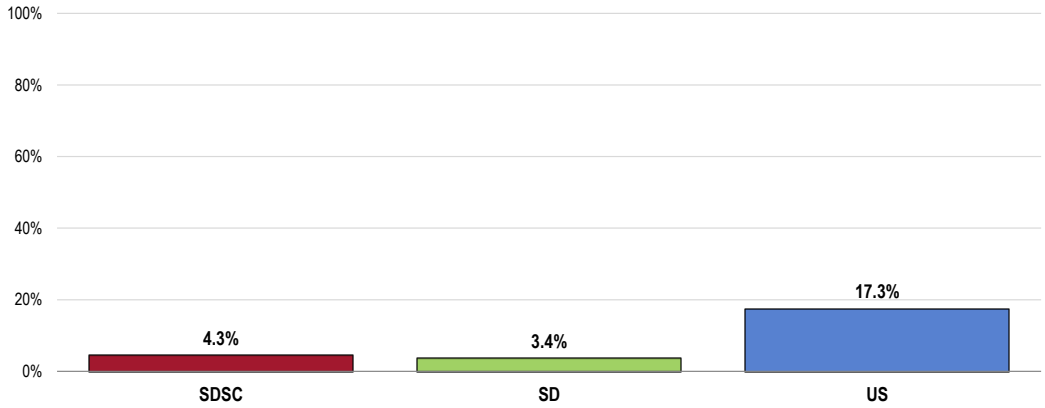
The following charts illustrate the racial and ethnic makeup of our community. Note that ethnicity (Hispanic or Latino) can be of any race.

Total Population by Race Alone, Percent
(2012-2016)



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved November 2018 from Community Commons at http://www.chna.org.

Hispanic Population
(2012-2016)



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved November 2018 from Community Commons at http://www.chna.org.

Notes:
- Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

Social Determinants of Health

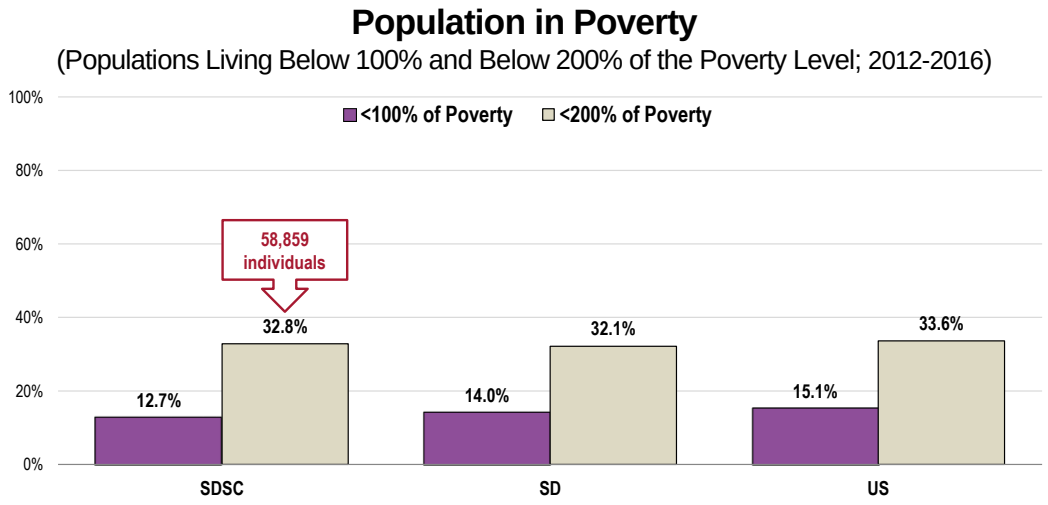
About Social Determinants

Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be.

- Healthy People 2020 (www.healthypeople.gov)

Poverty

The following chart outlines the proportion of our population below the federal poverty threshold, as well as below 200% of the federal poverty level, in comparison to state and national proportions.



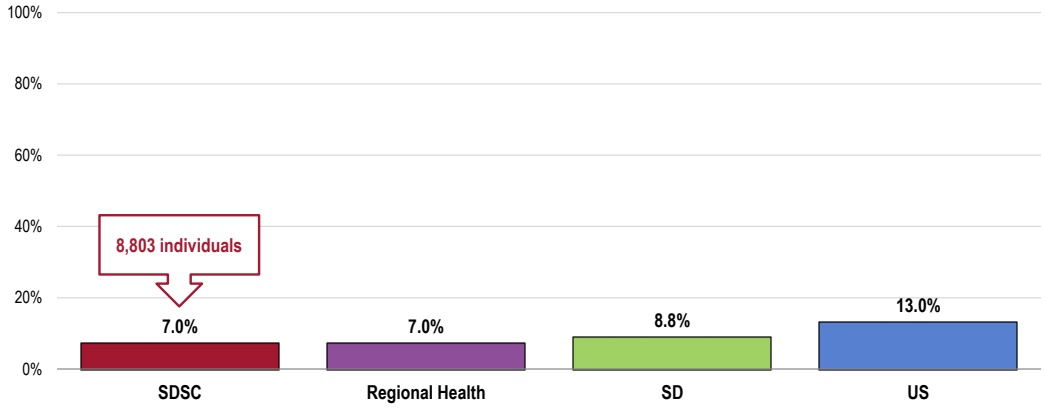
Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved November 2018 from Community Commons at http://www.chna.org.

Notes:
- Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

Education

Education levels are reflected in the proportion of our population without a high school diploma:

Population With No High School Diploma
(Population Age 25+ Without a High School Diploma or Equivalent, 2012-2016)

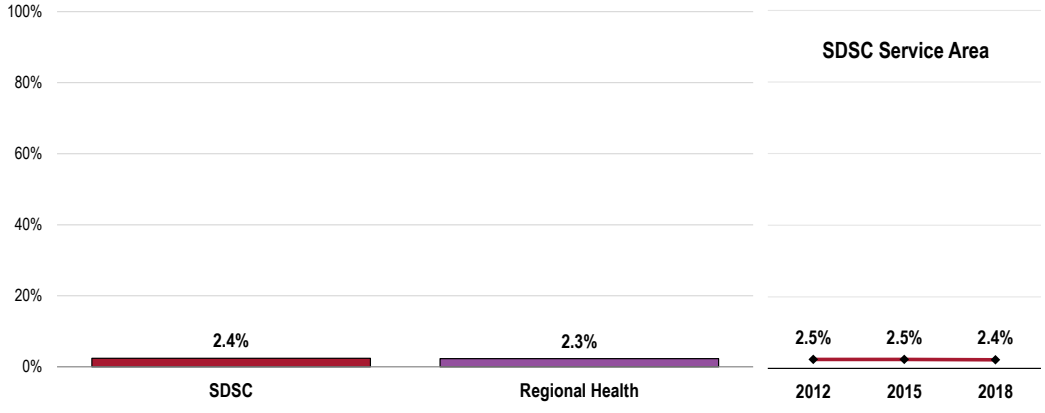


Sources: ● US Census Bureau American Community Survey 5-year estimates.
● Retrieved November 2018 from Community Commons at http://www.chna.org.
Notes: ● This indicator is relevant because educational attainment is linked to positive health outcomes.

Homelessness

"Has there been any time in the past two years when you were living on the street, in a car, or in a temporary shelter?"

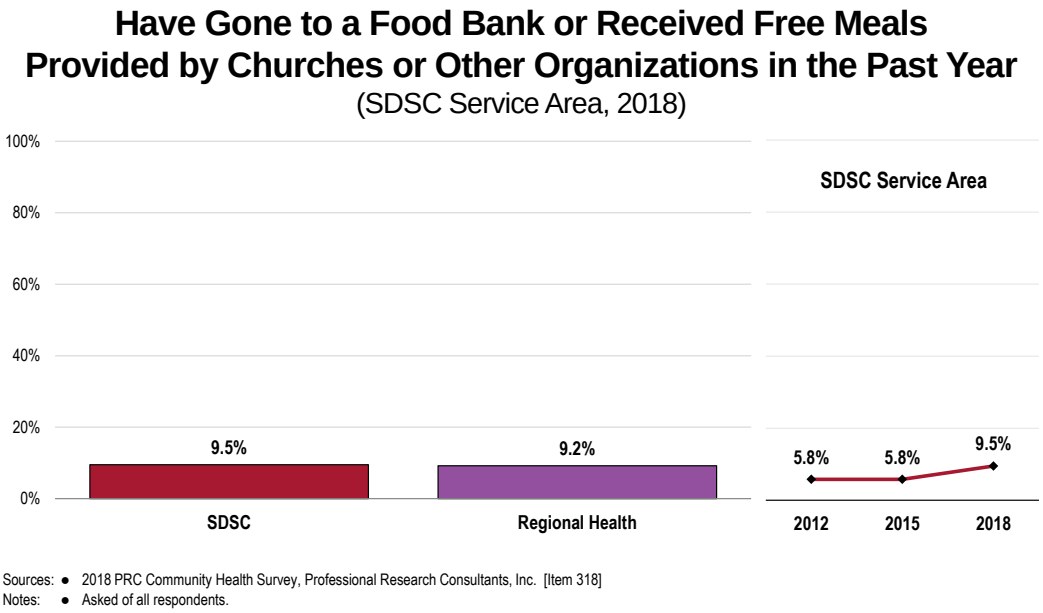
Have Lived on the Street, in a Car, or in a Temporary Shelter at any Time in the Past Two Years
(SDSC Service Area, 2018)



Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 317]
Notes: ● Asked of all respondents.

Food Banks/Free Meals

"In the past year, have you gone to a food bank or received free meals provided by churches or other organizations?"



Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 318]
Notes: ● Asked of all respondents.

Health Literacy

To measure respondents' ability to understand health-related information, respondents were asked the following questions:

"How often is health information written in a way that is easy for you to understand? Would you say: always, nearly always, sometimes, seldom, or never?"

"How often do you need to have someone help you read health information? Would you say: always, nearly always, sometimes, seldom, or never?"

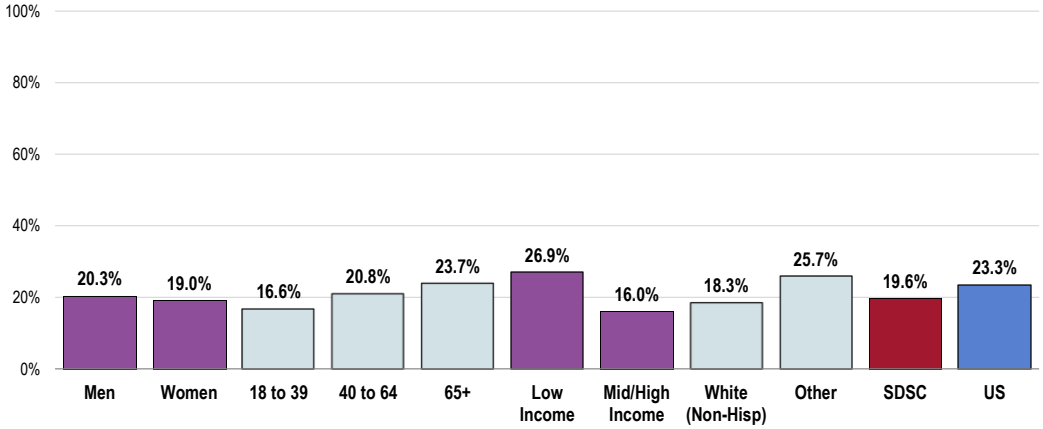
"How often is health information spoken in a way that is easy for you to understand? Would you say: always, nearly always, sometimes, seldom, or never?"

"In general, how confident are you in your ability to fill out health forms yourself? Would you say: extremely confident, somewhat confident, or not at all confident?

Low health literacy is defined here as those respondents who "seldom/never" find written or spoken health information easy to understand, and/or who "always/nearly always" need help reading health information, and/or who are "not at all confident" in filling out health forms, segmented by basic demographic characteristics (namely by sex, age groupings, income [based on poverty status], and race/ethnicity).

Low Health Literacy

(SDSC Service Area, 2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 172]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- Respondents with low health literacy are those who "seldom/never" find written or spoken health information easy to understand, and/or who "always/nearly always" need help reading health information, and/or who are "not at all confident" in filling out health forms.

Adverse Childhood Experiences (ACEs)

About ACEs

Adverse Childhood Experiences (ACEs) are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact prevention efforts. ACEs include:

- Physical abuse
- Sexual Abuse
- Emotional abuse
- Physical neglect
- Emotional neglect
- Intimate partner violence
- Mother treated violently
- Household substance misuse
- Household mental illness
- Parental separation/divorce
- Incarcerated household member

A series of 11 survey questions were used to identify adults' experiences of adverse childhood events prior to the age of 18 years. These 11 questions align with 8 ACEs categories, as outlined in the following table.

Adverse Childhood Experiences (ACEs)
(SDSC Service Area, 2018)

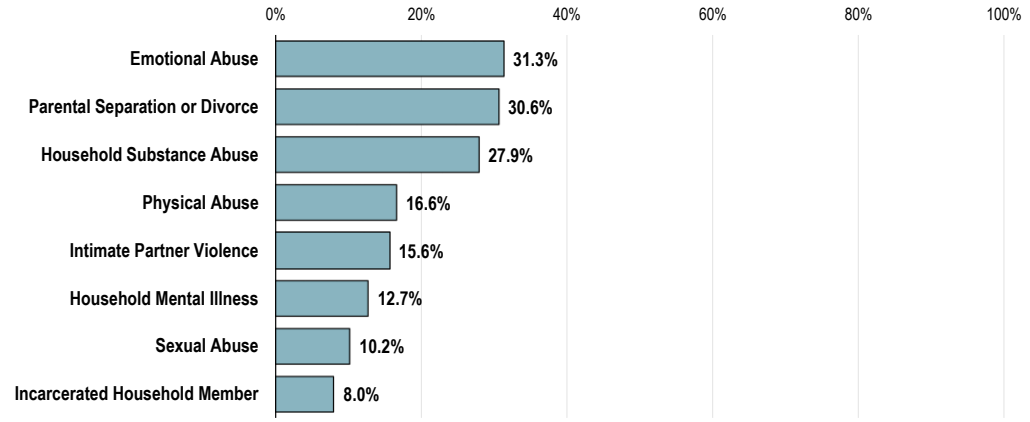
Category	Question
Household Mental Illness	Before you were 18 years of age, did you live with anyone who was depressed, mentally ill, or suicidal?
Household Substance Abuse	Before you were 18 years of age, did you live with anyone who was a problem drinker or alcoholic?
	Before you were 18 years of age, did you live with anyone who used illegal street drugs or who abused prescription medications?
Incarcerated Household Member	Before you were 18 years of age, did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
Parental Separation or Divorce	Before you were 18 years of age, were your parents separated or divorced?
Intimate Partner Violence	Before age 18, how often did your parents or adults in your home slap, hit, kick, punch or beat each other up?
Physical Abuse	Before age 18, how often did a parent or adult in your home hit, beat, kick, or physically hurt you in any way? Do not include spanking.
Emotional Abuse	Before age 18, how often did a parent or adult in your home swear at you, insult you, or put you down?
Sexual Abuse	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you touch you sexually?
	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you try to make you touch them sexually?
	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you force you to have sex?

Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 319-329]
Notes: ● Reflects the total sample of respondents.

The prevalence of ACEs in the community is outlined below.

Adverse Childhood Experiences (ACEs)

(SDSC Service Area, 2018)



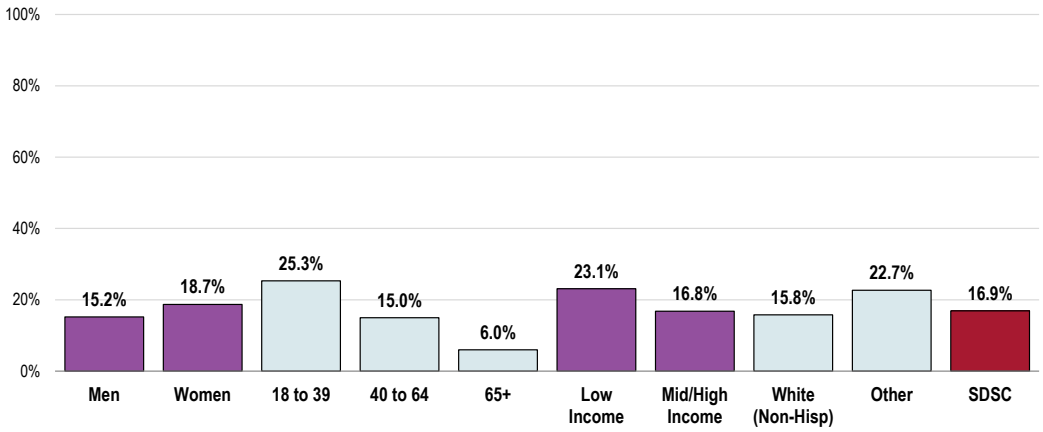
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 333-340]

Notes:
- Reflects the total sample of respondents.
- ACEs are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact prevention efforts.

In scoring the series of 11 ACE questions, survey respondents receive one "point" for each affirmative response. A score of 4 or higher is determined to be a "high" ACE score.

Prevalence of High ACE Scores (4 or More)

(SDSC Service Area, 2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 341]

Notes:
- Asked of all respondents.
- Adults who report four or more ACEs is categorized as having a high ACE score.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

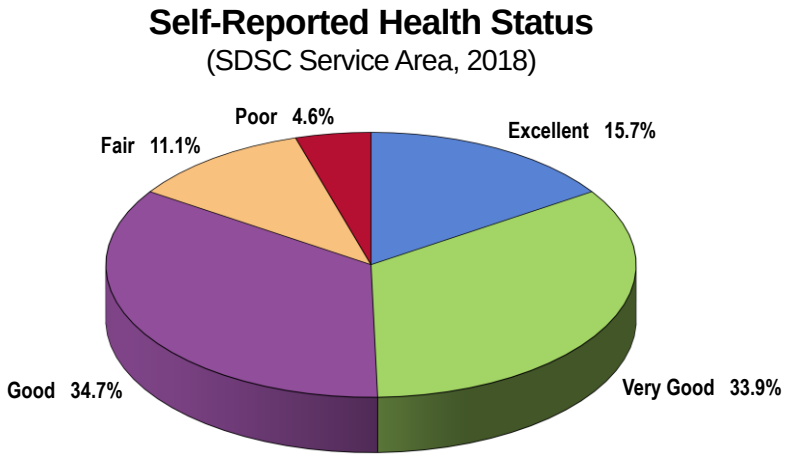
General Health Status

Overall Health Status

Self-Reported Health Status

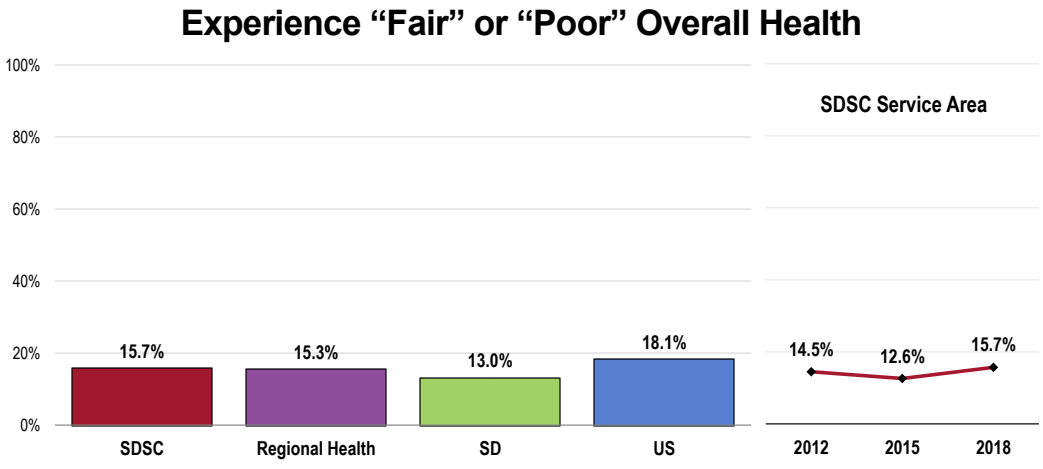
The initial inquiry of the PRC Community Health Survey asked respondents the following:

"Would you say that in general your health is: excellent, very good, good, fair, or poor?"



Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
Notes: ● Asked of all respondents.

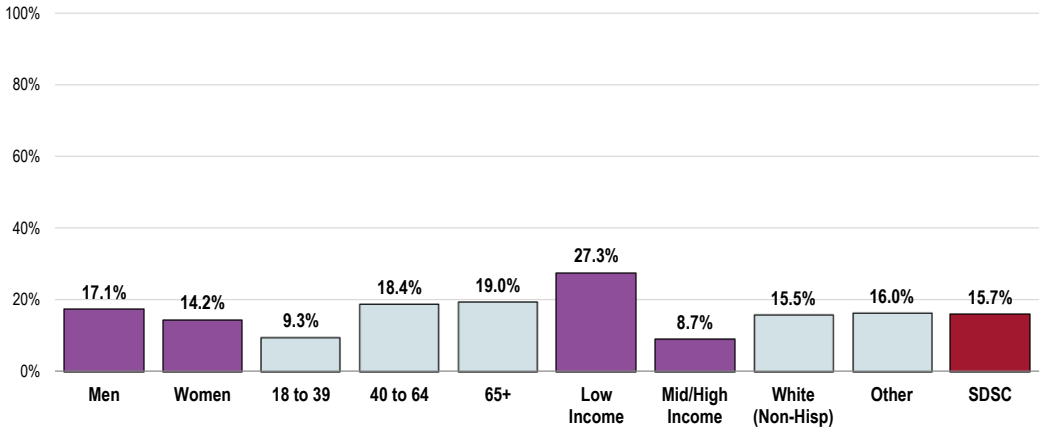
The following charts further detail "fair/poor" overall health responses in the SDSC Service Area in comparison to benchmark data, as well as by demographic characteristics.



Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Experience "Fair" or "Poor" Overall Health

(SDSC Service Area, 2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Activity Limitations

About Disability & Health

An individual can get a disabling impairment or chronic condition at any point in life. Compared with people without disabilities, people with disabilities are more likely to:

- Experience difficulties or delays in getting the health care they need.
- Not have had an annual dental visit.
- Not have had a mammogram in past 2 years.
- Not have had a Pap test within the past 3 years.
- Not engage in fitness activities.
- Use tobacco.
- Be overweight or obese.
- Have high blood pressure.
- Experience symptoms of psychological distress.
- Receive less social-emotional support.
- Have lower employment rates.

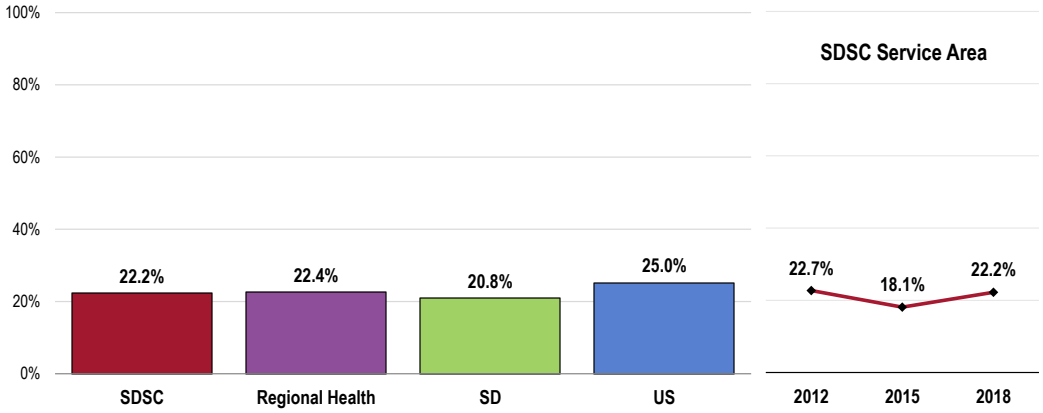
There are many social and physical factors that influence the health of people with disabilities. The following three areas for public health action have been identified, using the International Classification of Functioning, Disability, and Health (ICF) and the three World Health Organization (WHO) principles of action for addressing health determinants.

- **Improve the conditions of daily life** by: encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.
- **Address the inequitable distribution of resources among people with disabilities and those without disabilities** by increasing: appropriate health care for people with disabilities; education and work opportunities; social participation; and access to needed technologies and assistive supports.
- **Expand the knowledge base and raise awareness about determinants of health for people with disabilities** by increasing: the inclusion of people with disabilities in public health data collection efforts across the lifespan; the inclusion of people with disabilities in health promotion activities; and the expansion of disability and health training opportunities for public health and health care professionals.

- Healthy People 2020 (www.healthypeople.gov)

"Are you limited in any way in any activities because of physical, mental, or emotional problems?"

Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem

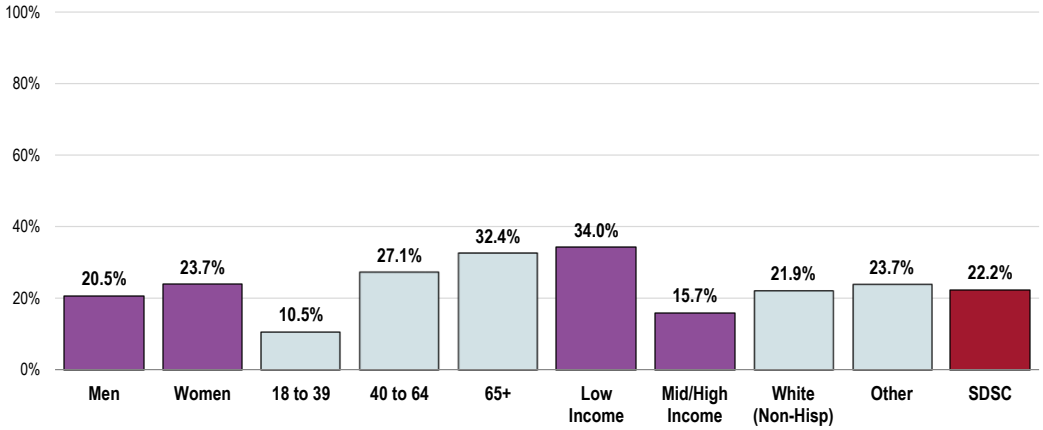


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 109]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem

(SDSC Service Area, 2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 109]

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Mental Health

About Mental Health & 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. Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning. Mental disorders contribute to a host of problems that may include disability, pain, or death. Mental illness is the term that refers collectively to all diagnosable mental disorders. Mental disorders are among the most common causes of disability. The resulting disease burden of mental illness is among the highest of all diseases.

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.

The existing model for understanding mental health and mental disorders emphasizes the interaction of social, environmental, and genetic factors throughout the lifespan. In behavioral health, researchers identify: **risk factors**, which predispose individuals to mental illness; and **protective factors**, which protect them from developing mental disorders. Researchers now know that the prevention of mental, emotional, and behavioral (MEB) disorders is inherently interdisciplinary and draws on a variety of different strategies. Over the past 20 years, research on the prevention of mental disorders has progressed. The major areas of progress include evidence that:

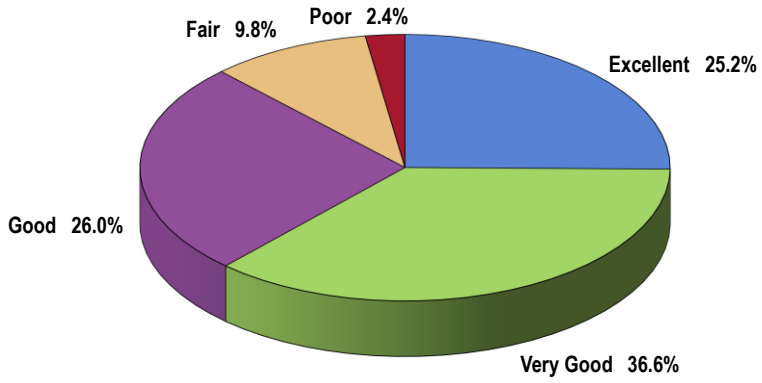
- MEB disorders are common and begin early in life.
- The greatest opportunity for prevention is among young people.
- There are multiyear effects of multiple preventive interventions on reducing substance abuse, conduct disorder, antisocial behavior, aggression, and child maltreatment.
- The incidence of depression among pregnant women and adolescents can be reduced.
- School-based violence prevention can reduce the base rate of aggressive problems in an average school by 25 to 33%.
- There are potential indicated preventive interventions for schizophrenia.
- Improving family functioning and positive parenting can have positive outcomes on mental health and can reduce poverty-related risk.
- School-based preventive interventions aimed at improving social and emotional outcomes can also improve academic outcomes.
- Interventions targeting families dealing with adversities, such as parental depression or divorce, can be effective in reducing risk for depression in children and increasing effective parenting.
- Some preventive interventions have benefits that exceed costs, with the available evidence strongest for early childhood interventions.
- Implementation is complex, and it is important that interventions be relevant to the target audiences.
- In addition to advancements in the prevention of mental disorders, there continues to be steady progress in treating mental disorders as new drugs and stronger evidence-based outcomes become available.
- Healthy People 2020 (www.healthypeople.gov)

Self-Reported Mental Health Status

"Now thinking about your mental health, which includes stress, depression and problems with emotions, would you say that, in general, your mental health is: excellent, very good, good, fair, or poor?"

Self-Reported Mental Health Status

(SDSC Service Area, 2018)

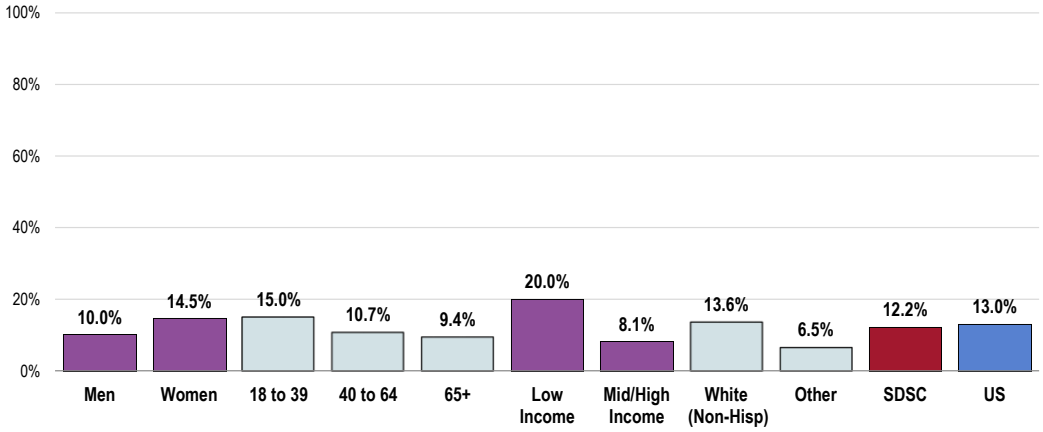


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]

Notes:
- Asked of all respondents.

Experience "Fair" or "Poor" Mental Health

(SDSC Service Area, 2018)

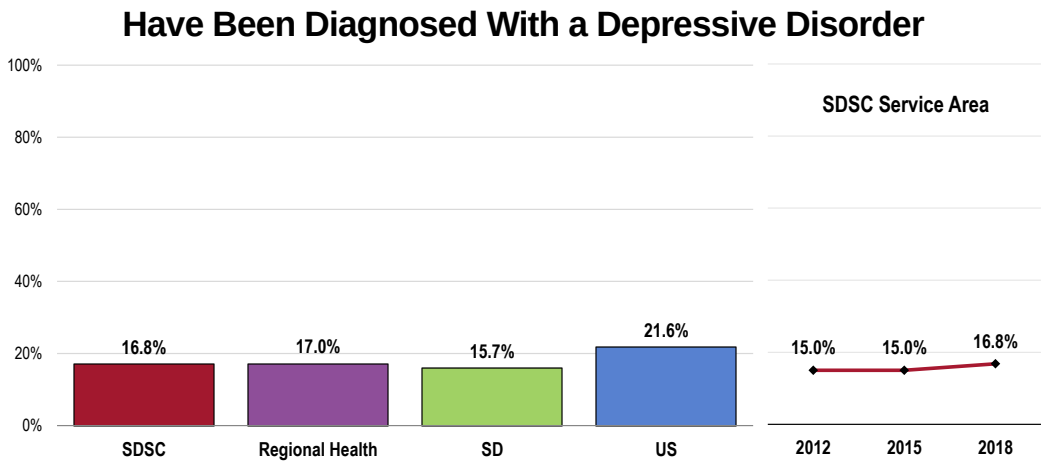


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Depression

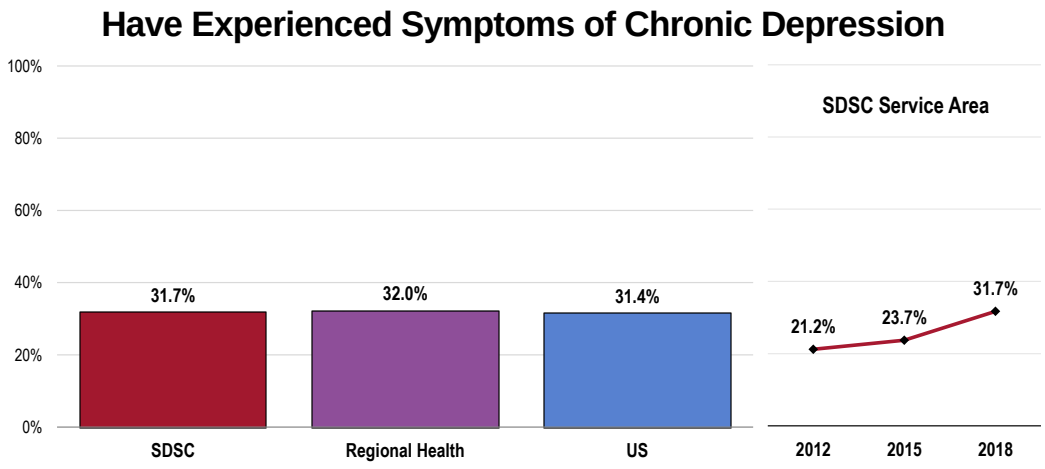
Diagnosed Depression: "Has a doctor or other healthcare provider ever told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?"



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Depressive disorders include depression, major depression, dysthymia, or minor depression.

Symptoms of Chronic Depression: "Have you had two years or more in your life when you felt depressed or sad most days, even if you felt okay sometimes?"

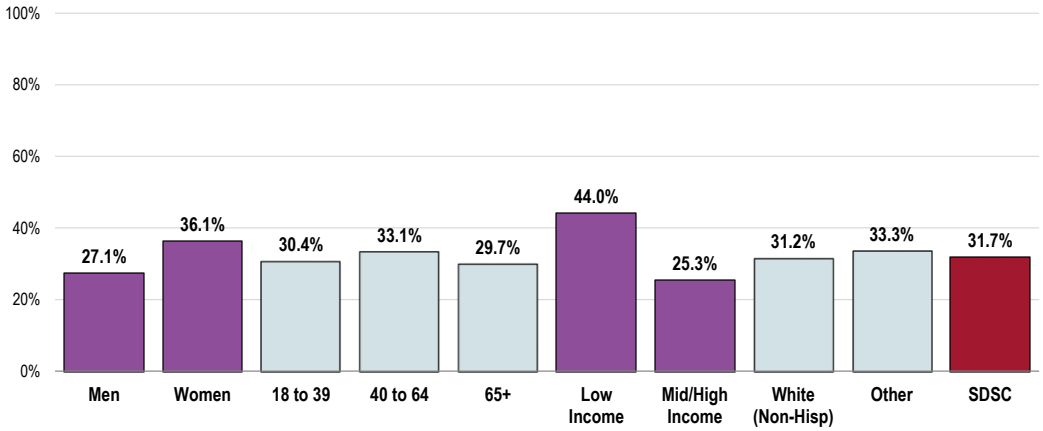


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 100]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Chronic depression includes periods of two or more years during which the respondent felt depressed or sad on most days, even if (s)he felt okay sometimes.

Have Experienced Symptoms of Chronic Depression

(SDSC Service Area, 2018)



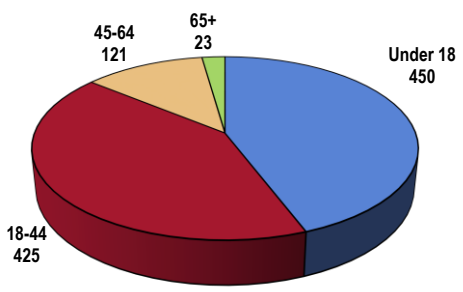
Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 100]
Notes: ● Asked of all respondents.
● Chronic depression includes periods of two or more years during which the respondent felt depressed or sad on most days, even if (s)he felt okay sometimes.
● Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
● Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Hospital Visits for Depression

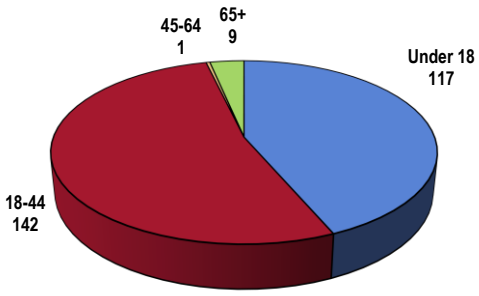
The following charts outline the number of inpatient and emergency department visits to Same Day Surgery Center for depression, segmented by age, insurance/payor, and race/ethnicity.

Number of Hospital Visits for Depression by Age

(Regional Health Rapid City Hospital)



Inpatient Admissions

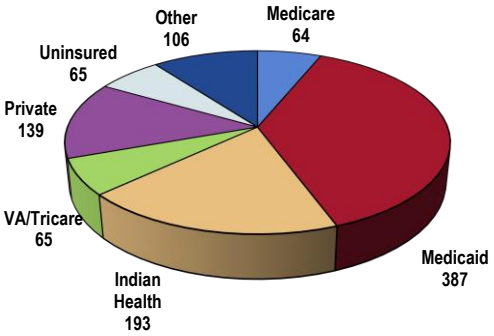


Emergency Department (Non-Admissions)

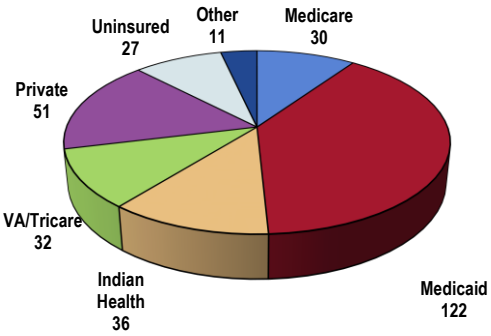
Source: ● Regional Health.

Number of Hospital Visits for Depression by Payor

(Regional Health Rapid City Hospital)



Inpatient Admissions

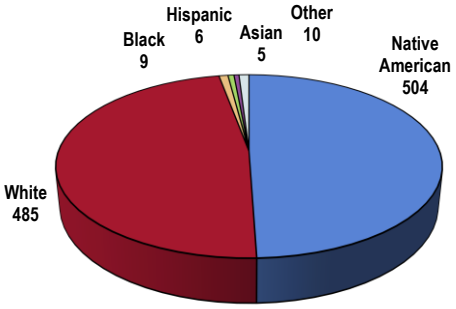


Emergency Department (Non-Admissions)

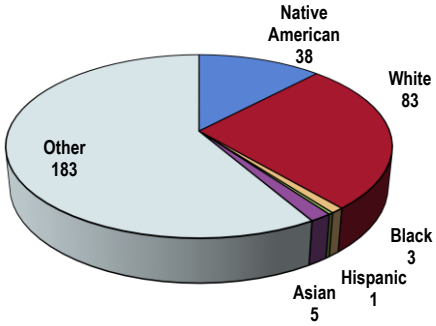
Source: ● Regional Health.

Number of Hospital Visits for Depression by Race/Ethnicity

(Regional Health Rapid City Hospital)



Inpatient Admissions



Emergency Department (Non-Admissions)

Source: ● Regional Health.

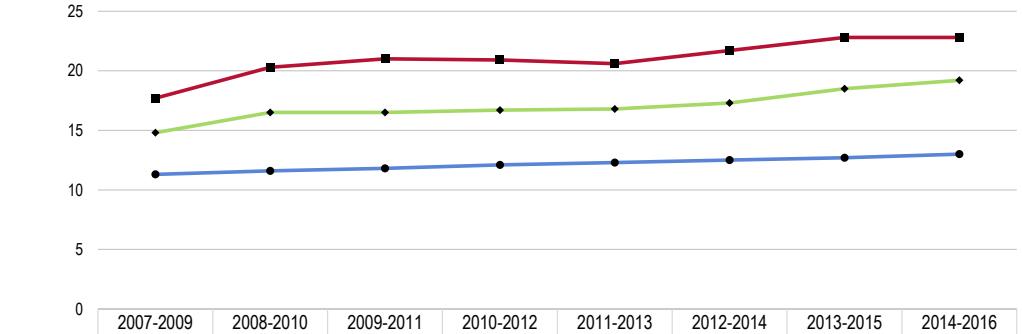
Suicide

The following chart outlines the most current age-adjusted mortality rates attributed to suicide in our population. (Refer to "Leading Causes of Death" for an explanation of the use of age-adjusting for these rates.)

Suicide: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 10.2 or Lower



	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	17.7	20.3	21.0	20.9	20.6	21.7	22.8	22.8
SD	14.8	16.5	16.5	16.7	16.8	17.3	18.5	19.2
US	11.3	11.6	11.8	12.1	12.3	12.5	12.7	13.0

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MHMD-1]

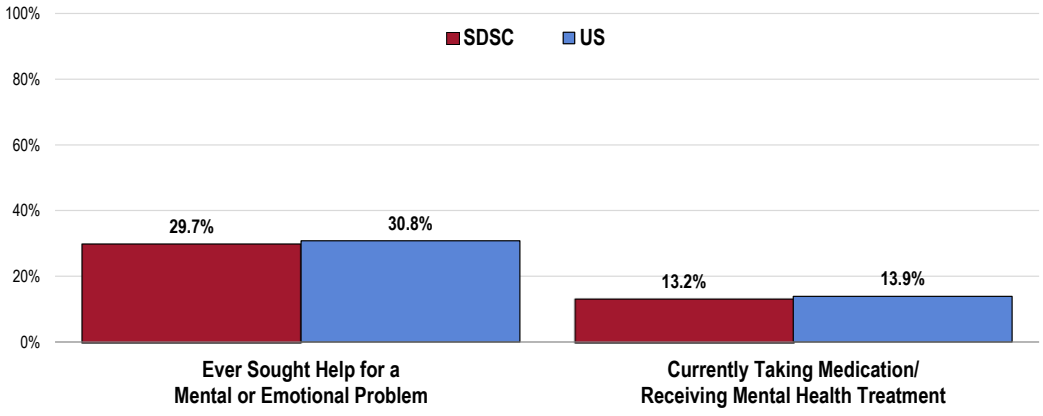
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Mental Health Treatment

"Have you ever sought help from a professional for a mental or emotional problem?"

"Are you now taking medication or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem?"

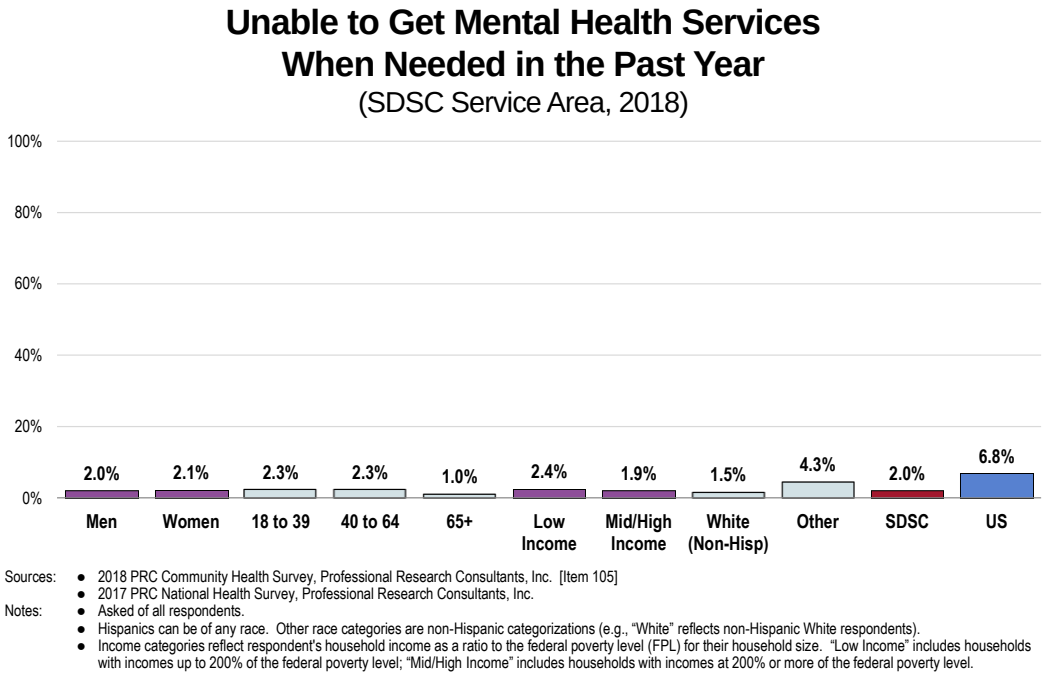
Mental Health Treatment



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 103-104]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Reflects the total sample of respondents.

"Was there a time in the past 12 months when you needed mental health services but were not able to get them?"

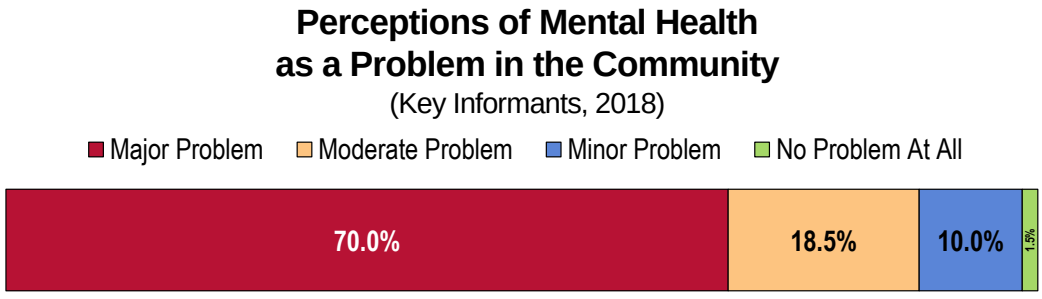


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 105]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Key Informant Input: Mental Health

Seven in 10 key informants taking part in an online survey characterized *Mental Health* as a "major problem" in the community.



Sources:
- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Among those rating this issue as a "major problem," the following represent what key informants see as the main challenges for persons with mental illness:

Access to Care/Services

> *Access to care and facilities for inpatient stays and substance abuse facilities. Access to dementia senior care. – Other Health Provider*

Mental health resources for outpatient services are very limited and then there are also very limited medical mental health inpatient facilities in the state who can accommodate the care patients need. – Other Health Provider

There are several. No long-term treatment options on this side of the state is primary. Followed by the lack of consistent reimbursement and limited payer sources. In patient treatment in this area is basically limited to stabilization and there is a big stigma in the community. – Other Health Provider

Limited resources to support growing number of mental health issues. – Other Health Provider

Limited resources available to address mental health needs, lack of understanding of mental health needs. – Other Health Provider

There are next to no mental health services in our area. Struggling to get access to the proper healthcare services. – Other Health Provider

Access to services. Shortage of psychiatrists, psychologists, professional counselor, and facilities/ programs. – Other Health Provider

Not enough services available in Western SD. Provider to patient ratio is too high. – Other Health Provider

Access to providers, medication availability, support systems, insurances that cover mental health issues, financial constraints, transportation. – Other Health Provider

Access to a qualified therapist, psychologist and psychiatrist, is very limited in our area. – Other Health Provider

Minimal resources available for those with mental health issues. Inpatient care is only for a short time frame, outpatient options limited. Only band aid fixes. – Other Health Provider

Absolutely no resources. Always get a big run around when trying to transfer people. – Other Health Provider

Access to mental health treatment as well as ability to purchase their medications as well as compliance with said medication regimen. – Other Health Provider

There are very limited resources for patients in mental health crisis to receive care and suicide rates are high in this community. – Other Health Provider

Access to mental health professionals for diagnosis is a major problem. In addition, long term treatment facilities are difficult to access. – Community/Business Leader

Access to mental healthcare, especially urgent and emergency care. Dementia care. – Other Health Provider

To my knowledge, Rapid City currently does not have a clinic for a person to go when having a mental health crisis. – Other Health Provider

Lack of services, education, resources, and funding. – Community/Business Leader

No/little adequately funded resources. – Community/Business Leader

Access to service providers. – Community/Business Leader

A shortage of mental health beds. Too few private providers. Virtually no state help in terms of facilities or services. The shedding of responsibility by the state, trickles down to the local and private sector. This will get worse. – Community/Business Leader

Nothing available in the community itself. Have to drive to Rapid City. – Community/Business Leader

There's so little mental healthcare, it's sad. – Community/Business Leader

Wait lists at providers and people don't want to admit they need help. – Community/Business Leader

Getting to a mental health professional can be difficult. Getting and maintaining services and prescriptions can be cost prohibitive. I work with kids who have been involved with fire and I often refer them to a mental health professional for evaluation. Helping them to find affordable, local, and swift service is challenging. I also work with parents of young children who may be diagnosed with autism spectrum disorder. If they can afford it, they are often going to Sioux Falls for evaluation because the six-hour drive is worth not waiting six months for an appointment. Once diagnosed, there are potential therapies that are simply not offered locally. – Other Health Provider

The system is broken when it comes to timely, professional psych evaluations, and the full community of mental health professionals (such as SD psychological association) is being left out of the solution process. In a rural area such as SD, with only around 200 psychologists to serve our entire population, it's critical to value, support, and utilize each one of these professionals. Time and again, psychologists are left out of the process when it comes to legislation, fact-finding, and remedies to improve mental healthcare services. We all know of the issue; jails essentially being used as mental health facilities, and not being properly staffed or equipped to deal with it. In-patient treatment saved my daughter's life, and we were lucky that we could afford and manage the logistics of getting her to substance treatment. People who have a combination of issues (perhaps substance and also mental health) but uninsured or cannot afford treatment are most at risk. – Community/Business Leader

West River, SD does not have a mental health facility. Many patients have to go out of state, or across the state to receive intense treatment. People in need of immediate care could be turned away or placed in a jail facility because of our lack of resources. A great challenge in SD is a stigma for people facing mental health issues. – Other Health Provider

Having dealt with a family member, I learned firsthand that resources for help is extremely limited, particularly for that initial crisis period. – Community/Business Leader

Lack of intermediate and long-term inpatient psychiatric facility. Also concern if hospital is committed to maintaining current inpatient capacity. Most individuals who need intermediate or long-term inpatient psychiatric services are sent out of the area. Many are involuntarily committed to the State's Human Services Center in Yankton. There is also a lack of Psychiatry available to the general public. More so on individuals without insurance and/or ability to pay full price. The majority of current psychiatrists available to the community are reaching retirement age so the problem will be increasing. The wait time for individuals needing a psychiatric evaluation for purpose of evaluating medication needs is weeks in Rapid City and greater for individuals outside of Rapid City. – Other Health Provider

For any kind of long term care you have to travel 400 miles ... and it's still not long term care. This problem is nationwide. – Other Health Provider

Mental Health Services is limited in the community. While there are some programs that offer a sliding fee scale, most have waiting lists to see clients who have acute mental health needs. – Other Health Provider

Access to services. – Other Health Provider

Access to mental health providers. – Other Health Provider

IHS mental health clinics at two locations. Does not address the needs of teen hospitalizations. Does not address the need for long-term treatment in residential placement. Increase in suicidal ideation of teens. Over-prescription of psychotropics and not sufficient talk therapy and residential setting for education while in treatment. – Community/Business Leader

Regularly available outpatient services that are affordable. Inpatient and residential services for that portion of the population that needs them. – Physician

Lack of options for care, especially affordable options for those in poverty. – Social Services Provider

There is a lack of services in our area to help with mental health issues. – Social Services Provider

Short term or long-term facilities are not available. – Social Services Provider

MH Services are extremely limited West River. There are not enough psychologists, psychiatrists or substance abuse counselors to meet the need. Patients who have chronic MH needs must leave the area, away from their family or support network. – Social Services Provider

There are not enough readily available resources to help people in crisis. Waiting lists are too long. Treatments are too short. Having someone in the Regional West a day or two, change their meds and then discharge them, is not solution; it is part of the problem. – Social Services Provider

Lack of mental health services, lack of access due to no transportation, widespread alcohol and substance abuse issues. Many with IHS as only payer source or Medicaid, or no payer source. – Public Health Representative

Access to psychiatry and other behavioral health services. Stigma associated with mental illness. Insurance coverage. Being able to afford medication. Crisis management. – Physician

Places where families can have their loved ones assessed and then monitored when the person affected is resistant to care and not thinking clearly. – Physician

Access to care. – Physician

Lack of case management/counseling/social services support. Lack of local psychiatry. Lack of supervised housing/residential living. – Physician

Lack of a geriatric psychiatric unit in the community. Often elderly patients with dementia are admitted to the ER and in need of care. Regional Behavioral Health cannot admit these patients related to their diagnosis of dementia and skilled nursing facilities cannot care for these patients until their behaviors are controlled. They are often sent 5-6 hours from home to seek treatment at HSC in Yankton or Avera Health in Sioux Falls. – Other Health Provider

Not enough mental health providers to address ongoing needs. Mental Health stigma on our community is high. Not enough awareness. Mentally ill patients are being criminalized instead of receiving the help they need. – Other Health Provider

There is very little resource in this area for mental health issues, suicide, depression, bipolar, etc. as well as those related to drug alcohol addiction. Very little appropriate support available for those without money. – Other Health Provider

Behavior Health in Native land lacks the number of people who can help those in need. If you were having a crisis there are no appointments for months out and the crisis usually ends badly for the person in crisis. – Other Health Provider

Increase in mental health issues within the community and lack of services to accommodate. – Other Health Provider

Access to quick care as an outpatient. Limited number of inpatient beds, can lead to long waits in the Emergency Department and/or need to transfer across the state for inpatient care. – Other Health Provider

Lack of inpatient resources is a huge issue. The state hospital also is not a good resource, and there are some people that really need that level of care. The hospital inpatient Behavioral Health is typically full and cannot meet the needs of the community. – Other Health Provider

There are no programs for a lot of the mental illnesses. A lot of them get lost in the cracks, homeless, have other mental health issues beside addictions. No insurance to get counseling/help. – Other Health Provider

Not nearly enough access anywhere close. – Other Health Provider

Very limited access to care. – Other Health Provider

Not enough resources. Only have one inpatient facility on the Western side of SD. – Other Health Provider

Lack of Providers

Lack of qualified staff, counselors, psychiatrist, to deal with the mental health issues. No follow-up from the mental health providers, lack of trust with the provider. – Other Health Provider

We have no providers for mental health services. People have to travel to Spearfish or Rapid City. – Other Health Provider

There is a complete lack of psychologists and facilities to support mental health. – Other Health Provider

Finding providers that will take state assistance for payment. Finding providers that have available appointments. – Other Health Provider

Psychiatric services are minimal. Not enough psychiatrists. Hard to get people in for appointments. – Physician

There are still challenges to get patients in to see a mental health provider. – Other Health Provider

Denial/Stigma

Stigma for low-income individuals. Lack of insurance coverage for treatment. Lack of transportation to services. Lack of knowledge about service providers. – Social Services Provider

Huge stigma in this state, high depression and anxiety rates in a state where you don't go talk to someone and don't go get help from a mental health professional. And if you decide to get help, because resources are so limited, you are on a waiting list. Suicide rate is so much higher than the national average. – Social Services Provider

Admitting they have an issue. We are only 16 miles from Rapid City so access is fairly easy. However, I offered a free grief recovery seminar last spring through our church and not one person appeared. Yet all members went forward for a candle lighting remembrance on All Saint's Day. There are people hurting, but they are not aware enough of themselves to ask for help. All people experience loss and grief, not just those who have had a death in the family. – Other Health Provider

Affordable Care/Services

Very limited affordable mental health treatment. The increased number of mental health issues continues to escalate. It seems that those folks with acute mental health issues do not have many options. There are limited resources for chronic mental health issues. It seems that there are not enough financial resources so is as if there is a push them out the door, "it's not my problem" within the community. – Social Services Provider

Access to affordable or no cost care. Rapid City needs an inpatient hospital for long term treatment. Access to affordable or no cost mental health professionals and medications. Case management services need to be available for all. – Social Services Provider

Awareness/Education

Along with mental health, suicide awareness and prevention should be addressed within our area communities. – Other Health Provider

Suicide is the leading cause of death for young people ages 12-22 in SD and is increasing in that age range in the Black Hills. The numbers are growing and it is a public health crisis. – Social Services Provider

Awareness of services, access to services, service shortage/staff shortage, education and understanding of some primary healthcare providers as well as the community at large. Stigma. – Other Health Provider

Alcohol/Drug Use

I see as substance abuse the biggest challenges for people with mental health issues in OLC, which leads to myriad other issues. – Other Health Provider

I have a concern that mental health clients with co-occurring substance abuse may not have access or referrals to receive the level of care they require for their substance abuse. It has been an issue for years, we talk about mental health and they think it includes substance abuse when in reality both of them need specialized focus; assistance from a mental health counselor and assistance from an addiction counselor. We need to work together more, at least that is what we are seeing with youth. – Social Services Provider

Diagnosis/Treatment

Diagnosis, treatment, funding. – Social Services Provider

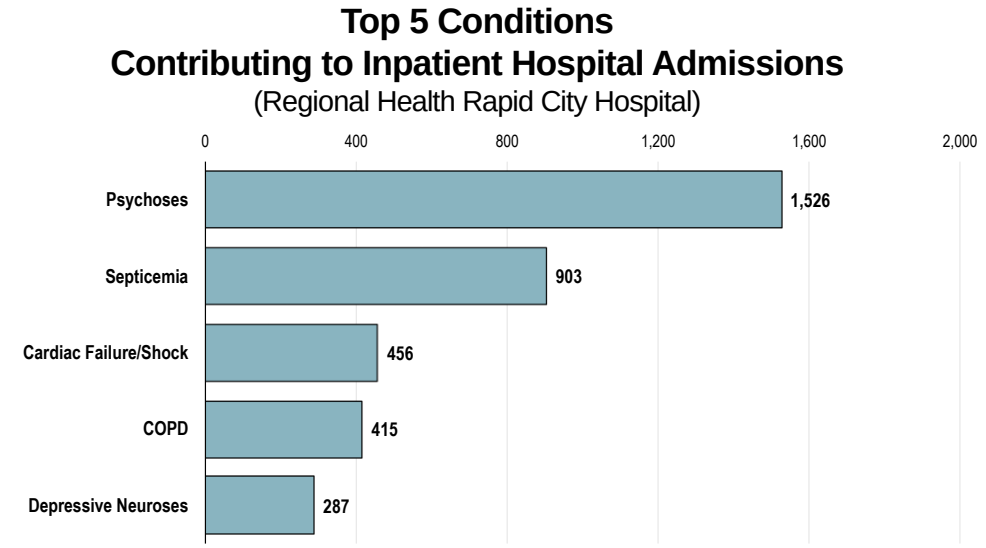
Lack of Pediatric Providers

Access to child psychiatry, need more providers than we have. – Physician

Death, Disease, & Chronic Conditions

Leading Causes of Hospitalization

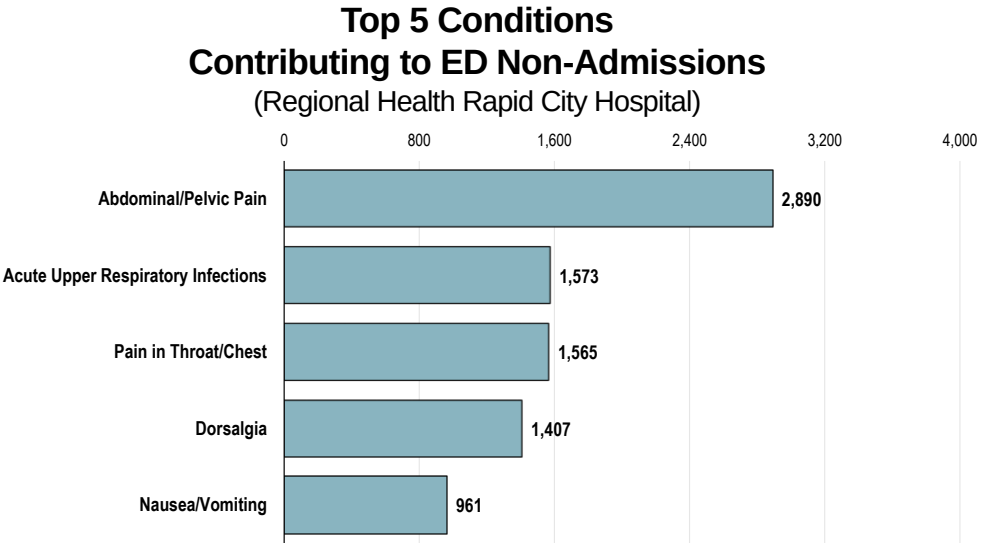
The following chart outlines the conditions that are among the top five primary diagnoses for inpatient hospital admissions at Regional Health Rapid City Hospital.



Source: • Regional Health.

Leading Causes of Emergency Department Visits

The top reasons for (non-admission) visits to the Regional Health Rapid City Hospital emergency department are outlined below.

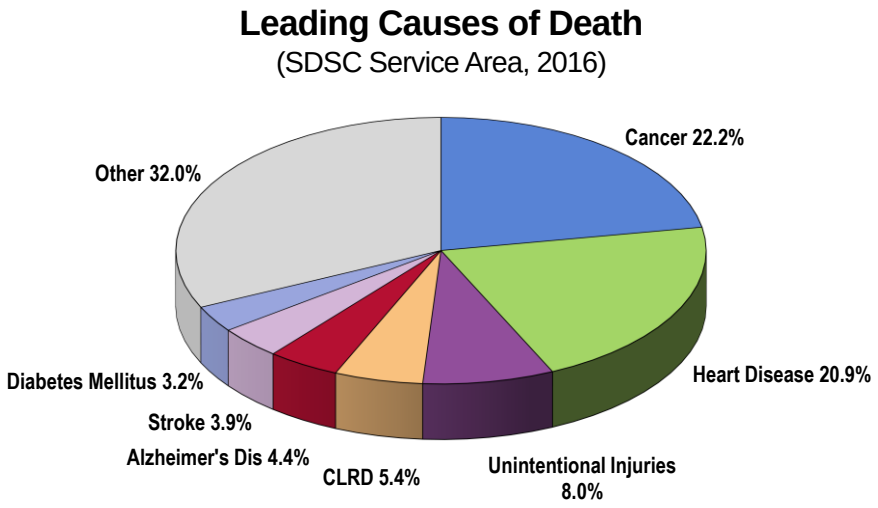


Source: • Regional Health.

Leading Causes of Death

Distribution of Deaths by Cause

Cancers and cardiovascular disease (heart disease and stroke) are leading causes of death in the community.



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- CLRD is chronic lower respiratory disease.

Age-Adjusted Death Rates for Selected Causes

In order to compare mortality in the region with other localities (in this case, the state and the United States), it is necessary to look at *rates* of death — these are figures which represent the number of deaths in relation to the population size (such as deaths per 100,000 population, as is used here).

Furthermore, in order to compare localities without undue bias toward younger or older populations, the common convention is to adjust the data to some common baseline age distribution. Use of these "age-adjusted" rates provides the most valuable means of gauging mortality against benchmark data, as well as *Healthy People 2020* targets.

Subsequent sections of this report outline annual average age-adjusted death rates per 100,000 population for selected causes of death in the area.

Cardiovascular Disease

About Heart Disease & Stroke

Heart disease is the leading cause of death in the United States, with stroke following as the third leading cause. Together, heart disease and stroke are among the most widespread and costly health problems facing the nation today, accounting for more than $500 billion in healthcare expenditures and related expenses in 2010 alone. Fortunately, they are also among the most preventable.

The leading modifiable (controllable) risk factors for heart disease and stroke are:

- High blood pressure
- High cholesterol
- Cigarette smoking
- Diabetes
- Poor diet and physical inactivity
- Overweight and obesity

The risk of Americans developing and dying from cardiovascular disease would be substantially reduced if major improvements were made across the US population in diet and physical activity, control of high blood pressure and cholesterol, smoking cessation, and appropriate aspirin use.

The burden of cardiovascular disease is disproportionately distributed across the population. There are significant disparities in the following based on gender, age, race/ethnicity, geographic area, and socioeconomic status:

- Prevalence of risk factors
- Access to treatment
- Appropriate and timely treatment
- Treatment outcomes
- Mortality

Disease does not occur in isolation, and cardiovascular disease is no exception. Cardiovascular health is significantly influenced by the physical, social, and political environment, including: maternal and child health; access to educational opportunities; availability of healthy foods, physical education, and extracurricular activities in schools; opportunities for physical activity, including access to safe and walkable communities; access to healthy foods; quality of working conditions and worksite health; availability of community support and resources; and access to affordable, quality healthcare.

- Healthy People 2020 (www.healthypeople.gov)

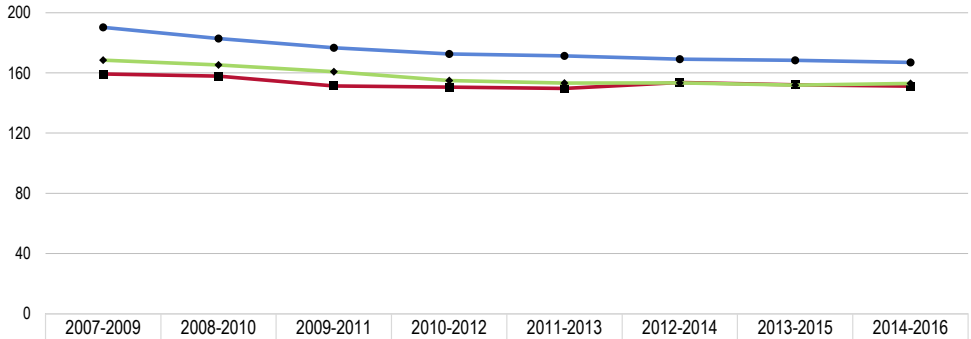
Age-Adjusted Heart Disease & Stroke Deaths

The greatest share of cardiovascular deaths is attributed to heart disease. The following charts outline age-adjusted mortality rates for heart disease and for stroke in our community.

Heart Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 156.9 or Lower (Adjusted)



	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	159.3	157.9	151.3	150.5	149.7	153.6	152.1	151.2
SD	168.5	165.3	160.8	154.9	153.2	153.4	151.9	153.0
US	190.3	182.9	176.7	172.6	171.3	169.1	168.4	167.0

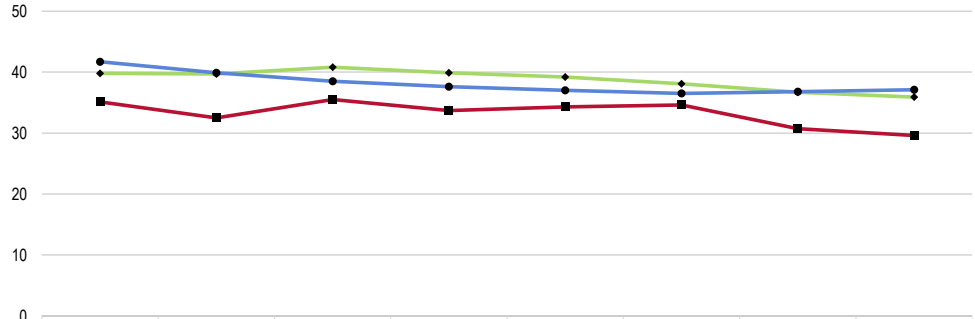
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-2]

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

Stroke: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 34.8 or Lower



	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	35.1	32.5	35.5	33.7	34.3	34.6	30.7	29.6
SD	39.8	39.7	40.8	39.9	39.2	38.1	36.7	35.9
US	41.7	39.9	38.5	37.6	37.0	36.5	36.8	37.1

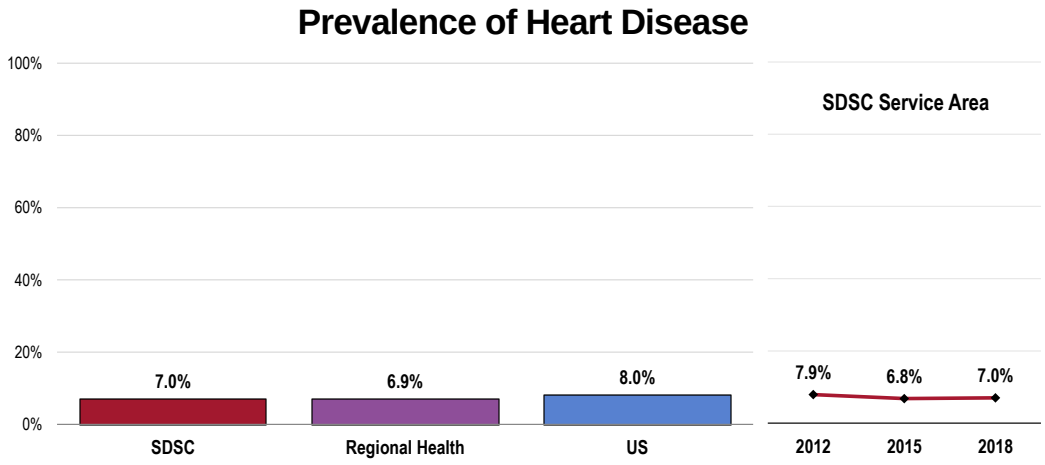
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-3]

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Prevalence of Heart Disease & Stroke

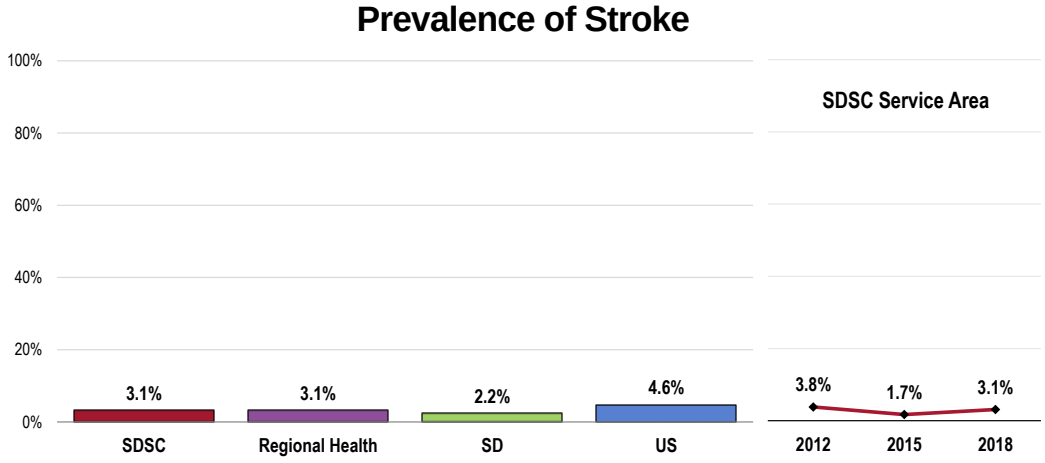
"Has a doctor, nurse, or other health professional ever told you that you had: a heart attack, also called a myocardial infarction; or angina or coronary heart disease?" (Heart disease prevalence here is a calculated prevalence that includes those responding affirmatively to either.)

"Has a doctor, nurse, or other health professional ever told you that you had a stroke?"



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 128]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Includes diagnoses of heart attack, angina or coronary heart disease.



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.

Notes:
- Asked of all respondents.

Cardiovascular Risk Factors

About Cardiovascular Risk

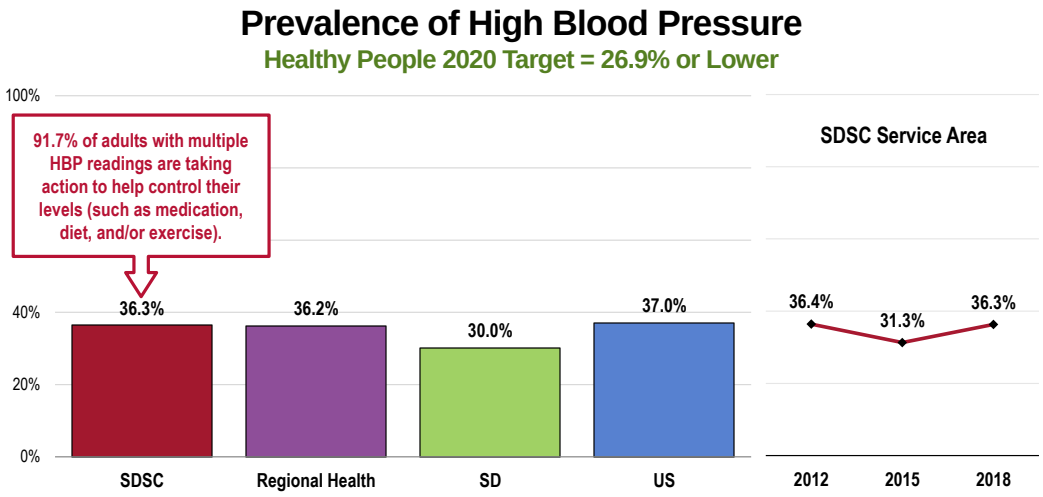
Controlling risk factors for heart disease and stroke remains a challenge. High blood pressure and cholesterol are still major contributors to the national epidemic of cardiovascular disease. High blood pressure affects approximately 1 in 3 adults in the United States, and more than half of Americans with high blood pressure do not have it under control. High sodium intake is a known risk factor for high blood pressure and heart disease, yet about 90% of American adults exceed their recommendation for sodium intake.

- Healthy People 2020 (www.healthypeople.gov)

High Blood Pressure & Cholesterol Prevalence

"Have you ever been told by a doctor, nurse, or other health care professional that you had high blood pressure?"

"Blood cholesterol is a fatty substance found in the blood. Have you ever been told by a doctor, nurse, or other health care professional that your blood cholesterol is high?"

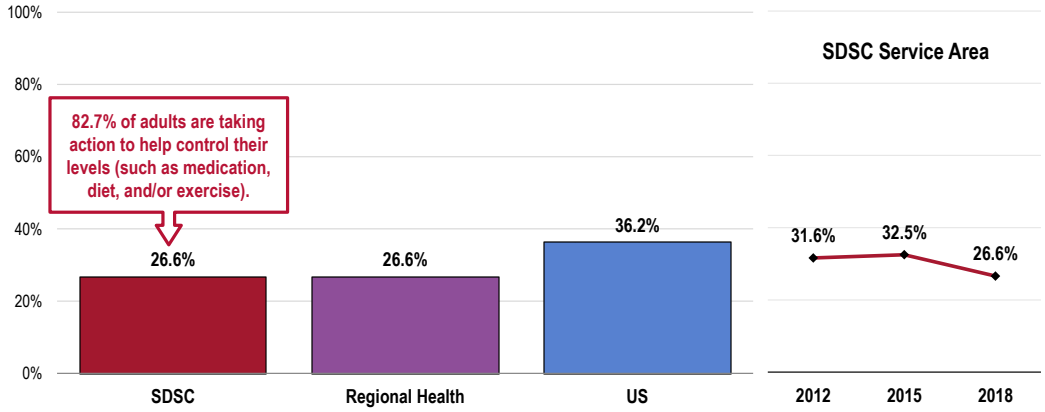


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 41,129]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-5.1]

Notes:
- Asked of all respondents.

Prevalence of High Blood Cholesterol

Healthy People 2020 Target = 13.5% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 44, 130]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-7]

Notes:
- Asked of all respondents.

About Cardiovascular Risk

Individual level risk factors which put people at increased risk for cardiovascular diseases include:

- High Blood Pressure
- High Blood Cholesterol
- Tobacco Use
- Physical Inactivity
- Poor Nutrition
- Overweight/Obesity
- Diabetes

- National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Three health-related behaviors contribute markedly to cardiovascular disease:

Poor nutrition. People who are overweight have a higher risk for cardiovascular disease. Almost 60% of adults are overweight or obese. To maintain a proper body weight, experts recommend a well-balanced diet which is low in fat and high in fiber, accompanied by regular exercise.

Lack of physical activity. People who are not physically active have twice the risk for heart disease of those who are active. More than half of adults do not achieve recommended levels of physical activity.

Tobacco use. Smokers have twice the risk for heart attack of nonsmokers. Nearly one-fifth of all deaths from cardiovascular disease, or about 190,000 deaths a year nationally, are smoking-related. Every day, more than 3,000 young people become daily smokers in the US.

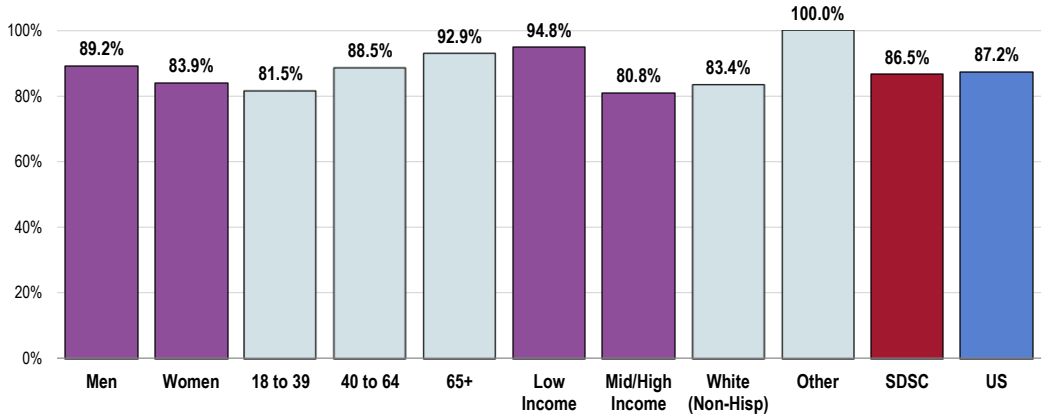
Modifying these behaviors is critical both for preventing and for controlling cardiovascular disease. Other steps that adults who have cardiovascular disease should take to reduce their risk of death and disability include adhering to treatment for high blood pressure and cholesterol, using aspirin as appropriate, and learning the symptoms of heart attack and stroke.

- National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Total Cardiovascular Risk

The following chart reflects the percentage of adults in the SDSC Service Area who report one or more of the following: being overweight; smoking cigarettes; being physically inactive; or having high blood pressure or cholesterol. See also *Nutrition, Physical Activity, Weight Status,* and *Tobacco Use* in the **Modifiable Health Risks** section of this report.

Present One or More Cardiovascular Risks or Behaviors
(SDSC Service Area, 2018)



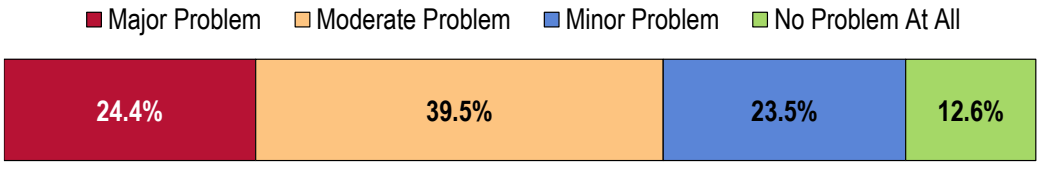
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 131]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) hypertension; 4) high blood cholesterol; and/or 5) being overweight/obese.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Key Informant Input: Heart Disease & Stroke

The following chart outlines key informants' perceptions of the severity of *Heart Disease & Stroke* as a problem in the community:

Perceptions of Heart Disease and Stroke as a Problem in the Community
(Key Informants, 2018)



Sources:
- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Prevalence/Incidence

Heart disease and stroke are major problems in OLC related to high level of diabetes, smoking, chronic diseases. – Other Health Provider

See or hear of many people who have had problems or a family member who does. See patrons after cardiac rehab who come join the community center after graduating from cardiac rehab. – Community/ Business Leader

Based on the number of people we know personally who have heart disease and cardiac concerns, this is a major problem. – Community/Business Leader

A friend of mine was having a heart attack and went to the emergency room. They turned him away because they said they were full. He ended up going to Gillette and then was flown to Denver. – Community/Business Leader

Many people in this community are having strokes and heart attacks. – Community/Business Leader

Leading issues for most adults. – Other Health Provider

I often hear that stroke and heart disease are the primary cause of death. – Other Health Provider

There is a high incidence rate in our communities of heart disease and stroke and limited access to heart doctors. – Other Health Provider

I work with many cardiac patients in the hospital and hear from church member of their problems. – Social Services Provider

High volume of patients seen with these complaints through the Emergency Department. – Other Health Provider

So many people are diagnosed with heart disease, high cholesterol, high blood pressure. For some it is hereditary, just like diabetes, but for so many it is like diabetes in that they have co-occurring mental health problems and don't eat right, exercise right, don't take their medications correctly. – Social Services Provider

They are common. – Physician

Native Americans have a high rate of heart disease and strokes. – Other Health Provider

Access to Care/Services

I have heard from patients how hard it is to get an appointment with the heart and vascular clinic. – Other Health Provider

Access to preventative and follow up appointments when issues arise. – Other Health Provider

Lifestyle

Major in every community. Today's life style and lack of personal responsibility are sometimes the root. – Community/ Business Leader

Tobacco use, alcohol use, unhealthy eating and unhealthy lifestyles. – Other Health Provider

Poor lifestyle choices and poor food choices drive this for many Native people. – Other Health Provider

Lack of Physical Activity

Because I also believe fitness, weight issues are a problem. These two issues go hand in hand. Overweight, unfit equals high blood pressure, diabetes, etc. The national statistics regarding stroke, heart attack and other heart diseases are increasing. – Other Health Provider

This is directly related to physical activity and nutrition. – Community/Business Leader

Prevention/Screenings

Prevention and identification are always difficult to promote and push out. I believe that there are adequate resources I believe the change health of the individuals make a major problem that is difficult to treat. – Other Health Provider

Lack of Providers

The majority of providers in our area for cardiology are in Rapid City. We have visiting physicians that come to Spearfish, but there could be more emphasis in Spearfish. – Other Health Provider

Leading Cause of Death

Number-one killer, lack of accessibility to see cardiologist. – Other Health Provider

Cancer

About Cancer

Continued advances in cancer research, detection, and treatment have resulted in a decline in both incidence and death rates for all cancers. Among people who develop cancer, more than half will be alive in five years. Yet, cancer remains a leading cause of death in the United States, second only to heart disease.

Many cancers are preventable by reducing risk factors such as: use of tobacco products; physical inactivity and poor nutrition; obesity; and ultraviolet light exposure. Other cancers can be prevented by getting vaccinated against human papillomavirus and hepatitis B virus. In the past decade, overweight and obesity have emerged as new risk factors for developing certain cancers, including colorectal, breast, uterine corpus (endometrial), and kidney cancers. The impact of the current weight trends on cancer incidence will not be fully known for several decades. Continued focus on preventing weight gain will lead to lower rates of cancer and many chronic diseases.

Screening is effective in identifying some types of cancers (see US Preventive Services Task Force [USPSTF] recommendations), including:

- Breast cancer (using mammography)
- Cervical cancer (using Pap tests)
- Colorectal cancer (using fecal occult blood testing, sigmoidoscopy, or colonoscopy)

- Healthy People 2020 (www.healthypeople.gov)

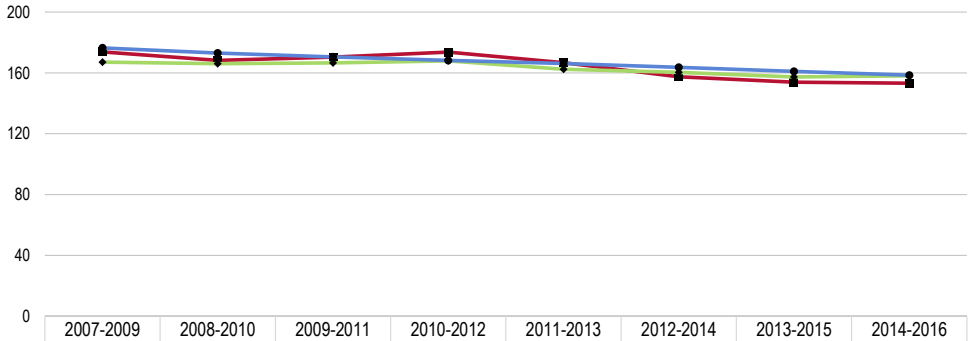
Age-Adjusted Cancer Deaths

The following chart illustrates age-adjusted cancer mortality (all types) in the SDSC Service Area.

Cancer: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 161.4 or Lower



	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	173.8	168.2	170.3	173.6	166.7	157.4	153.9	153.2
SD	167.1	166.0	166.5	167.9	162.4	160.3	157.3	158.0
US	176.4	173.0	170.5	168.2	166.2	163.6	161.0	158.5

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-1]

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Lung cancer is by far the leading cause of cancer deaths in the area. Other leading sites include prostate cancer among men, breast cancer among women, and colorectal cancer (both sexes).

Age-Adjusted Cancer Death Rates by Site

(2014-2016 Annual Average Deaths per 100,000 Population)

	SDSC Service Area	SD	US	HP2020
ALL CANCERS	153.2	158.0	158.5	161.4
Lung Cancer	41.1	40.3	40.3	45.5
Prostate Cancer	17.9	19.8	19.0	21.8
Colorectal Cancer	15.7	16.2	14.1	14.5
Female Breast Cancer	14.2	19.0	20.3	20.7

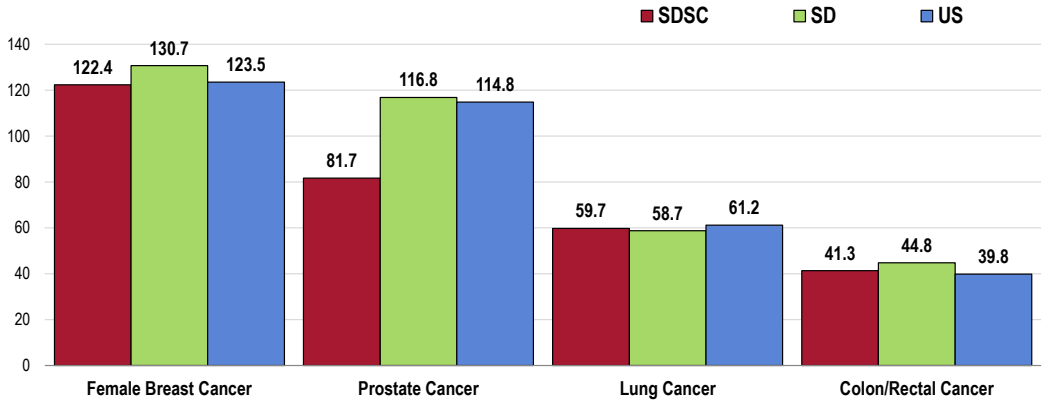
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov

Cancer Incidence

Incidence rates (or case rates) reflect the number of newly diagnosed cases in a given population in a given year, regardless of outcome. They usually are expressed as cases per 100,000 population per year. These rates are also age-adjusted.

Cancer Incidence Rates by Site

(Annual Average Age-Adjusted Incidence per 100,000 Population, 2010-2014)



Sources:
- State Cancer Profiles.
- Retrieved November 2018 from Community Commons at http://www.chna.org.

Notes:
- This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of cancers, adjusted to 2000 US standard population age groups (under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Cancer Risk

About Cancer Risk

Reducing the nation's cancer burden requires reducing the prevalence of behavioral and environmental factors that increase cancer risk.

- All cancers caused by cigarette smoking could be prevented. At least one-third of cancer deaths that occur in the United States are due to cigarette smoking.
- According to the American Cancer Society, about one-third of cancer deaths that occur in the United States each year are due to nutrition and physical activity factors, including obesity.

- National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Cancer Screenings

The American Cancer Society recommends that both men and women get a cancer-related checkup during a regular doctor's checkup. It should include examination for cancers of the thyroid, testicles, ovaries, lymph nodes, oral cavity, and skin, as well as health counseling about tobacco, sun exposure, diet and nutrition, risk factors, sexual practices, and environmental and occupational exposures.

Screening levels in the community were measured in the PRC Community Health Survey relative to: female breast cancer (mammography); cervical cancer (Pap smear testing); and colorectal cancer (sigmoidoscopy and fecal occult blood testing).

Female Breast Cancer Screening

About Screening for Breast Cancer

The US Preventive Services Task Force (USPSTF) recommends screening mammography, with or without clinical breast examination (CBE), every 1-2 years for women age 40 and older.

Rationale: The USPSTF found fair evidence that mammography screening every 12-33 months significantly reduces mortality from breast cancer. Evidence is strongest for women age 50-69, the age group generally included in screening trials. For women age 40-49, the evidence that screening mammography reduces mortality from breast cancer is weaker, and the absolute benefit of mammography is smaller, than it is for older women. Most, but not all, studies indicate a mortality benefit for women undergoing mammography at ages 40-49, but the delay in observed benefit in women younger than 50 makes it difficult to determine the incremental benefit of beginning screening at age 40 rather than at age 50.

The absolute benefit is smaller because the incidence of breast cancer is lower among women in their 40s than it is among older women. The USPSTF concluded that the evidence is also generalizable to women age 70 and older (who face a higher absolute risk for breast cancer) if their life expectancy is not compromised by comorbid disease. The absolute probability of benefits of regular mammography increase along a continuum with age, whereas the likelihood of harms from screening (false-positive results and unnecessary anxiety, biopsies, and cost) diminish from ages 40-70. The balance of benefits and potential harms, therefore, grows more favorable as women age. The precise age at which the potential benefits of mammography justify the possible harms is a subjective choice. The USPSTF did not find sufficient evidence to specify the optimal screening interval for women age 40-49.

- US Preventive Services Task Force, Agency for Healthcare Research and Quality, US Department of Health & Human Services

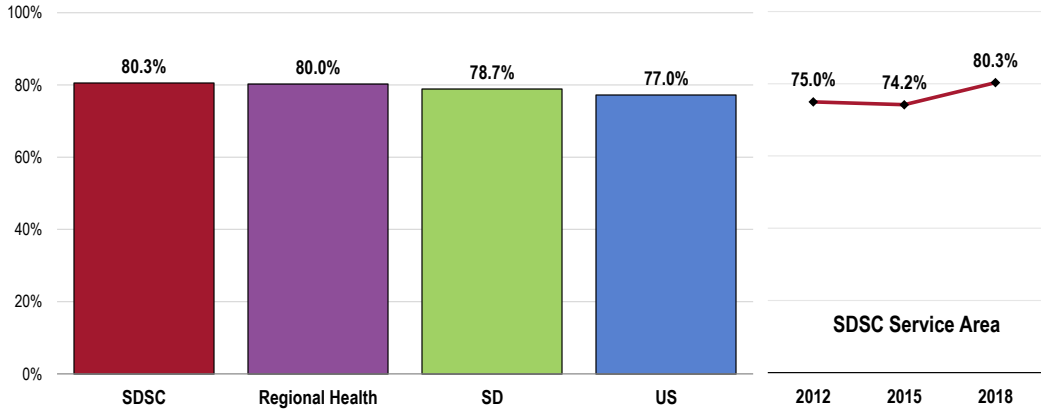
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

Breast Cancer Screening: "A mammogram is an x-ray of each breast to look for cancer. How long has it been since you had your last mammogram?" (Calculated here among women age 50 to 74 who indicate screening within the past 2 years.)

Have Had a Mammogram in the Past Two Years

(Among Women Age 50-74)

Healthy People 2020 Target = 81.1% or Higher



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 133]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-17]

Notes:
- Reflects female respondents 50-74.

Cervical Cancer Screenings

About Screening for Cervical Cancer

The US Preventive Services Task Force (USPSTF) strongly recommends screening for cervical cancer in women who have been sexually active and have a cervix.

Rationale: The USPSTF found good evidence from multiple observational studies that screening with cervical cytology (Pap smears) reduces incidence of and mortality from cervical cancer. Direct evidence to determine the optimal starting and stopping age and interval for screening is limited. Indirect evidence suggests most of the benefit can be obtained by beginning screening within 3 years of onset of sexual activity or age 21 (whichever comes first) and screening at least every 3 years. The USPSTF concludes that the benefits of screening substantially outweigh potential harms.

The USPSTF recommends against routinely screening women older than age 65 for cervical cancer if they have had adequate recent screening with normal Pap smears and are not otherwise at high risk for cervical cancer.

Rationale: The USPSTF found limited evidence to determine the benefits of continued screening in women older than 65. The yield of screening is low in previously screened women older than 65 due to the declining incidence of high-grade cervical lesions after middle age. There is fair evidence that screening women older than 65 is associated with an increased risk for potential harms, including false-positive results and invasive procedures. The USPSTF concludes that the potential harms of screening are likely to exceed benefits among older women who have had normal results previously and who are not otherwise at high risk for cervical cancer.

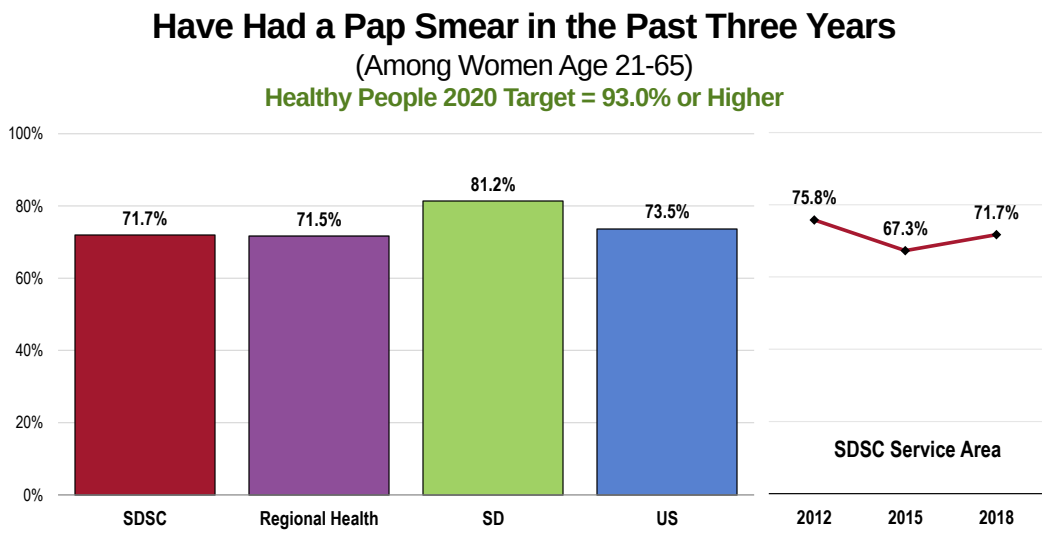
The USPSTF recommends against routine Pap smear screening in women who have had a total hysterectomy for benign disease.

Rationale: The USPSTF found fair evidence that the yield of cytologic screening is very low in women after hysterectomy and poor evidence that screening to detect vaginal cancer improves health outcomes. The USPSTF concludes that potential harms of continued screening after hysterectomy are likely to exceed benefits.

- US Preventive Services Task Force, Agency for Healthcare Research and Quality, US Department of Health & Human Services

Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

Cervical Cancer Screening: **"A Pap test is a test for cancer of the cervix. How long has it been since you had your last Pap test?"** (Calculated here among women age 21 to 65 who indicate screening within the past 3 years.)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 134]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-15]

Notes:
- Reflects female respondents age 21 to 65.

Colorectal Cancer Screenings

About Screening for Colorectal Cancer

The USPSTF recommends screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults, beginning at age 50 years and continuing until age 75 years.

The evidence is convincing that screening for colorectal cancer with fecal occult blood testing, sigmoidoscopy, or colonoscopy detects early-stage cancer and adenomatous polyps. There is convincing evidence that screening with any of the three recommended tests (fecal occult blood testing, sigmoidoscopy, colonoscopy) reduces colorectal cancer mortality in adults age 50 to 75 years. Follow-up of positive screening test results requires colonoscopy regardless of the screening test used.

- US Preventive Services Task Force, Agency for Healthcare Research and Quality, US Department of Health & Human Services

Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

Colorectal Cancer Screening: **"Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. How long has it been since your last sigmoidoscopy or colonoscopy?"** and

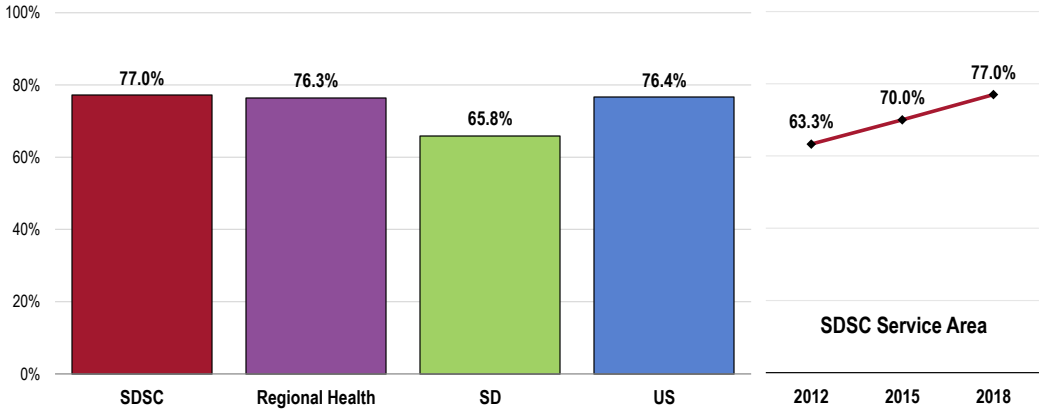
"A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. How long has it been since you had your last blood stool test?"

(Calculated here among both sexes age 50 to 75 who indicated fecal occult blood testing within the past year and/or sigmoidoscopy/colonoscopy [lower endoscopy] within the past 10 years.)

Have Had a Colorectal Cancer Screening

(Among Adults Age 50-75)

Healthy People 2020 Target = 70.5% or Higher



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 137]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-16]

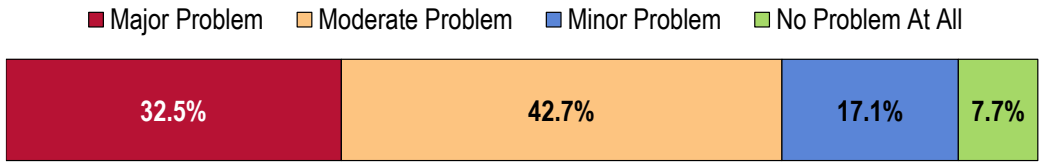
Notes:
- Asked of all respondents age 50 through 75.
- In this case, the term "colorectal screening" refers to adults age 50-75 receiving a FOBT (fecal occult blood test) in the past year and/or a lower endoscopy (sigmoidoscopy/colonoscopy) in the past 10 years.

Key Informant Input: Cancer

The following chart outlines key informants' perceptions of the severity of *Cancer* as a problem in the community:

Perceptions of Cancer as a Problem in the Community

(Key Informants, 2018)



Sources:
- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Prevalence/Incidence

High breast, gynecologic, and colon cancers prevalent in the population. – Other Health Provider

There seems to be a high instance of cancer among people I know. – Community/Business Leader

We have residents throughout the community affected by many different types of cancer. Way too many of them rely on crowd funding to help them cover the expense of treatment. – Community/ Business Leader

Based on the number of people we know personally who have cancer, this is a major problem. – Community/Business Leader

Frequent diagnosis and many uninsured patients. Only a few oncologists. – Physician

Anecdotally, cancer appears to be more prevalent than ever. – Community/Business Leader

Cancers are commonly diagnosed. – Other Health Provider

It seems as though the number of people dying of cancer or diagnosed with cancer is steadily increasing. People diagnosed with cancer may be unable to earn an income or have no resources. In turn, this decreases the quality of life for the patient and the caregivers. – Other Health Provider

We have had and continue to have numerous residents with cancer. With being a rural area, treatments and specialized healthcare providers are not available. Cancer patients are required to drive numerous miles for their care. This not only costs more money to the patients, but also time for their families. In addition, we see a great number that travel out-of-state to ensure the proper and upmost care available. – Community/Business Leader

Frequency and number of cases. – Other Health Provider

My perception is that more and more people are getting cancer. – Social Services Provider

Many people who develop cancer do not get the early care to defeat the disease. – Other Health Provider

We have a high incidence of breast cancer within our community. – Other Health Provider

Discussions with community members, at church, hair salon, one learns of people's concerns for their neighbors, friends or family who have Cancer. I also see many cancer patients in the hospital. – Social Services Provider

Cancer is diagnosed more and more frequently causing extreme emotional and financial hardships. – Social Services Provider

My perception is that the prevalence of cancer in our communities is high. – Other Health Provider

The increase rate of cancers within the area is huge. It seems as though our Cancer Care Institute is overwhelmed. Sometimes can be a while for tests to take place whether at the Regional Health system or elsewhere in the community to move forward with treatment. I think there needs to be additional expansion to have more navigators available for all types of cancer rather than just breast cancer. – Social Services Provider

People diagnosed and being treated is high. – Social Services Provider

Access to Care/Services

The treatment of cancer is a major problem. Inadequate access. – Other Health Provider

There is no local cancer care for patients. Most of them end up traveling at minimum an hour to receive treatment. – Other Health Provider

Access to services. We once were able to offer chemo services in Spearfish, and now everyone has to drive to Rapid City. – Other Health Provider

Access to cancer care is limited as most need to travel to other cities for treatment. This creates a hardship based on time, accommodations, transportation, and general energy. – Community/Business Leader

Cancer Institute needs to be enlarged to provide adequate access to cancer patients in our region. Many cancer patients seek care outside of the area and sometimes out of the region. RH oncologists are outstanding and more could be recruited if physical space for practice is available. – Other Health Provider

There are very limited options to get cancer care and if you don't have insurance you don't get care. – Social Services Provider

Lack of Providers

We have a shortage of hematologists and oncologists, so we have to refer people to providers in distant cities. Palliative Care can benefit patients in the early stages of disease but resources to provide this care are limited. People are being referred to hospice care very late in the course of their illness. Although they could receive benefit from earlier referral, there is a lack of awareness of the benefits of hospice services. – Physician

We have an inadequate number of oncologists for the service area. – Other Health Provider

Lifestyle

There is a number of factors. Tobacco, unsafe drinking water, exposure to asbestos and self-care. – Other Health Provider

We have a high incidence of cancer patients due to the age, smoking habits and occupations of our citizens. – Community/Business Leader

Affordable Care/Services

The expense. RCRH has a wonderful cancer care center and they work super hard, but there is a huge expense and much of our population is uninsured or underinsured. – Other Health Provider

Comorbidities

Our patients have complex chronic issues including social issues. We have a need for a registry to ensure appropriate care for these patients. – Other Health Provider

Contributing Factors

Lack of preventative medicine, substance abuse, follow through with appointments. – Other Health Provider

Diagnosis/Treatment

Patients establish care with cancer diagnosis or no previous medical care. – Other Health Provider

Respiratory Disease

About Asthma & COPD

Asthma and chronic obstructive pulmonary disease (COPD) are significant public health burdens. Specific methods of detection, intervention, and treatment exist that may reduce this burden and promote health.

Asthma is a chronic inflammatory disorder of the airways characterized by episodes of reversible breathing problems due to airway narrowing and obstruction. These episodes can range in severity from mild to life threatening. Symptoms of asthma include wheezing, coughing, chest tightness, and shortness of breath. Daily preventive treatment can prevent symptoms and attacks and enable individuals who have asthma to lead active lives.

COPD is a preventable and treatable disease characterized by airflow limitation that is not fully reversible. The airflow limitation is usually progressive and associated with an abnormal inflammatory response of the lung to noxious particles or gases (typically from exposure to cigarette smoke). Treatment can lessen symptoms and improve quality of life for those with COPD.

The burden of respiratory diseases affects individuals and their families, schools, workplaces, neighborhoods, cities, and states. Because of the cost to the healthcare system, the burden of respiratory diseases also falls on society; it is paid for with higher health insurance rates, lost productivity, and tax dollars. Annual healthcare expenditures for asthma alone are estimated at $20.7 billion.

Asthma. The prevalence of asthma has increased since 1980. However, deaths from asthma have decreased since the mid-1990s. The causes of asthma are an active area of research and involve both genetic and environmental factors.

Risk factors for asthma currently being investigated include:

- Having a parent with asthma
- Sensitization to irritants and allergens
- Respiratory infections in childhood
- Overweight

Asthma affects people of every race, sex, and age. However, significant disparities in asthma morbidity and mortality exist, in particular for low-income and minority populations. Populations with higher rates of asthma include: children; women (among adults) and boys (among children); African Americans; Puerto Ricans; people living in the Northeast United States; people living below the Federal poverty level; and employees with certain exposures in the workplace.

While there is not a cure for asthma yet, there are diagnoses and treatment guidelines that are aimed at ensuring that all people with asthma live full and active lives.

- Healthy People 2020 (www.healthypeople.gov)

[NOTE: COPD was changed to chronic lower respiratory disease (CLRD) with the introduction of ICD-10 codes. CLRD is used in vital statistics reporting, but COPD is still widely used and commonly found in surveillance reports.]

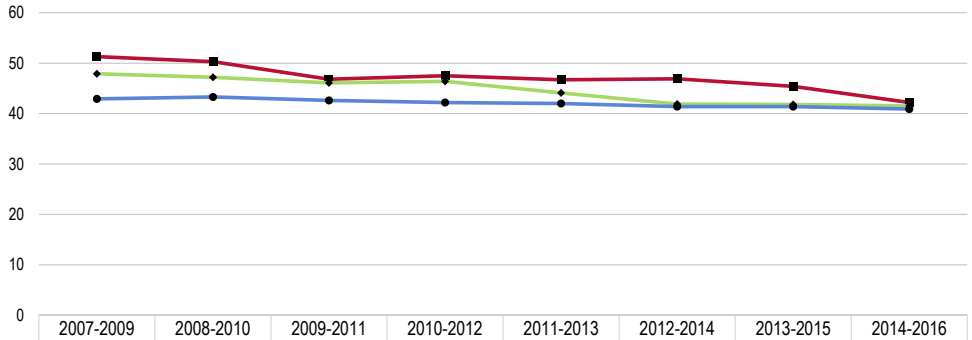
Age-Adjusted Respiratory Disease Deaths

Chronic lower respiratory diseases (CLRD) are diseases affecting the lungs; the most deadly of these is chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis.

Pneumonia and influenza mortality also is illustrated in the following chart. For prevalence of vaccinations against pneumonia and influenza, see also *Immunization & Infectious Diseases* in the **Infectious Disease** section of this report.

CLRD: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



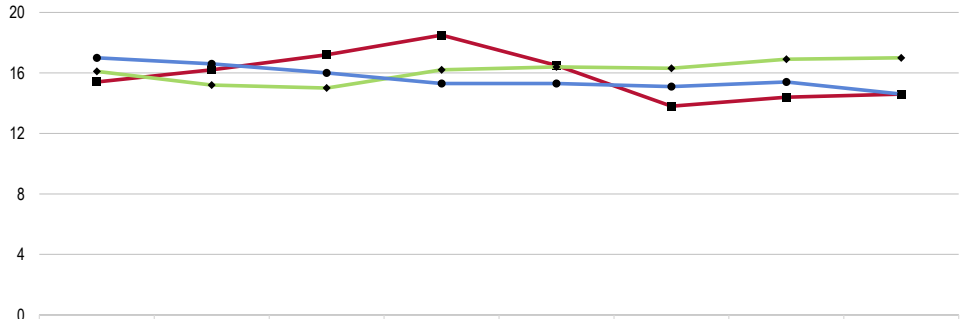
	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	51.3	50.3	46.8	47.5	46.7	46.9	45.4	42.2
SD	47.9	47.2	46.1	46.4	44.1	41.9	41.8	41.5
US	42.9	43.3	42.6	42.2	42.0	41.4	41.4	40.9

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- CLRD is chronic lower respiratory disease.

Pneumonia/Influenza: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	15.4	16.2	17.2	18.5	16.5	13.8	14.4	14.6
SD	16.1	15.2	15.0	16.2	16.4	16.3	16.9	17.0
US	17.0	16.6	16.0	15.3	15.3	15.1	15.4	14.6

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.

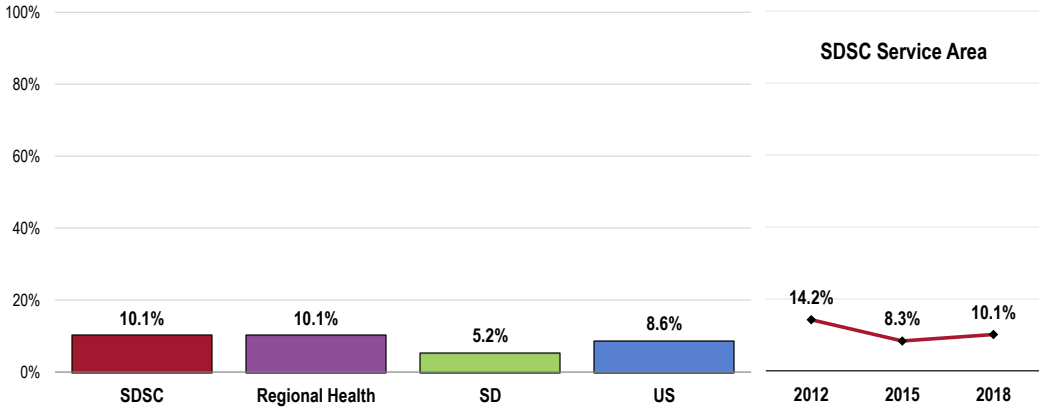
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Prevalence of Respiratory Diseases

COPD

"Would you please tell me if you have ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema?"

Prevalence of Chronic Obstructive Pulmonary Disease (COPD)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 24]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

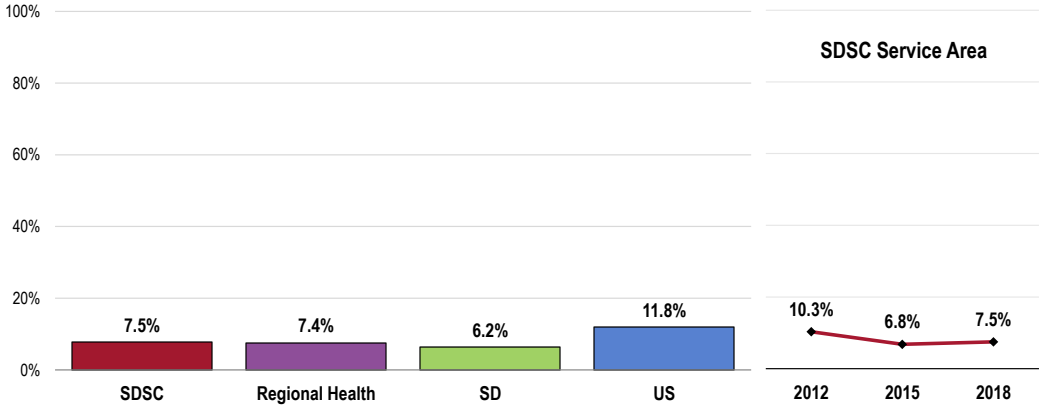
Notes:
- Asked of all respondents.
- Includes those having ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema.

Asthma

Adults: "Have you ever been told by a doctor, nurse, or other health professional that you had asthma?" and "Do you still have asthma?" (Calculated here as a prevalence of all adults who have ever been diagnosed with asthma and who still have asthma ["current asthma"].)

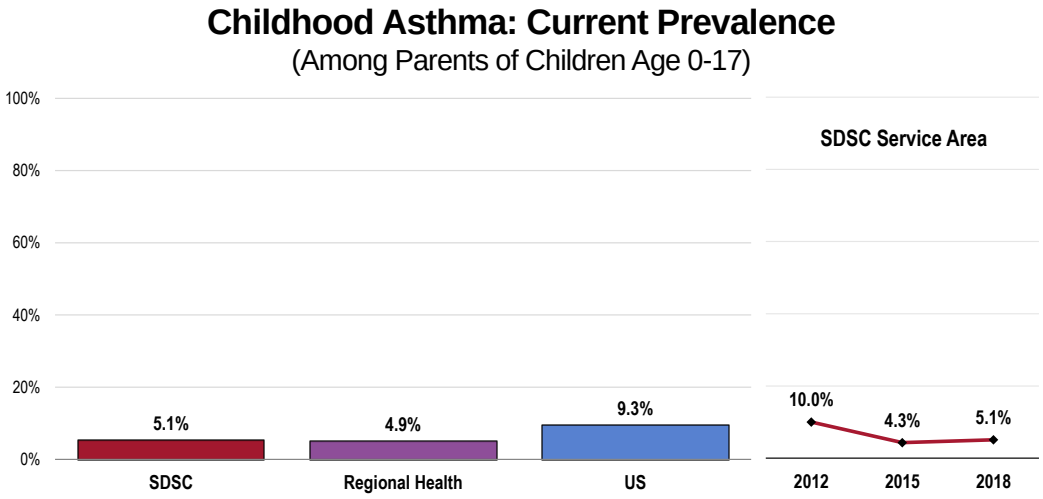
Children: "Has a doctor or other health professional ever told you that this child had asthma?" and "Does this child still have asthma?" (Calculated here as a prevalence of all children who have ever been diagnosed with asthma and who still have asthma ["current asthma"].)

Adult Asthma: Current Prevalence



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 138]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.

Notes:
- Asked of all respondents.
- Includes those who have ever been diagnosed with asthma, and who report that they still have asthma.

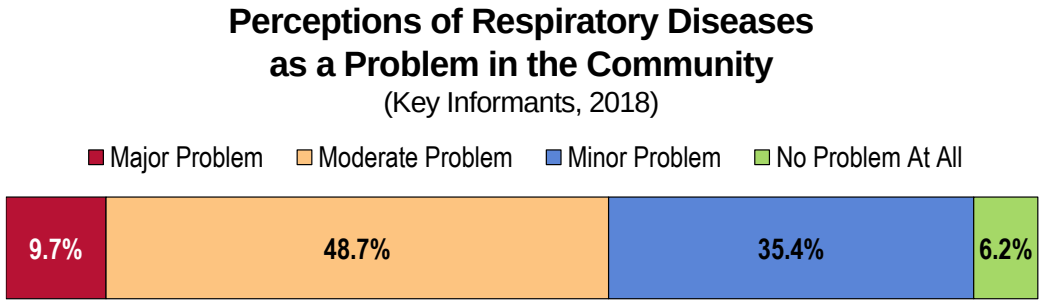


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 139]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents with children 0 to 17 in the household.
- Includes children who have ever been diagnosed with asthma, and whom are reported to still have asthma.

Key Informant Input: Respiratory Disease

The following chart outlines key informants' perceptions of the severity of *Respiratory Disease* as a problem in the community:



Sources:
- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Prevalence/Incidence

Common chief complaint seen in the emergency department. Don't feel this is out of normal for what other communities see. – Other Health Provider

Anecdotally this appears to be increasing. – Community/Business Leader

Substance Abuse

Respiratory diseases are a major problem in OLC related to tobacco/drug use and abuse. – Other Health Provider

Smoking tobacco and meth. Exposures in the mine for the older patients who worked in the mine. – Other Health Provider

Lack of Providers

Limited pulmonologists available. – Other Health Provider

Injury & Violence

About Injury & Violence

Injuries and violence are widespread in society. Both unintentional injuries and those caused by acts of violence are among the top 15 killers for Americans of all ages. Many people accept them as “accidents,” “acts of fate,” or as “part of life.” However, most events resulting in injury, disability, or death are predictable and preventable.

Injuries are the leading cause of death for Americans ages 1 to 44, and a leading cause of disability for all ages, regardless of sex, race/ethnicity, or socioeconomic status. More than 180,000 people die from injuries each year, and approximately 1 in 10 sustains a nonfatal injury serious enough to be treated in a hospital emergency department.

Beyond their immediate health consequences, injuries and violence have a significant impact on the well-being of Americans by contributing to:

- Premature death
- Disability
- Poor mental health
- High medical costs
- Lost productivity

The effects of injuries and violence extend beyond the injured person or victim of violence to family members, friends, coworkers, employers, and communities.

Numerous factors can affect the risk of unintentional injury and violence, including individual behaviors, physical environment, access to health services (ranging from pre-hospital and acute care to rehabilitation), and social environment (from parental monitoring and supervision of youth to peer group associations, neighborhoods, and communities).

Interventions addressing these social and physical factors have the potential to prevent unintentional injuries and violence. Efforts to prevent unintentional injury may focus on:

- Modifications of the environment
- Improvements in product safety
- Legislation and enforcement
- Education and behavior change
- Technology and engineering

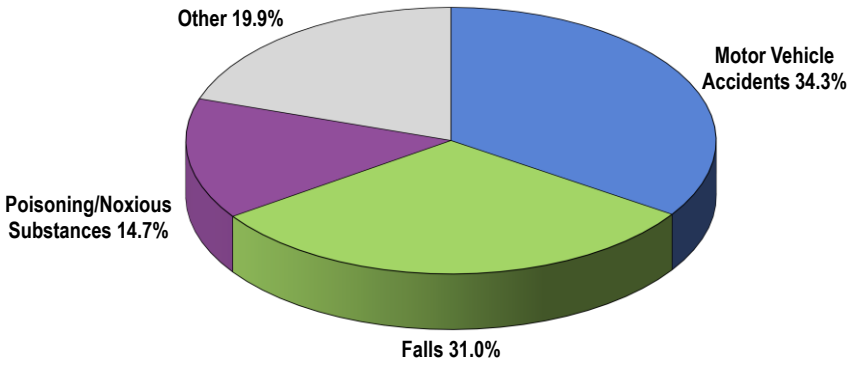
Efforts to prevent violence may focus on:

- Changing social norms about the acceptability of violence
- Improving problem-solving skills (for example, parenting, conflict resolution, coping)
- Changing policies to address the social and economic conditions that often give rise to violence
- Healthy People 2020 (www.healthypeople.gov)

Leading Causes of Accidental Death

Leading causes of accidental death in the area include the following:

Leading Causes of Accidental Death
(SDSC Service Area, 2014-2016)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.

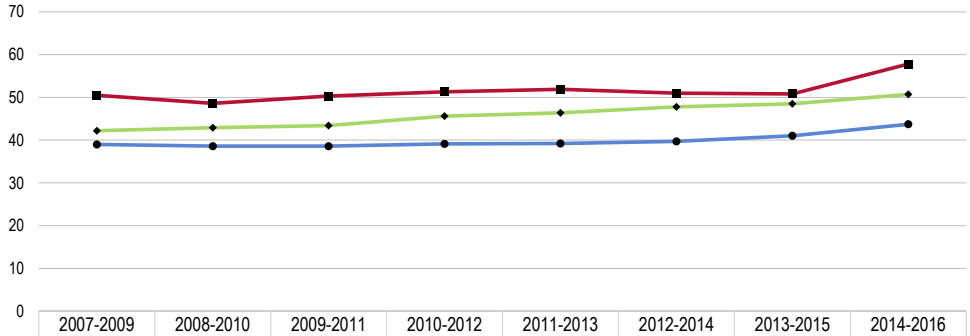
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Unintentional Injury

Age-Adjusted Unintentional Injury Deaths

The following chart outlines age-adjusted mortality rates for unintentional injury in the area.

Unintentional Injuries: Age-Adjusted Mortality Trends
(Annual Average Deaths per 100,000 Population)
Healthy People 2020 Target = 36.4 or Lower



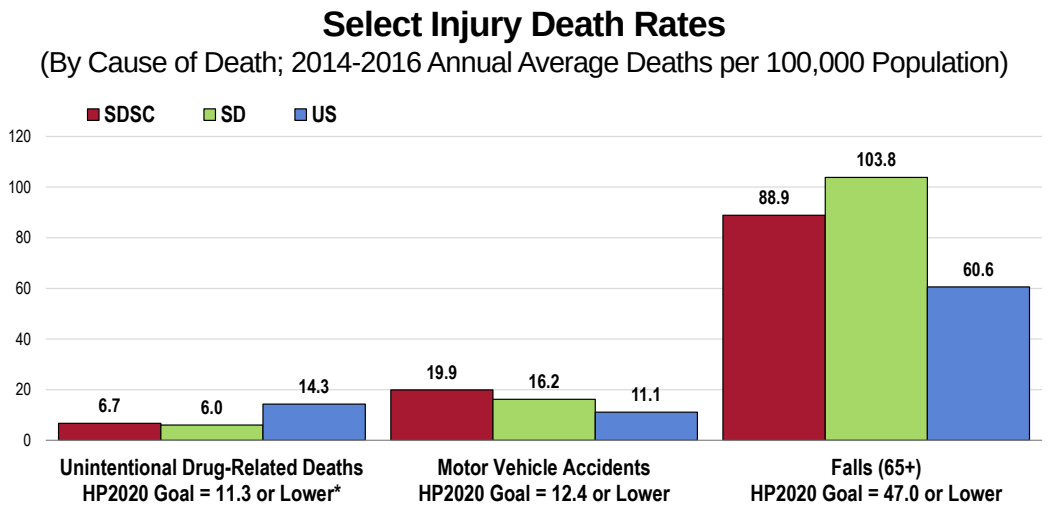
	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	50.5	48.6	50.3	51.3	51.9	51.0	50.8	57.8
SD	42.2	42.9	43.4	45.6	46.4	47.8	48.5	50.7
US	39.0	38.6	38.6	39.1	39.2	39.7	41.0	43.7

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-11]

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Age-Adjusted Deaths for Selected Injury-Related Causes

The following chart outlines age-adjusted mortality rates for unintentional drug-related deaths, motor vehicle crash deaths, and fall-related deaths (among adults age 65+).



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-13.1, IVP-23.2, SA-12]

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- *Healthy People 2020 goal includes all drug-induced deaths, both intentional and unintentional.

Injury Control

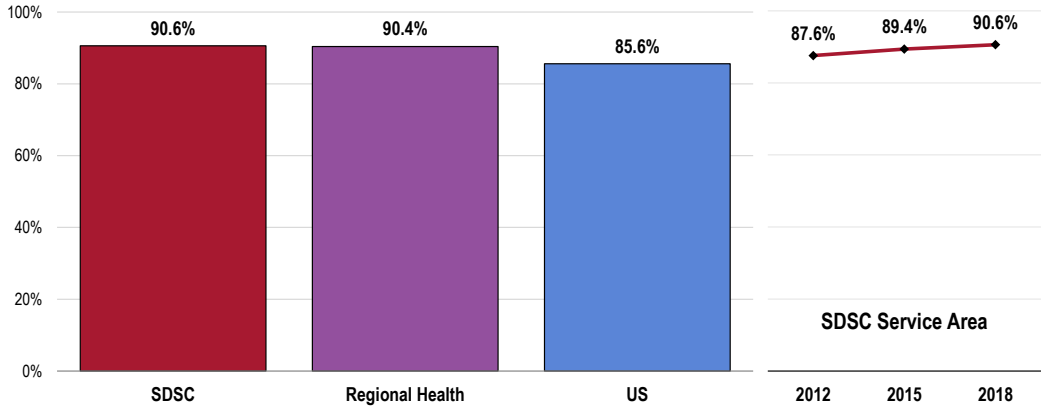
[For all children age 0-17] "How often does this child wear a child restraint or seat belt when riding in a car? Would you say: Always, Nearly Always, Sometimes, Seldom, or Never?"

[For children age 5-17, excluding those reported to not ride bikes] "In the past year, how often has this child worn a bicycle helmet when riding a bicycle? Would you say: Always, Nearly Always, Sometimes, Seldom, or Never?"

Child "Always" Wears a Seat Belt or Appropriate Restraint When Riding in a Vehicle

(Among Parents of Children Age 0-17)

Healthy People 2020 Target = 49.0% or Higher



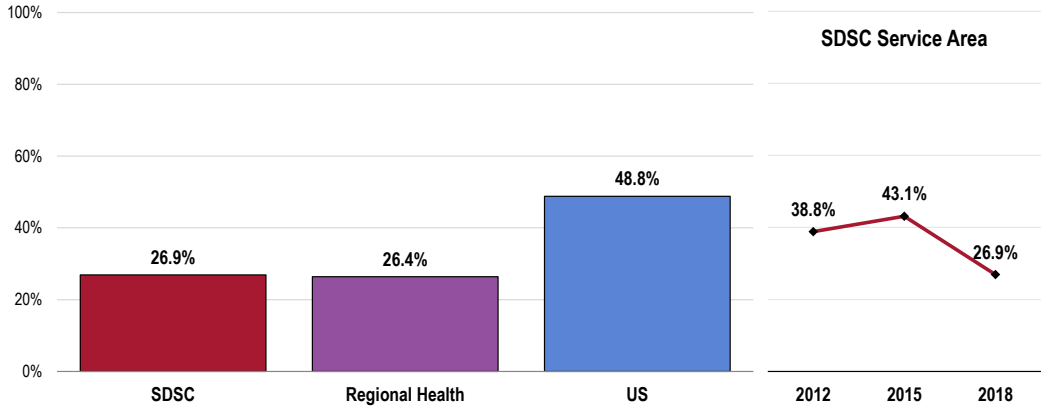
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 331]
- 2017 PRC National Child & Adolescent Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

Notes:
- Asked of all respondents with children age 2 through 17.

Child "Always" Wore a Helmet When Riding a Bicycle in the Past Year

(Among Parents of Children Age 5-17 Who Rode a Bike in the Past Year)

Healthy People 2020 Target = 49.0% or Higher



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 330]
- 2017 PRC National Child & Adolescent Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

Notes:
- Asked of all respondents with children age 2 through 17.

Intentional Injury (Violence)

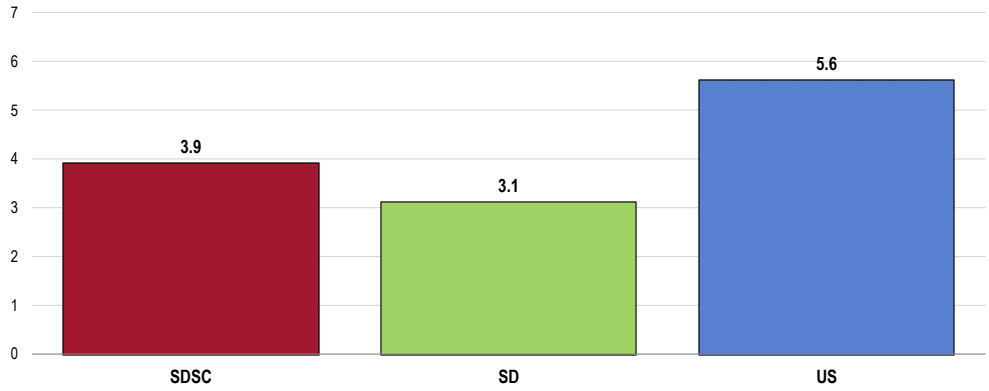
Homicide

Age-adjusted mortality attributed to homicide is shown in the following chart.

Homicide: Age-Adjusted Mortality Trends

(2007-2016 Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 5.5 or Lower



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-29]

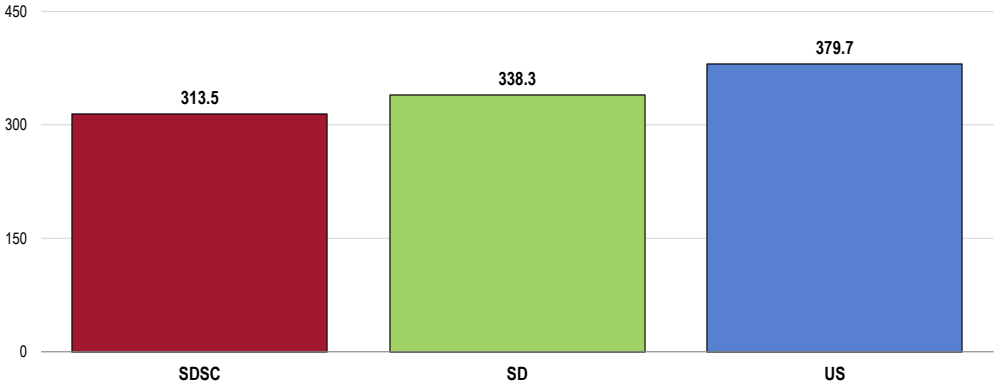
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Violent Crime

Violent crime is composed of four offenses (FBI Index offenses): murder and non-negligent manslaughter; forcible rape; robbery; and aggravated assault. Note that the quality of crime data can vary widely from location to location, depending on the consistency and completeness of reporting among various jurisdictions.

Violent Crime

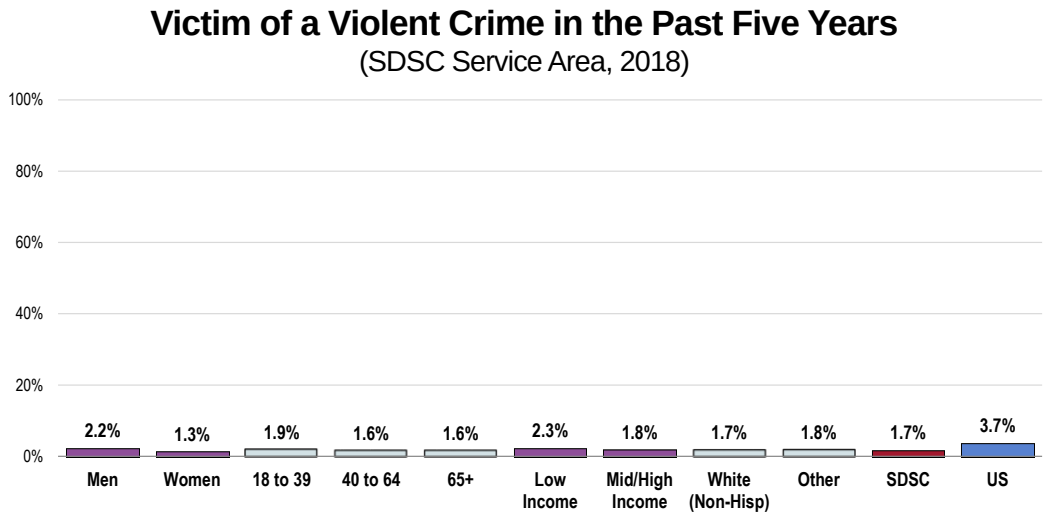
(Rate per 100,000 Population, 2012-2014)



Sources:
- Federal Bureau of Investigation, FBI Uniform Crime Reports.
- Retrieved November 2018 from Community Commons at http://www.chna.org.

Notes:
- This indicator reports the rate of violent crime offenses reported by the sheriff's office or county police department per 100,000 residents. Violent crime includes homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety.
- Participation by law enforcement agencies in the UCR program is voluntary. Sub-state data do not necessarily represent an exhaustive list of crimes due to gaps in reporting. Also, some institutions of higher education have their own police departments, which handle offenses occurring within campus grounds; these offenses are not included in the violent crime statistics, but can be obtained from the Uniform Crime Reports Universities and Colleges data tables.

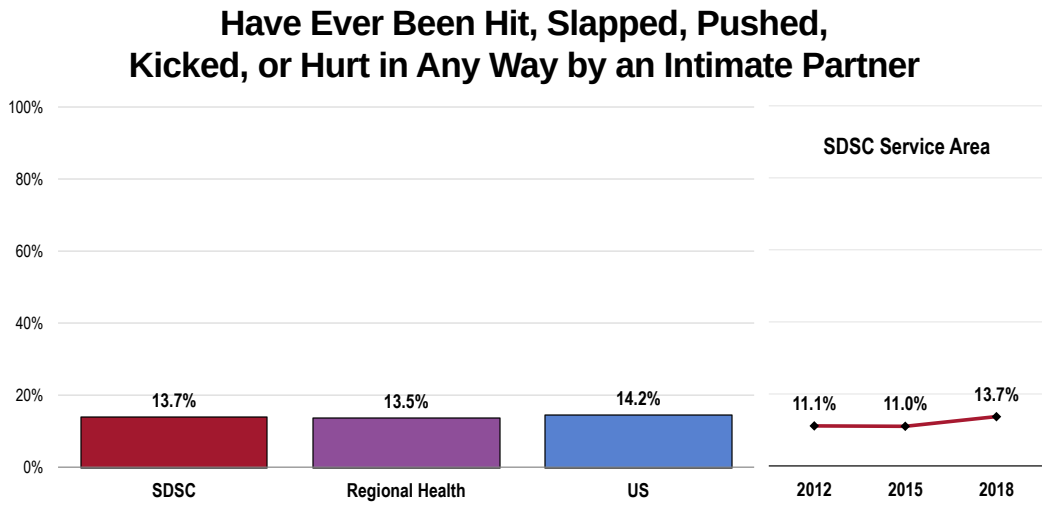
Violent Crime Experience: "Have you been the victim of a violent crime in your area in the past 5 years?"



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 46]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Intimate Partner Violence: "The next questions are about different types of violence in relationships with an intimate partner. By an intimate partner, I mean any current or former spouse, boyfriend, or girlfriend. Someone you were dating, or romantically or sexually intimate with, would also be considered an intimate partner. Has an intimate partner ever hit, slapped, pushed, kicked, or hurt you in any way?"

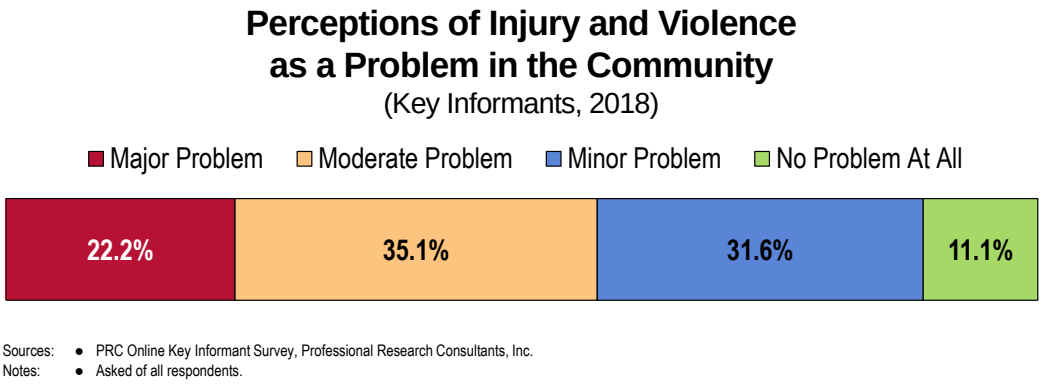


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 47]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Key Informant Input: Injury & Violence

The following chart outlines key informants' perceptions of the severity of *Injury & Violence* as a problem in the community:



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Prevalence/Incidence

It is a national problem and it exists in our communities. Just in this past week, there was a shooting in Box Elder, destruction of a school building in Belle Fourche, car windows were shot out in Rapid City. And that is only the violence side of our communities that made the news. People are injured in our communities by these violent attacks as well as in home domestic violence, mental health violence. It occurs every day and shows up in schools, homes and the hospitals. – Other Health Provider

High domestic violence rates. High motor vehicle injuries. – Other Health Provider

The community where I work is surrounded by violence and abuse, shootings, robberies, drug dealings, it's a dangerous side of town to be in. – Other Health Provider

Violent crimes are increasing, which correspond with increased opioid use. – Social Services Provider

Violent crime is increasing. – Community/Business Leader

Increase in incidences in community and workplace. – Other Health Provider

Alcohol/Drug Use

Substance abuse, including opioids, seems to be high here and this correlates with violence and injuries. There is also a large homeless population that are often victims of violence. – Other Health Provider

Due to meth and alcoholism, there is now an increase in violent injury and death as criminal behavior has erupted. – Community/Business Leader

Injury and violence are major problems in OLC related to high substance abuse. – Other Health Provider

Domestic/Family Violence

Domestic violence, sexual assault and child abuse are societal issues that are being addressed but need more resources to and awareness for prevention. We need a better system to protect children from abuse. – Social Services Provider

Domestic violence is a big concern in our community. Fits with addiction, low wages, and low graduation rates. – Other Health Provider

Vulnerable Population

There are limited services for the homeless, indigent, and chemically dependent to access and that leads to violence. – Other Health Provider

High rate of personal injury due to violence with certain populations. – Other Health Provider

Many natives have lost hope and a sense of identity. – Other Health Provider

Contributing Factors

Poverty, lack of supervision, substance abuse. Pediatric critical care for trauma victims is not available locally, patients must be transported to Sioux Falls, Denver or another distant location. – Other Health Provider

Stresses on the families, lack of resources and money, drug addiction, alcohol, parents working two jobs, availability of day care. – Other Health Provider

Traumatic Injuries

Traumatic injury, car crash and pedestrian vs. car, and intentional violence (especially stabbing) occur on a regular basis in Rapid City and the area. There seems to be few resources focused on these topics in the West River area. – Other Health Provider

Diabetes

About Diabetes

Diabetes mellitus occurs when the body cannot produce or respond appropriately to insulin. Insulin is a hormone that the body needs to absorb and use glucose (sugar) as fuel for the body's cells. Without a properly functioning insulin signaling system, blood glucose levels become elevated and other metabolic abnormalities occur, leading to the development of serious, disabling complications. Many forms of diabetes exist; the three common types are Type 1, Type 2, and gestational diabetes. Effective therapy can prevent or delay diabetic complications.

Diabetes mellitus:

- Lowers life expectancy by up to 15 years.
- Increases the risk of heart disease by 2 to 4 times.
- Is the leading cause of kidney failure, lower limb amputations, and adult-onset blindness.

The rate of diabetes mellitus continues to increase both in the United States and throughout the world. Due to the steady rise in the number of persons with diabetes mellitus, and possibly earlier onset of type 2 diabetes mellitus, there is growing concern about the possibility that the increase in the number of persons with diabetes mellitus and the complexity of their care might overwhelm existing healthcare systems.

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

Lifestyle change has been proven effective in preventing or delaying the onset of type 2 diabetes in high-risk individuals.

- Healthy People 2020 (www.healthypeople.gov)

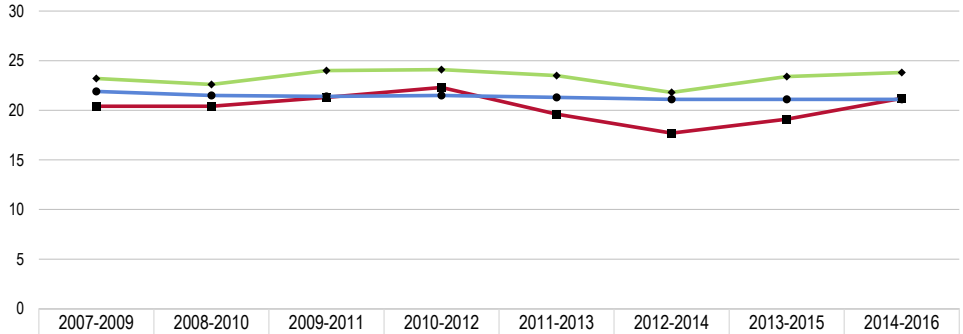
Age-Adjusted Diabetes Deaths

Age-adjusted diabetes mortality for the area is shown in the following chart.

Diabetes: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 20.5 or Lower (Adjusted)



	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	20.4	20.4	21.3	22.3	19.6	17.7	19.1	21.2
SD	23.2	22.6	24.0	24.1	23.5	21.8	23.4	23.8
US	21.9	21.5	21.4	21.5	21.3	21.1	21.1	21.1

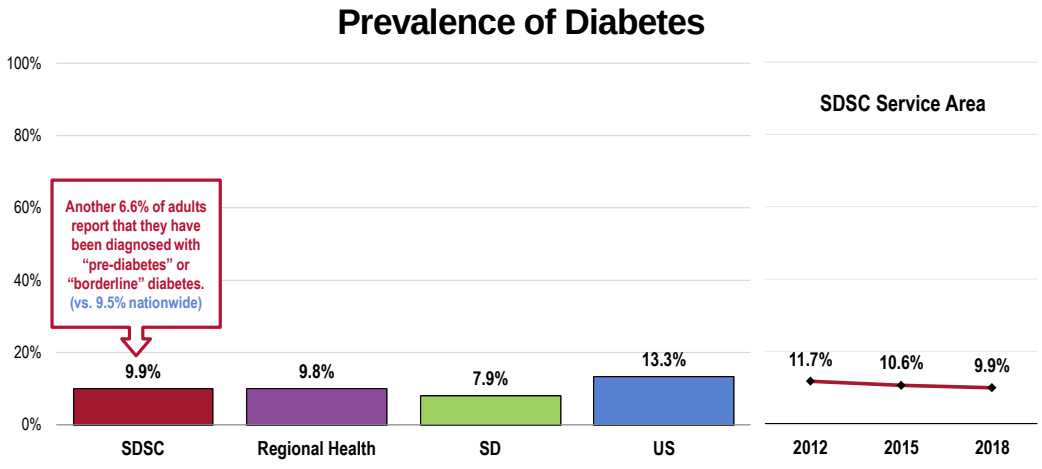
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective D-3]

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

Prevalence of Diabetes

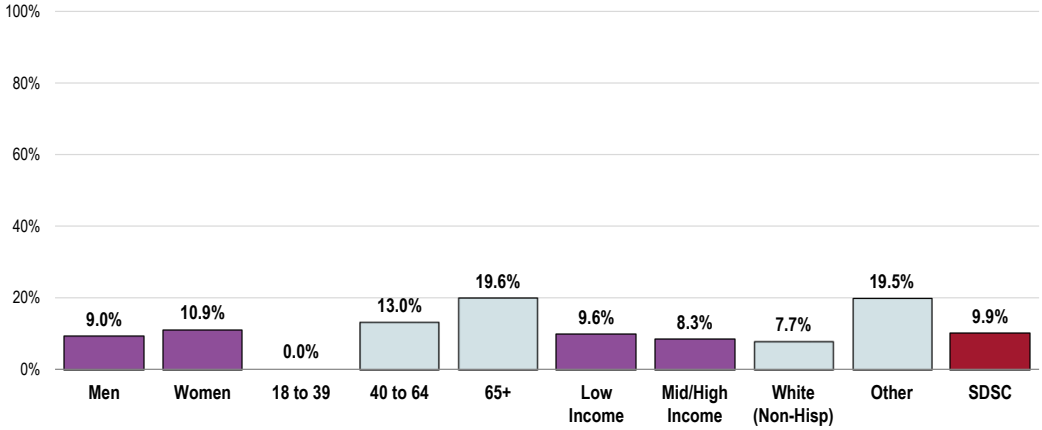
"Have you ever been told by a doctor, nurse, or other health professional that you have diabetes? (If female, add: **not counting diabetes only occurring during pregnancy?)"**

"Have you ever been told by a doctor, nurse, or other health professional that you have pre-diabetes or borderline diabetes? (If female, add: **other than during pregnancy?)"**



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 140]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.

Notes:
- Asked of all respondents.

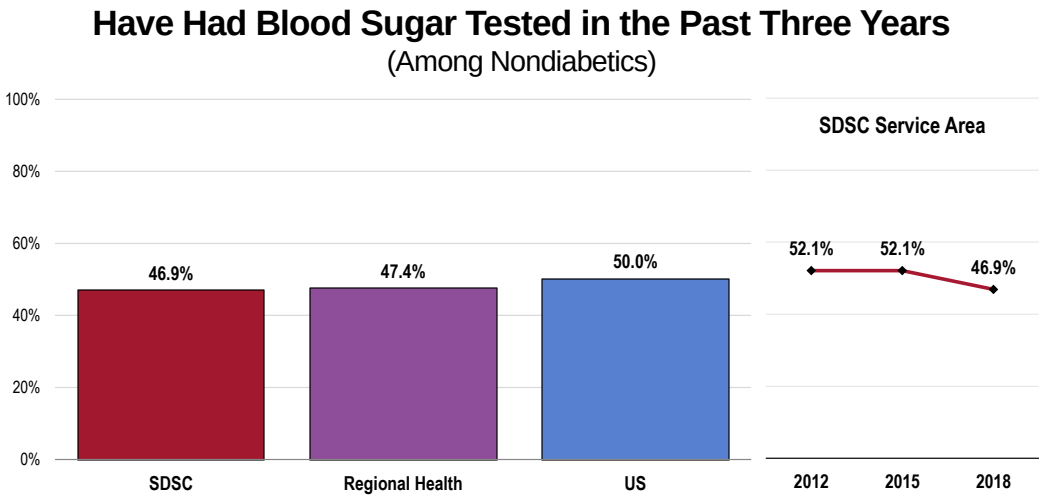


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 140]

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- Excludes gestational diabetes (occurring only during pregnancy).

Diabetes Testing

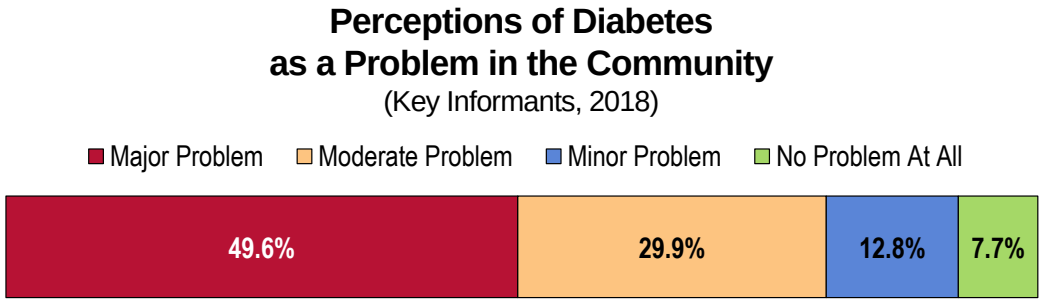
Adults who do not have diabetes: "Have you had a test for high blood sugar or diabetes within the past three years?"



Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 37]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of respondents who have not been diagnosed with diabetes.

Key Informant Input: Diabetes

The following chart outlines key informants' perceptions of the severity of *Diabetes* as a problem in the community:



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Among those rating this issue as a "major problem," the biggest challenges for people with diabetes are seen as:

Access to Care/Services

> *Underserved populations do not have resources to manage their diabetes. Low income, homeless or at risk of homeless do not have enough funds to purchase healthier foods or lack proper cooking facilities/equipment to prepare meals. Education does not help when a person cannot afford or have ways to properly prepare and store food. – Social Services Provider*
>
> *Lack of access to adult endocrinology physicians. Most visits must be scheduled with APPs. – Other Health Provider*

Sioux San, to be able to see the same healthcare provider. Diabetes education and mental health problems and like denial. – Other Health Provider

Have to drive for dialysis. – Other Health Provider

Transportation to and from education, access to appropriate foods. – Other Health Provider

Access, refrigeration, insurance. – Social Services Provider

Diagnosis and treatment. Getting to see a provider especially endocrinologist. – Other Health Provider

We have a large, uncontrolled population of diabetics in our community with limited access to specialty care and support services. – Other Health Provider

Awareness/Education

The biggest challenge for people with diabetes in OLC is consistent education availability and the lack of an endocrinologist or mid-level provider working specifically with diabetes. – Other Health Provider

Food education for those suffering with diabetes. – Other Health Provider

Education and compliance. We have a good diabetes education department who offer many services but the number of people with diabetes keeps increasing. We somehow need to engage people in healthy lifestyles to prevent diabetes. – Other Health Provider

Diabetes care is very detailed. When in the hospital patients are not well enough to learn everything. When they are discharged they might not have most of what they need, but often times there is a missing piece of either information, or medication or how to use the medication. A team approach that helps patients navigate in and out of the hospital to keep them healthier and out of the hospital is needed. – Physician

Very limited diabetic educational classes in the community. No formal diabetic education in house, clinic or hospital. – Other Health Provider

Inadequate early education with children, poor food access, too much sugar and processed foods, lack of education on preparation, no home economics in high schools, apathy and depression about the illness and early deaths or amputations due to diabetes. – Community/Business Leader

Lack of public education. – Other Health Provider

Lack of Providers

This area needs more endocrinologists to help manage diabetic patients. – Other Health Provider

Limited endocrinologists, limited food support surrounding diabetic diet needs. Inconsistent approach to diabetic care throughout healthcare community. – Other Health Provider

No endocrinologist. – Other Health Provider

Not enough endocrinologists. – Physician

Lack of adult endocrinologists. – Other Health Provider

There are doctors treating the disease within the community but very limited endocrinologists. – Social Services Provider

There are not enough diabetic specialists in our community yet we have a high incidence of diabetes. A newly diagnosed diabetic can wait 6-8 months to see an endocrinologist and must be referred by a PCP. Not all diabetics are accepted and therefore must be seen and treated strictly by their PCP. – Other Health Provider

Affordable Medication/Supplies

Cost of medication and access to primary care. – Community/Business Leader

Difficulty paying for newer diabetic medications. Following an appropriate diet, some have trouble affording/accessing healthy food. Limited health literacy. – Physician

Medication costs. Access to an Endocrinologist. Lack of education for medical providers on the latest in diabetes management. – Other Health Provider

Affordability of medications and preventative medications. Access to care. – Social Services Provider

Disease Management

Maintaining their health and medical supervision seems to be the biggest challenge. Complications from uncontrolled diabetes plays a part in many other emergency medical responses. – Other Health Provider

Noncompliance with medications related to substance abuse, lack of education, and funding of medications. – Other Health Provider

Noncompliance with care/treatment. – Other Health Provider

We have adequate healthcare to help with diabetes, but we have a lot of patients that have diabetes. Focus on more prevention, but that is difficult. Providers do not have the time to do this. – Other Health Provider

Prevention, good nutrition, compliance with a disease that affects every aspect of one's body and life. – Other Health Provider

Patient compliance and adherence to their medications. Lack of understanding of the consequences of noncompliance. Lack of adult endocrinologists. – Other Health Provider

Some simply do not take care of themselves and have co-occurring depression and mental health problems; some need ongoing and long-term treatment, which is expensive and challenging; some do not follow nutrition suggestions; some do not have transportation to appointments. – Social Services Provider

Prevalence/Incidence

I work with many diabetic patients in the hospital and the community. This is prevalent in our Native American population, but is not limited to it. In the community, one can observe patients who are blind, have lost a limb, or who complain of their issues. – Social Services Provider

The number of people with diabetes and the food choices they have living in poverty. – Social Services Provider

Growing diagnosis not only in our community but in the nation. – Other Health Provider

The rates of diabetes are very high in our state and especially within the Native American population. Compliance with diet and blood sugar control are ongoing challenges for people with diabetes. Having a good education program is essential for people with diabetes. – Other Health Provider

Lifestyle

The poor lifestyle habits and lower social-economic status of our citizens leads to a higher percentage of this disease in our community. – Community/Business Leader

Coaching to change lifestyle and diet interventions. – Other Health Provider

This is directly related to the low levels of physical activity and nutrition, which is directly impacting our young people. – Community/Business Leader

Healthy food and drink choices. Most of the food is purchased from the local stores, which are basically convenient stores. There is a grocery store that sells fresh fruits and vegetables in 3 of the districts. However, even the choices are limited. Lack of fitness facilities, either indoor or outdoor. – Other Health Provider

Poor diets, lack of compliance, high incidence of ethyl alcohol abuse. Lack of transportation for medical, low income population often with no payer source. – Public Health Representative

Nationwide problem of advertising and access to unhealthy foods is too great. Lack of prevention emphasis. We would benefit from a community program for healthy eating and exercise. – Physician

Eating healthy affordable food, getting regular exercise. – Other Health Provider

Healthy eating. Access to healthy options. – Other Health Provider

Vulnerable Population

For low income people with diabetes, Native Americans in particular, access to healthy foods is a challenge. – Social Services Provider

Native country has the highest rates of all people and are dying at record rates as well. – Other Health Provider

Our Native American population. – Other Health Provider

Alzheimer's Disease

About Dementia

Dementia is the loss of cognitive functioning—thinking, remembering, and reasoning—to such an extent that it interferes with a person's daily life. Dementia is not a disease itself, but rather a set of symptoms. Memory loss is a common symptom of dementia, although memory loss by itself does not mean a person has dementia. Alzheimer's disease is the most common cause of dementia, accounting for the majority of all diagnosed cases.

Alzheimer's disease is the 6th leading cause of death among adults age 18 years and older. Estimates vary, but experts suggest that up to 5.1 million Americans age 65 years and older have Alzheimer's disease. These numbers are predicted to more than double by 2050 unless more effective ways to treat and prevent Alzheimer's disease are found.

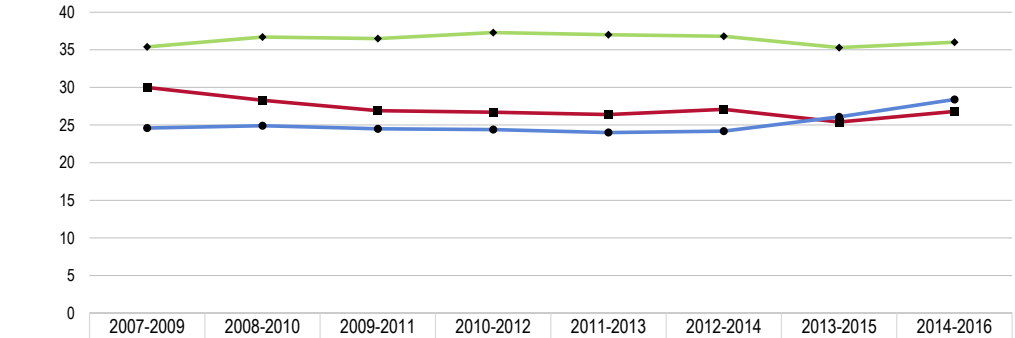
- Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Alzheimer's Disease Deaths

Age-adjusted Alzheimer's disease mortality is outlined in the following chart.

Alzheimer's Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	30.0	28.3	26.9	26.7	26.4	27.1	25.4	26.8
SD	35.4	36.7	36.5	37.3	37.0	36.8	35.3	36.0
US	24.6	24.9	24.5	24.4	24.0	24.2	26.1	28.4

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.

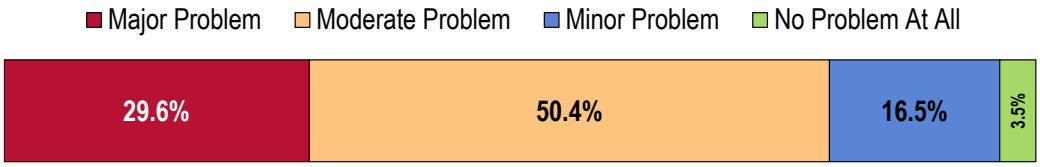
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Key Informant Input: Dementias, Including Alzheimer's Disease

Half of key informants taking part in an online survey are most likely to consider *Dementias, Including Alzheimer's Disease* as a "moderate problem" in the community.

Perceptions of Dementia/Alzheimer's Disease as a Problem in the Community

(Key Informants, 2018)



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Access to Care/Services

We are housing people with dementia at the Human Services Center in Yankton who cannot be served in their communities because of lack of available beds in nursing homes. Taking these beds from HSC take beds from people in need of crisis mental health or addiction inpatient services. – Community/ Business Leader

Not enough long term care options, especially if you are unable to pay out of pocket. Very difficult to get into a long-term care option with Medicaid that provides top quality care. – Other Health Provider

There are minimal services in the area and those we have are full. – Other Health Provider

Access to appropriate quality long term services is limited and difficult to access. Cost is a barrier also. – Other Health Provider

There are people who need to be in assisted living and there is nothing available. – Other Health Provider

Lack of memory care units in this area. Patients with this issue are sent out of the area and often times are put through involuntary commitment process and sent to the State Human Services Center in Yankton. – Other Health Provider

Limited resources and expertise to assist healthcare providers to manage disease. – Other Health Provider

There is not enough specialized facilities to care for these patients. Resources and funds seem to be limited. – Other Health Provider

We don't have many facilities for patients or family members to take their loved ones for live in or day care in this area, that doesn't cost a lot of money. – Other Health Provider

Access to daycare services, support systems for caregivers and access to neurology. – Physician

There are few facilities that provide quality, personalized care. – Community/Business Leader

Where do people go if they can't go to Regional. Limited elder care facilities, waiting lists, funding. – Social Services Provider

Mental health services in Rapid City and South Dakota in general are limited with waiting list and lack of providers available. – Social Services Provider

Lack of services available for individuals with these diseases. – Social Services Provider

No resources. – Other Health Provider

Aging Population

The average age of our citizens is high. The lifestyle habits of our community is also a cause of higher rates of this disease. – Community/Business Leader

We are facing an aging population. – Community/Business Leader

Increase number of retired people moving into area. No family resources. – Other Health Provider

Spearfish has a high population of retired individuals. – Other Health Provider

This community, like most in SD, is aging and the incidence of Alzheimer's is only growing with no concerted effort for the community to diagnose earlier, to provide resources to the family caregivers for their education, support for day care centers for adults, more beds for more advanced care needs. – Physician

We have a relatively elderly population. Primary care providers are slow to identify it and may provide inappropriate treatment, e.g. antipsychotic medications to treat insomnia. In home care is expensive, and long-term care costs even more. There are limited resources for diagnosis and for caregiver education to help families keep their loved ones in the community. It is difficult to find a place to treat patients with dementia who exhibit violent behavior. – Physician

Impact on Families/Caregivers

My brother was diagnosed with dementia a few years ago. He lived in another state, but I wanted a support group. I couldn't find one. There were some for mental health issues, but not dementia. – Social Services Provider

We have nursing homes, assisted living, but need programs and support groups for families. – Other Health Provider

Prevalence/Incidence

Dementia and Alzheimer's disease is known in our community. The resources for those patients and their families is very minimal. – Community/Business Leader

Many people show signs of Dementia/Alzheimer's in our Independent living which includes: Missing medications, attending appointments in the wrong areas, date, or times, wandering around, and asking the same question to the same person over and over again. – Other Health Provider

Affordable Care/Services

Many people cannot afford consistent medical care for these diseases or the medications that are useful for their "treatment". I assume consistency of care is very important with these diseases but it is difficult to afford. – Other Health Provider

Lack of affordable housing care units in area. – Community/Business Leader

End-of-Life Issues

Awareness of end of life issues: the need for advance healthcare planning such as advance directives; limited use/awareness of hospice and palliative care services. People may lose capacity to make healthcare decisions due to injury or illness, and if advance directives and general powers of attorney are not in place, then appropriate treatment decisions or placement may be delayed. This can lead to increased inappropriate use of healthcare resources. – Physician

Lack of Providers

There is a limited number of providers who are willing to diagnose these diseases. A close friend was referred for neuropsych evaluation and it took two months to get the appointment, followed by another three months for the appointment to occur. – Other Health Provider

Kidney Disease

About Kidney Disease

Chronic kidney disease and end-stage renal disease are significant public health problems in the United States and a major source of suffering and poor quality of life for those afflicted. They are responsible for premature death and exact a high economic price from both the private and public sectors. Nearly 25% of the Medicare budget is used to treat people with chronic kidney disease and end-stage renal disease.

Genetic determinants have a large influence on the development and progression of chronic kidney disease. It is not possible to alter a person's biology and genetic determinants; however, environmental influences and individual behaviors also have a significant influence on the development and progression of chronic kidney disease. As a result, some populations are disproportionately affected. Successful behavior modification is expected to have a positive influence on the disease.

Diabetes is the most common cause of kidney failure. The results of the Diabetes Prevention Program (DPP) funded by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) show that moderate exercise, a healthier diet, and weight reduction can prevent development of type 2 diabetes in persons at risk.

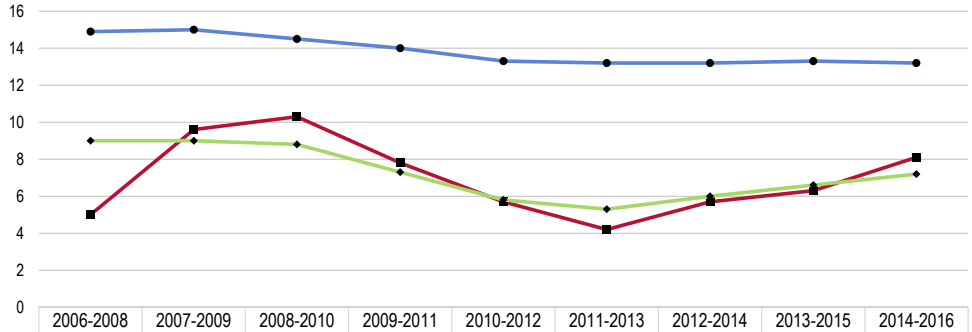
- Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Kidney Disease Deaths

Age-adjusted kidney disease mortality is described in the following chart.

Kidney Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



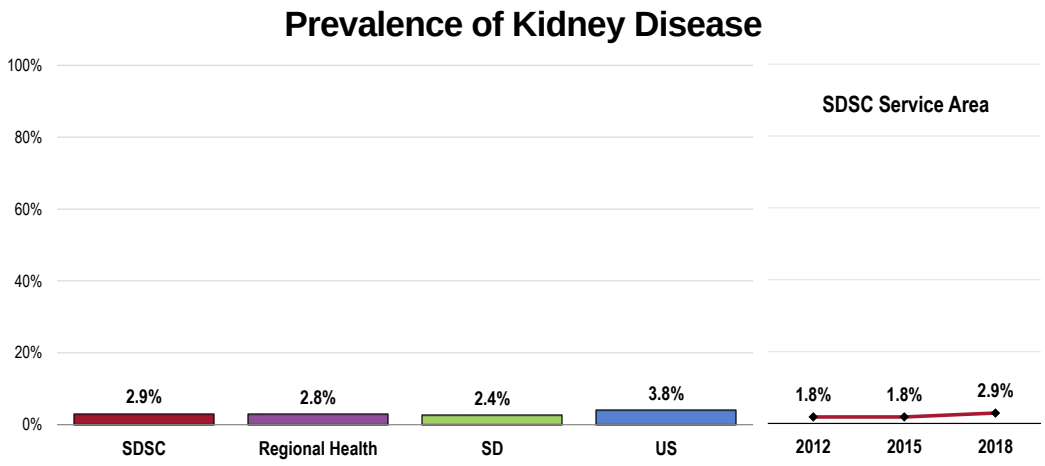
	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	5.0	9.6	10.3	7.8	5.7	4.2	5.7	6.3	8.1
SD	9.0	9.0	8.8	7.3	5.8	5.3	6.0	6.6	7.2
US	14.9	15.0	14.5	14.0	13.3	13.2	13.2	13.3	13.2

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Prevalence of Kidney Disease

"Would you please tell me if you have ever suffered from or been diagnosed with kidney disease?"

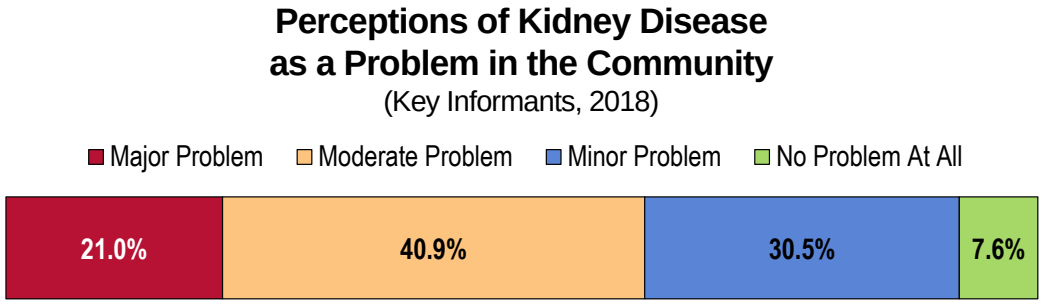


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 30]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Key Informant Input: Kidney Disease

The following chart outlines key informants' perceptions of the severity of *Kidney Disease* as a problem in the community:



Sources:
- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Top Concerns

Among those rating this issue as a "major problem," reasons related to the following:

Comorbidities

> *Large population with poorly controlled diabetes leading to kidney disease. – Other Health Provider*
>
> *Many of the community residents are predisposed to diabetes and in turn, chronic kidney disease. There are just one or two physicians in the community who are nephrologist. – Other Health Provider*
>
> *Diabetes is a huge problem in OLC, contributing to chronic kidney disease. – Other Health Provider*
>
> *Chronic care is not limited to kidney disease, and it is diabetes that needs to be addressed with a clinic and medical staff solely to address all diabetes-related health issues. – Community/Business Leader*

Many Natives have high blood pressure and diabetes and do not get the care they need. Lack of education is also a problem. – Other Health Provider

Because of the high rates of diabetes. – Other Health Provider

Very high rate of diabetic kidney disease. – Physician

High incidence of diabetes and ethyl alcohol abuse. – Public Health Representative

Many of our patients, particularly, but not limited to our Native American population have diabetes which often leads to kidney disease and renal failure. – Social Services Provider

Access to Care/Services

Chronic kidney disease becomes a major issue when it becomes end stage renal disease. Patients requiring dialysis are required to drive 90 miles one direction for dialysis services. This could mean 3 trips or more weekly for patients and their caregiver(s). – Other Health Provider

The need for dialysis continues to grow in our resident population as well as visitors to the area. Also need home dialysis service and rural dialysis clinics. – Other Health Provider

Dialysis chairs in and around the community are hard to find. Often patients are admitted to the hospital and started on dialysis and have to travel from Rapid City to Spearfish for a dialysis opening. Patients often struggle with finding transportation to and from dialysis which leads to compliance issues. Also, the skilled nursing facilities are often filled with so many dialysis patients that they are not able to accommodate any more. – Other Health Provider

Limited dialysis options, no insurance no care. – Social Services Provider

Lack of Providers

No specialist dealing with disease processes involving endocrinologists. – Other Health Provider

We need to have more dialysis options available. – Other Health Provider

Lack of urologists. – Community/Business Leader

Disease Management

Uncontrolled health problems. – Other Health Provider

Palliative care and chronic disease management is more reactive than proactive for a myriad of reasons. – Other Health Provider

Potentially Disabling Conditions

Arthritis, Osteoporosis, & Chronic Back Conditions

About Arthritis, Osteoporosis, & Chronic Back Conditions

There are more than 100 types of arthritis. Arthritis commonly occurs with other chronic conditions, such as diabetes, heart disease, and obesity. Interventions to treat the pain and reduce the functional limitations from arthritis are important, and may also enable people with these other chronic conditions to be more physically active. Arthritis affects 1 in 5 adults and continues to be the most common cause of disability. It costs more than $128 billion per year. All of the human and economic costs are projected to increase over time as the population ages. There are interventions that can reduce arthritis pain and functional limitations, but they remain underused. These include: increased physical activity; self-management education; and weight loss among overweight/obese adults.

Osteoporosis is a disease marked by reduced bone strength leading to an increased risk of fractures (broken bones). In the United States, an estimated 5.3 million people age 50 years and older have osteoporosis. Most of these people are women, but about 0.8 million are men. Just over 34 million more people, including 12 million men, have low bone mass, which puts them at increased risk for developing osteoporosis. Half of all women and as many as 1 in 4 men age 50 years and older will have an osteoporosis-related fracture in their lifetime.

Chronic back pain is common, costly, and potentially disabling. About 80% of Americans experience low back pain in their lifetime. It is estimated that each year:

- 15%-20% of the population develop protracted back pain.
- 2-8% have chronic back pain (pain that lasts more than 3 months).
- 3-4% of the population is temporarily disabled due to back pain.
- 1% of the working-age population is disabled completely and permanently as a result of low back pain.

Americans spend at least $50 billion each year on low back pain. Low back pain is the:

- 2nd leading cause of lost work time (after the common cold).
- 3rd most common reason to undergo a surgical procedure.
- 5th most frequent cause of hospitalization.

Arthritis, osteoporosis, and chronic back conditions all have major effects on quality of life, the ability to work, and basic activities of daily living.

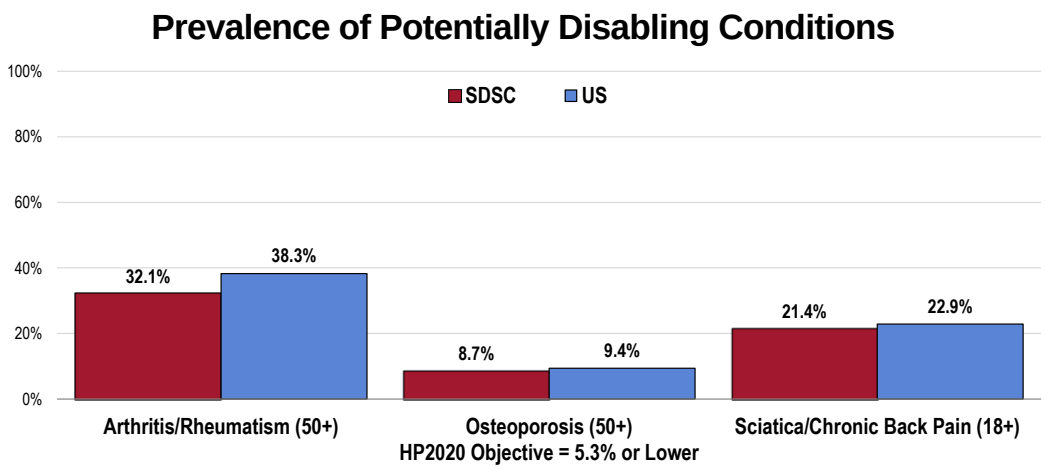
- Healthy People 2020 (www.healthypeople.gov)

"Would you please tell me if you have ever suffered from or been diagnosed with arthritis or rheumatism?" (Reported here among only those here 50+.)

"Would you please tell me if you have ever suffered from or been diagnosed with osteoporosis?" (Reported in the following chart among only those age 50+.)

"Would you please tell me if you have ever suffered from or been diagnosed with sciatica or chronic back pain?" (Reported here among all adults age 18+.)

See also *Overall Health Status: Activity Limitations* in the **General Health Status** section of this report.

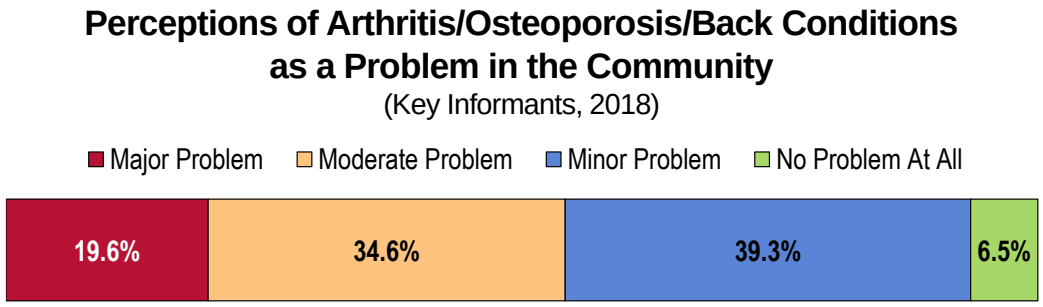


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 26, 141-142]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AOCBC-10]

Notes:
- The sciatica indicator reflects the total sample of respondents; the arthritis and osteoporosis columns reflect adults age 50+.

Key Informant Input: Arthritis, Osteoporosis, & Chronic Back Conditions

The following chart outlines key informants' perceptions of the severity of *Arthritis, Osteoporosis, & Chronic Back Conditions* as a problem in the community:



Sources:
- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Prevalence/Incidence

Frequently occurring in population. Many people suffer from chronic pain, much of which is from a back injury, arthritis, or condition caused by osteoporosis. Many back injuries occurred due to ranching/occupation/recreational activities. Many of these have long-term effects. – Other Health Provider

Many individuals who are experiencing arthritis/osteoporosis/back conditions do not have access to adequate specialty care and physical therapy limiting their ability to earn an income and negatively impacting quality of life. – Other Health Provider

I meet many individuals daily that have one of these issues. – Other Health Provider

Common diagnosis. – Physician

Many people come to me looking for exercise that will help alleviate pain from these conditions or are seeing a therapist for these conditions. – Other Health Provider

I don't know if it's my age, but I think everyone I talk to has joint pain/back pain/arthritis where it effects their everyday activities or have to do a career change. I work with elders and everyone has arthritis/back pain. – Other Health Provider

I feel arthritis/osteoporosis/back conditions are major problems in OLC. Related to lack of adequate education and management of these issues. Related to lack of specialty training of staff and/or regular specialty providers. – Other Health Provider

Access to Care/Services

Individuals with these conditions are limited in options to seek care. There is a need for several more Rheumatologists. I have to wait about four months to see a Rheumatologist, even though I am an established patient. – Other Health Provider

No facilities. – Community/Business Leader

Access for at risk patients is a problem. This amplifies the problem for those patients. There is also a lack of training and certification for the technicians performs the Dexa-scans. – Other Health Provider

Lack of Providers

There is only one rheumatologist in town. – Other Health Provider

Lack of providers. – Community/Business Leader

Access for Underinsured/Uninsured

Where do people go? Where do people living in poverty or without insurance go? Does Sioux San have this program? – Social Services Provider

Aging Population

Many residents are afflicted with these conditions in our community due to the age and occupations of our citizens. They end up having to travel for treatment. – Community/Business Leader

Quality of Life

These common conditions limit the ability to perform activities of daily living and can cause chronic pain. Osteoporosis can lead to disabling fractures which are expensive to treat. – Physician

Contributing Factors

Many people worked in manual labor jobs like ranching, mining, logging, and construction, and suffer the consequences more and more as they age. I work with elderly people who are often dealing with this condition in addition to any others they might have. – Other Health Provider

Many Natives have many issues with their bodies because of the harsh lives we live. These are not life-or-death conditions so many people live a poor quality of life. – Other Health Provider

Obesity

Many of the patients I see are overweight and which has led to back problems and arthritis. – Social Services Provider

Vision & Hearing Impairment

About Vision

Vision is an essential part of everyday life, influencing how Americans of all ages learn, communicate, work, play, and interact with the world. Yet millions of Americans live with visual impairment, and many more remain at risk for eye disease and preventable eye injury.

The eyes are an important, but often overlooked, part of overall health. Despite the preventable nature of some vision impairments, many people do not receive recommended screenings and exams. A visit to an eye care professional for a comprehensive dilated eye exam can help to detect common vision problems and eye diseases, including diabetic retinopathy, glaucoma, cataract, and age-related macular degeneration.

These common vision problems often have no early warning signs. If a problem is detected, an eye care professional can prescribe corrective eyewear, medicine, or surgery to minimize vision loss and help a person see his or her best.

Healthy vision can help to ensure a healthy and active lifestyle well into a person's later years. Educating and engaging families, communities, and the nation is critical to ensuring that people have the information, resources, and tools needed for good eye health.

- Healthy People 2020 (www.healthypeople.gov)

About Hearing & Other Sensory or Communication Disorders

An impaired ability to communicate with others or maintain good balance can lead many people to feel socially isolated, have unmet health needs, have limited success in school or on the job. Communication and other sensory processes contribute to our overall health and well-being. Protecting these processes is critical, particularly for people whose age, race, ethnicity, gender, occupation, genetic background, or health status places them at increased risk.

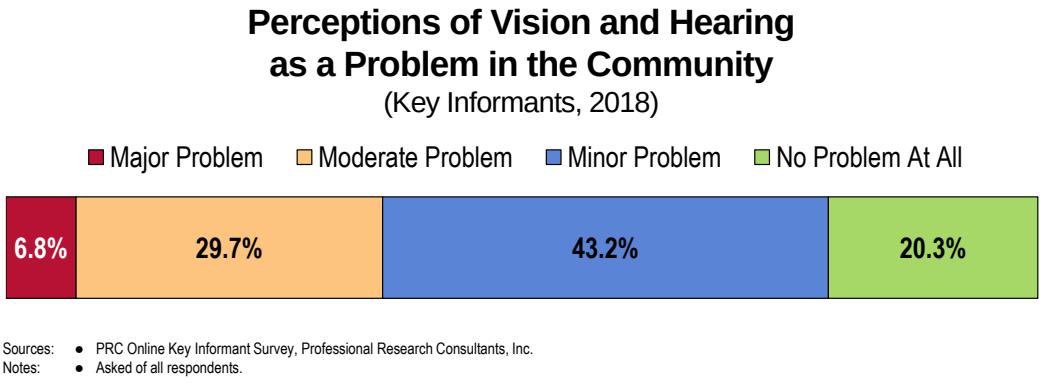
Many factors influence the numbers of Americans who are diagnosed and treated for hearing and other sensory or communication disorders, such a social determinants (social and economic standings, age of diagnosis, cost and stigma of wearing a hearing aid, and unhealthy lifestyle choices). In addition, biological causes of hearing loss and other sensory or communication disorders include: genetics; viral or bacterial infections; sensitivity to certain drugs or medications; injury; and aging.

As the nation's population ages and survival rates for medically fragile infants and for people with severe injuries and acquired diseases improve, the prevalence of sensory and communication disorders is expected to rise.

- Healthy People 2020 (www.healthypeople.gov)

Key Informant Input: Vision & Hearing

The following chart outlines key informants' perceptions of the severity of *Vision & Hearing* as a problem in the community:



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Affordable Care/Services

Most hearing aids are very expensive and cost is not covered by many insurances. Vision care is available but most are out-of-pocket costs. – Other Health Provider

Lack of affordability. – Community/Business Leader

Lack of Providers

There are many hearing issues in our community and we only have one Audiologist. Believe we are underserved in this area. – Other Health Provider

Work-Related

Farmers and ranchers suffer major hearing loss. Since Medicare does not cover this, this issue is not always addressed. – Community/Business Leader

Aging Population

As people are aging, their hearing diminishes and their eyesight may become compromised due to aging, diet, and overall health. – Other Health Provider

Infectious Disease

About Immunization & Infectious Diseases

The increase in life expectancy during the 20th century is largely due to improvements in child survival; this increase is associated with reductions in infectious disease mortality, due largely to immunization. However, infectious diseases remain a major cause of illness, disability, and death. Immunization recommendations in the United States currently target 17 vaccine-preventable diseases across the lifespan.

People in the US continue to get diseases that are vaccine-preventable. Viral hepatitis, influenza, and tuberculosis (TB) remain among the leading causes of illness and death across the nation and account for substantial spending on the related consequences of infection.

The infectious disease public health infrastructure, which carries out disease surveillance at the national, state, and local levels, is an essential tool in the fight against newly emerging and re-emerging infectious diseases. Other important defenses against infectious diseases include:

- Proper use of vaccines
- Antibiotics
- Screening and testing guidelines
- Scientific improvements in the diagnosis of infectious disease-related health concerns

Vaccines are among the most cost-effective clinical preventive services and are a core component of any preventive services package. Childhood immunization programs provide a very high return on investment. For example, for each birth cohort vaccinated with the routine immunization schedule, society:

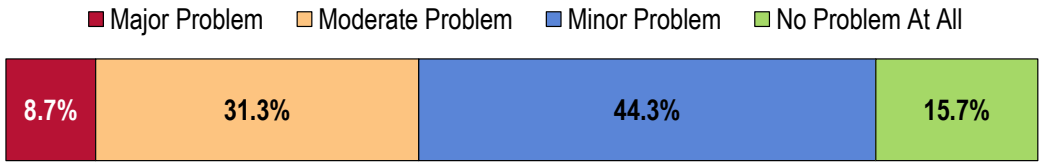
- Saves 33,000 lives.
- Prevents 14 million cases of disease.
- Reduces direct healthcare costs by $9.9 billion.
- Saves $33.4 billion in indirect costs.

- Healthy People 2020 (www.healthypeople.gov)

Key Informant Input: Immunization & Infectious Diseases

The following chart outlines key informants' perceptions of the severity of *Immunization & Infectious Diseases* as a problem in the community:

Perceptions of Immunization and Infectious Diseases as a Problem in the Community
(Key Informants, 2018)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Prevention/Screenings

> *When thinking about the underserved, immunizations do not seem like a priority for them until it's time for school. If they miss a well-baby appointment due to lack of transportation or gas money to get there or any other reason, chances are they will wait until the next scheduled well baby rather than rescheduling. – Social Services Provider*

Low Level of Immunizations

> *There are a lot of people that do not see a physician on an annual basis and they do not bother to get immunization shots on an annual basis. Education and access to immunizations, at minimal costs, needs to be improved. – Other Health Provider*

Affordable Medication/Supplies

> *Many immunizations are up to $100.00 at the local clinics. Parents have to drive to Spearfish or Rapid City for affordable Immunizations. We do not have a South Dakota Department of Health grant. – Other Health Provider*

HIV

About Human Immunodeficiency Virus (HIV)

The HIV epidemic in the United States continues to be a major public health crisis. An estimated 1.1 million Americans are living with HIV, and 1 in 5 people with HIV do not know they have it. HIV continues to spread, leading to about 56,000 new HIV infections each year.

HIV is a preventable disease, and effective HIV prevention interventions have been proven to reduce HIV transmission. People who get tested for HIV and learn that they are infected can make significant behavior changes to improve their health and reduce the risk of transmitting HIV to their sex or drug-using partners. More than 50% of new HIV infections occur as a result of the 21% of people who have HIV but do not know it.

In the era of increasingly effective treatments for HIV, people with HIV are living longer, healthier, and more productive lives. Deaths from HIV infection have greatly declined in the United States since the 1990s. As the number of people living with HIV grows, it will be more important than ever to increase national HIV prevention and healthcare programs.

There are gender, race, and ethnicity disparities in new HIV infections:

- Nearly 75% of new HIV infections occur in men.
- More than half occur in gay and bisexual men, regardless of race or ethnicity.
- 45% of new HIV infections occur in African Americans, 35% in whites, and 17% in Hispanics.

Improving access to quality healthcare for populations disproportionately affected by HIV, such as persons of color and gay and bisexual men, is a fundamental public health strategy for HIV prevention. People getting care for HIV can receive:

- Antiretroviral therapy
- Screening and treatment for other diseases (such as sexually transmitted infections)
- HIV prevention interventions
- Mental health services
- Other health services

As the number of people living with HIV increases and more people become aware of their HIV status, prevention strategies that are targeted specifically for HIV-infected people are becoming more important. Prevention work with people living with HIV focuses on:

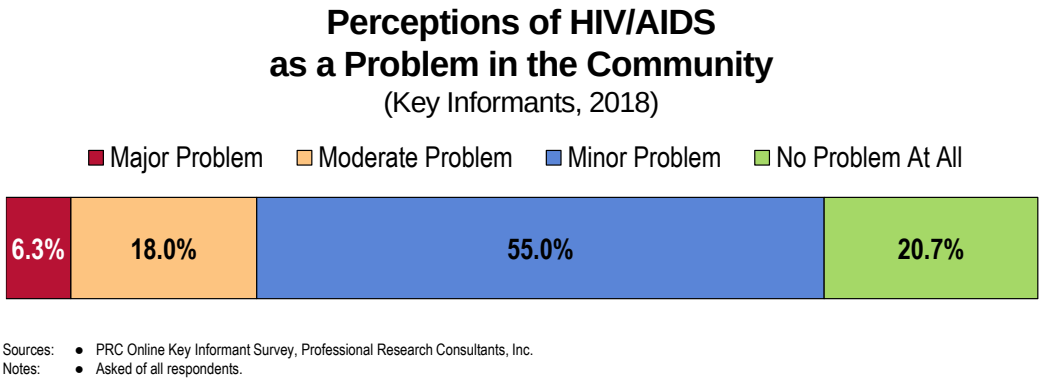
- Linking to and staying in treatment.
- Increasing the availability of ongoing HIV prevention interventions.
- Providing prevention services for their partners.

Public perception in the US about the seriousness of the HIV epidemic has declined in recent years. There is evidence that risky behaviors may be increasing among uninfected people, especially gay and bisexual men. Ongoing media and social campaigns for the general public and HIV prevention interventions for uninfected persons who engage in risky behaviors are critical.

- Healthy People 2020 (www.healthypeople.gov)

Key Informant Input: HIV/AIDS

The following chart outlines key informants' perceptions of the severity of *HIV/AIDS* as a problem in the community:



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Awareness/Education

> *HIV prevention is not being addressed by the majority of healthcare providers in the community. All individuals between the ages of 13 and 60 should have an HIV test at least once in their lives. All providers need to be asking about sexual and drug history. If their patient is at risk then they need to be counseled and tested. All patients with acute fever, rash, adenopathy, or persistent infections should be asked their sexual and drug use history. This includes in the emergency room and urgent cares. Providers need to be aware of free testing centers such as DOH and Volunteers of America and should at least be referred to these organizations for advocacy, education, and testing. There is only one ID provider at Regional Health that sees HIV-positive patients and their clinic is often full. Providers seem to come and go often. Regional Health seems unaware of the Ryan White Program, which provides advocacy, meds, and financial assistance to patients. Refer to VOA please! – Other Health Provider*
>
> *I believe HIV/AIDS is a major problem in OLC related to lack of education. – Other Health Provider*
>
> *It is a communicable disease. – Other Health Provider*

Sexually Transmitted Diseases

About Sexually Transmitted Diseases

STDs refer to more than 25 infectious organisms that are transmitted primarily through sexual activity. Despite their burdens, costs, and complications, and the fact that they are largely preventable, STDs remain a significant public health problem in the United States. This problem is largely unrecognized by the public, policymakers, and health care professionals. STDs cause many harmful, often irreversible, and costly clinical complications, such as: reproductive health problems; fetal and perinatal health problems; cancer; and facilitation of the sexual transmission of HIV infection.

Because many cases of STDs go undiagnosed—and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all—the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STDs in the US. Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women. Several factors contribute to the spread of STDs.

Biological Factors. STDs are acquired during unprotected sex with an infected partner. Biological factors that affect the spread of STDs include:

- **Asymptomatic nature of STDs**. The majority of STDs either do not produce any symptoms or signs, or they produce symptoms so mild that they are unnoticed; consequently, many infected persons do not know that they need medical care.
- **Gender disparities**. Women suffer more frequent and more serious STD complications than men do. Among the most serious STD complications are pelvic inflammatory disease, ectopic pregnancy (pregnancy outside of the uterus), infertility, and chronic pelvic pain.
- **Age disparities**. Compared to older adults, sexually active adolescents ages 15 to 19 and young adults ages 20 to 24 are at higher risk for getting STDs.
- **Lag time between infection and complications**. Often, a long interval, sometimes years, occurs between acquiring an STD and recognizing a clinically significant health problem.

Social, Economic, and Behavioral Factors. The spread of STDs is directly affected by social, economic, and behavioral factors. Such factors may cause serious obstacles to STD prevention due to their influence on social and sexual networks, access to and provision of care, willingness to seek care, and social norms regarding sex and sexuality. Among certain vulnerable populations, historical experience with segregation and discrimination exacerbates these factors. Social, economic, and behavioral factors that affect the spread of STDs include: racial and ethnic disparities; poverty and marginalization; access to healthcare; substance abuse; sexuality and secrecy (stigma and discomfort discussing sex); and sexual networks (persons “linked” by sequential or concurrent sexual partners).

- Healthy People 2020 (www.healthypeople.gov)

Chlamydia & Gonorrhea

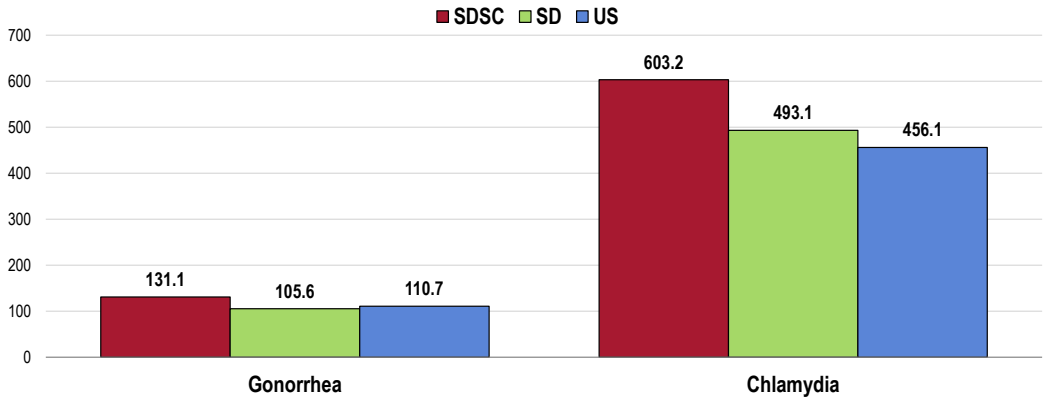
Chlamydia. Chlamydia is the most commonly reported STD in the United States; most people who have chlamydia are unaware, since the disease often has no symptoms.

Gonorrhea. Anyone who is sexually active can get gonorrhea. Gonorrhea can be cured with the right medication; left untreated, however, gonorrhea can cause serious health problems in both women and men.

The following chart outlines local incidence for these STDs.

Chlamydia & Gonorrhea Incidence

(Incidence Rate per 100,000 Population, 2014)



Sources:
- Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
- Retrieved November 2018 from Community Commons at http://www.chna.org.

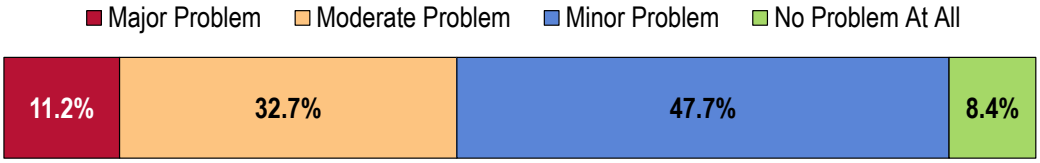
Notes:
- This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

Key Informant Input: Sexually Transmitted Diseases

The following chart outlines key informants' perceptions of the severity of *Sexually Transmitted Diseases* as a problem in the community:

Perceptions of Sexually Transmitted Diseases as a Problem in the Community

(Key Informants, 2018)



Sources:
- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Lack of Parental Guidance

Lack of proper parenting skills to the youth, lack of sex education classes offered in schools. Reluctant to discuss sex with the parent/guardian/spouse/youth. – Other Health Provider

Poor morale and health teachings in the home and then not adequate in the schools. – Community/ Business Leader

Prevalence/Incidence

Statistics show that this is a major problem. I have recently read about the numbers, the counties and the cost of treating preventable medical conditions is growing. – Other Health Provider

Rising rates of STDs in our communities, especially chlamydia and gonorrhea. – Other Health Provider

Unprotected Sex

Low condom usage. – Physician

Promiscuity is normalized in today's culture. – Other Health Provider

Vulnerable Population

The Native community has a high rate of STDs. – Community/Business Leader

Births

About Infant & Child Health

Improving the well-being of mothers, infants, and children is an important public health goal for the US. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the healthcare system. The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy) and inter-conception (between pregnancies) care. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. Many factors can affect pregnancy and childbirth, including pre-conception health status, age, access to appropriate healthcare, and poverty.

Infant and child health are similarly influenced by socio-demographic factors, such as family income, but are also linked to the physical and mental health of parents and caregivers. There are racial and ethnic disparities in mortality and morbidity for mothers and children, particularly for African Americans. These differences are likely the result of many factors, including social determinants (such as racial and ethnic disparities in infant mortality; family income; educational attainment among household members; and health insurance coverage) and physical determinants (i.e., the health, nutrition, and behaviors of the mother during pregnancy and early childhood).

- Healthy People 2020 (www.healthypeople.gov)

Birth Outcomes & Risks

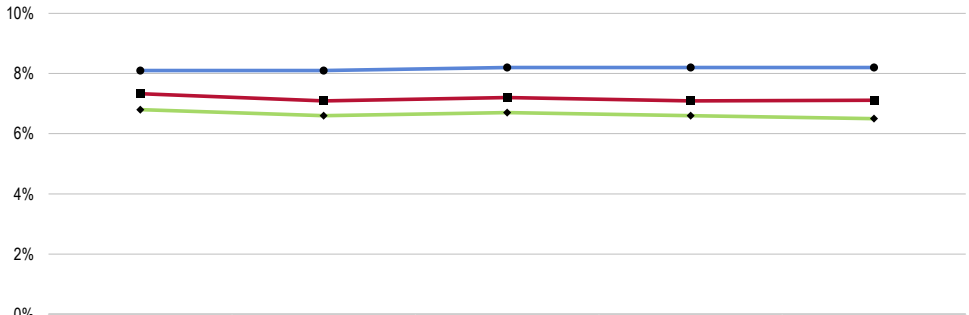
Low-Weight Births

Low birthweight babies, those who weigh less than 2,500 grams (5 pounds, 8 ounces) at birth, are much more prone to illness and neonatal death than are babies of normal birthweight. Largely a result of receiving poor or inadequate prenatal care, many low-weight births and the consequent health problems are preventable. Births of low-weight infants are described in the following chart.

Low-Weight Births

(Percent of Live Births)

Healthy People 2020 Target = 7.8% or Lower



	2002-2008	2003-2009	2004-2010	2005-2011	2006-2012
SDSC	7.3%	7.1%	7.2%	7.1%	7.1%
SD	6.8%	6.6%	6.7%	6.6%	6.5%
US	8.1%	8.1%	8.2%	8.2%	8.2%

Sources:
- US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2006-12.
- Retrieved November 2018 from Community Commons at http://www.chna.org.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-8.1]

Note:
- This indicator reports the percentage of total births that are low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

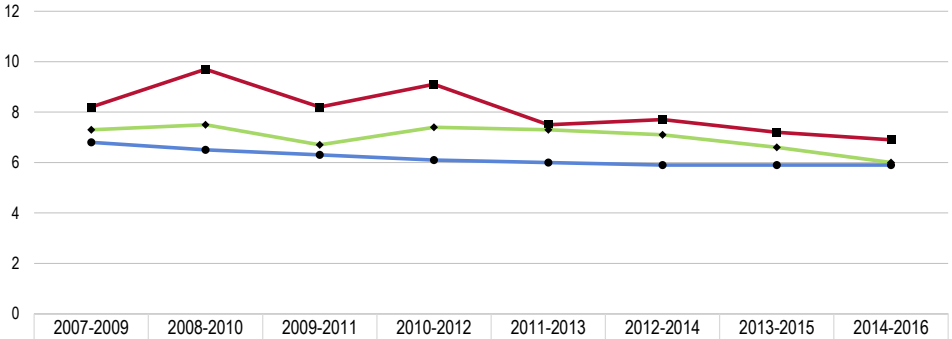
Infant Mortality

Infant mortality rates reflect deaths of children less than one year old per 1,000 live births. These rates are outlined in the following chart.

Infant Mortality Rate

(Annual Average Infant Deaths per 1,000 Live Births)

Healthy People 2020 Target = 6.0 or Lower



	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	8.2	9.7	8.2	9.1	7.5	7.7	7.2	6.9
SD	7.3	7.5	6.7	7.4	7.3	7.1	6.6	6.0
US	6.8	6.5	6.3	6.1	6.0	5.9	5.9	5.9

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted November 2018.
- Centers for Disease Control and Prevention, National Center for Health Statistics.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-1.3]

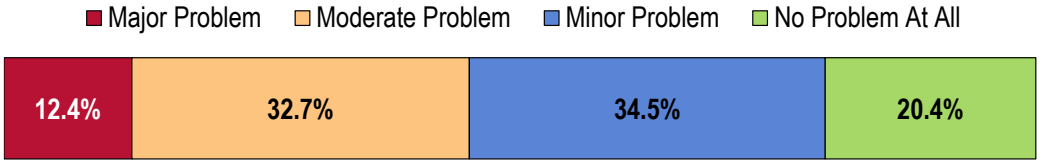
Notes:
- Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.

Key Informant Input: Infant & Child Health

The following chart outlines key informants' perceptions of the severity of *Infant & Child Health* as a problem in the community:

Perceptions of Infant and Child Health as a Problem in the Community

(Key Informants, 2018)



Sources:
- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Among those rating this issue as a “major problem,” reasons related to the following:

Child Mortality

Child mortality in the US is way out of whack given the amount of money we spend on healthcare. We should do much better as a country. – Other Health Provider

This is especially prevalent on our reservations, which has a much higher infant mortality rate. – Community/Business Leader

Access to Care/Services

Lack of resources. – Other Health Provider

WIC and clinics. Pediatricians themselves are overextended and try to work with limited resources. – Community/Business Leader

Contributing Factors

Infant and child health is a major problem in OLC related to many things such as teen pregnancies. Lack of follow-through with infant/young child “well” checks. Substance abuse by caregivers. – Other Health Provider

Poorly educated parents. Single parents. Poverty. Drug/alcohol use. – Other Health Provider

Lifestyle

Childhood obesity and lack of physical activity. – Other Health Provider

Poverty

Child poverty. – Community/Business Leader

Family Planning

Births to Teen Mothers

About Teen Births

The negative outcomes associated with unintended pregnancies are compounded for adolescents. Teen mothers:

- Are less likely to graduate from high school or attain a GED by the time they reach age 30.
- Earn an average of approximately $3,500 less per year, when compared with those who delay childbearing.
- Receive nearly twice as much Federal aid for nearly twice as long.

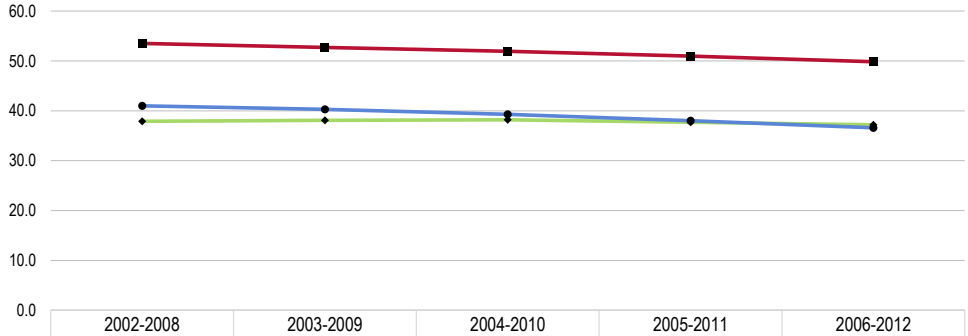
Similarly, early fatherhood is associated with lower educational attainment and lower income. Children of teen parents are more likely to have lower cognitive attainment and exhibit more behavior problems. Sons of teen mothers are more likely to be incarcerated, and daughters are more likely to become adolescent mothers.

- Healthy People 2020 (www.healthypeople.gov)

The following chart describes local teen births.

Teen Birth Rate

(Births to Women Age 15-19 Per 1,000 Female Population Age 15-19)



	2002-2008	2003-2009	2004-2010	2005-2011	2006-2012
SDSC	53.5	52.7	51.9	51.0	49.8
SD	37.9	38.1	38.2	37.7	37.2
US	41.0	40.3	39.3	38.0	36.6

Sources:
- Centers for Disease Control and Prevention, National Vital Statistics System. Accessed using CDC WONDER.
- Retrieved from Community Commons at http://www.chna.org.

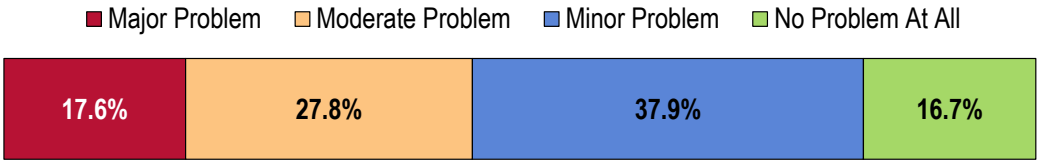
Notes:
- This indicator reports the rate of total births to women under the age of 15–19 per 1,000 female population age 15–19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.

Key Informant Input: Family Planning

The following chart outlines key informants' perceptions of the severity of *Family Planning* as a problem in the community:

Perceptions of Family Planning as a Problem in the Community

(Key Informants, 2018)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Teen Pregnancies

There are still many teen pregnancies in our area. – Other Health Provider

Number of the teen moms. – Other Health Provider

Most parents became a parent at a young age and are not or were not provided information on how to raise a child(ren). How to provide for their well-being, how to provide the basic needs with little or no income. Birth control, etc. – Other Health Provider

Young individuals having children. Grandparents raising grandchildren. – Other Health Provider

Kids are having kids generation after generation. – Community/Business Leader

Access to Care/Services

Uninsured patients do not have access to affordable contraception. – Physician

We have no family planning from SD Department of Health. People have to drive to Rapid City or Spearfish for services. – Other Health Provider

Neglect

I want to see adults who select to have children take care of those children. They can be abused, left alone, exposed to drugs and alcohol. They need immunizations, they need schools and warm clothing. They need dental care and doctor care. We need to take care of our children. – Other Health Provider

Awareness/Education

Little or no sex education. Planned Parenthood run out of town. Local attitudes that young people don't have sex and that providing them with contraception will cause them to do so. – Other Health Provider

Government/Policies

More and more pressure to limit options from a legislative aspect. – Other Health Provider

Modifiable Health Risks

Nutrition, Physical Activity, & Weight

Nutrition

About Healthful Diet & Healthy Weight

Strong science exists supporting the health benefits of eating a healthful diet and maintaining a healthy body weight. Efforts to change diet and weight should address individual behaviors, as well as the policies and environments that support these behaviors in settings such as schools, worksites, healthcare organizations, and communities.

The goal of promoting healthful diets and healthy weight encompasses increasing household food security and eliminating hunger.

Americans with a healthful diet:

- Consume a variety of nutrient-dense foods within and across the food groups, especially whole grains, fruits, vegetables, low-fat or fat-free milk or milk products, and lean meats and other protein sources.
- Limit the intake of saturated and trans fats, cholesterol, added sugars, sodium (salt), and alcohol.
- Limit caloric intake to meet caloric needs.

Diet and body weight are related to health status. Good nutrition is important to the growth and development of children. A healthful diet also helps Americans reduce their risks for many health conditions, including: overweight and obesity; malnutrition; iron-deficiency anemia; heart disease; high blood pressure; dyslipidemia (poor lipid profiles); type 2 diabetes; osteoporosis; oral disease; constipation; diverticular disease; and some cancers.

Diet reflects the variety of foods and beverages consumed over time and in settings such as worksites, schools, restaurants, and the home. Interventions to support a healthier diet can help ensure that:

- Individuals have the knowledge and skills to make healthier choices.
- Healthier options are available and affordable.

Social Determinants of Diet. Demographic characteristics of those with a more healthful diet vary with the nutrient or food studied. However, most Americans need to improve some aspect of their diet.

Social factors thought to influence diet include:

- Knowledge and attitudes
- Skills
- Social support
- Societal and cultural norms
- Food and agricultural policies
- Food assistance programs
- Economic price systems

Physical Determinants of Diet. Access to and availability of healthier foods can help people follow healthful diets. For example, better access to retail venues that sell healthier options may have a positive impact on a person's diet; these venues may be less available in low-income or rural neighborhoods.

The places where people eat appear to influence their diet. For example, foods eaten away from home often have more calories and are of lower nutritional quality than foods prepared at home.

Marketing also influences people's—particularly children's—food choices.

- Healthy People 2020 (www.healthypeople.gov)

Daily Recommendation of Fruits/Vegetables

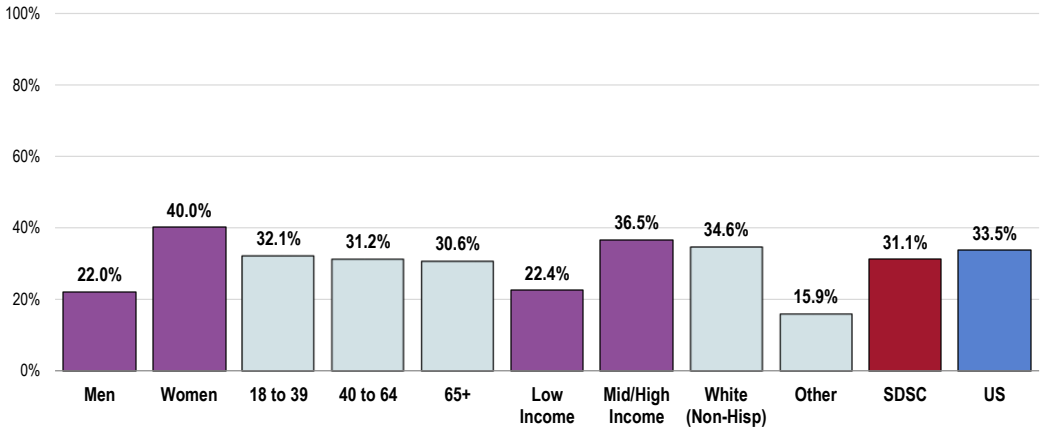
To measure fruit and vegetable consumption, survey respondents were asked multiple questions, specifically about the foods and drinks they consumed on the day prior to the interview.

"Now I would like you to think about the foods you ate or drank yesterday. Include all the foods you ate, both at home and away from home. How many servings of fruit or fruit juices did you have yesterday?"

"How many servings of vegetables did you have yesterday?"

The questions above are used to calculate daily fruit/vegetable consumption for respondents. The proportion reporting having 5 or more servings per day is shown here.

Consume Five or More Servings of Fruits/Vegetables Per Day
(SDSC Service Area, 2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

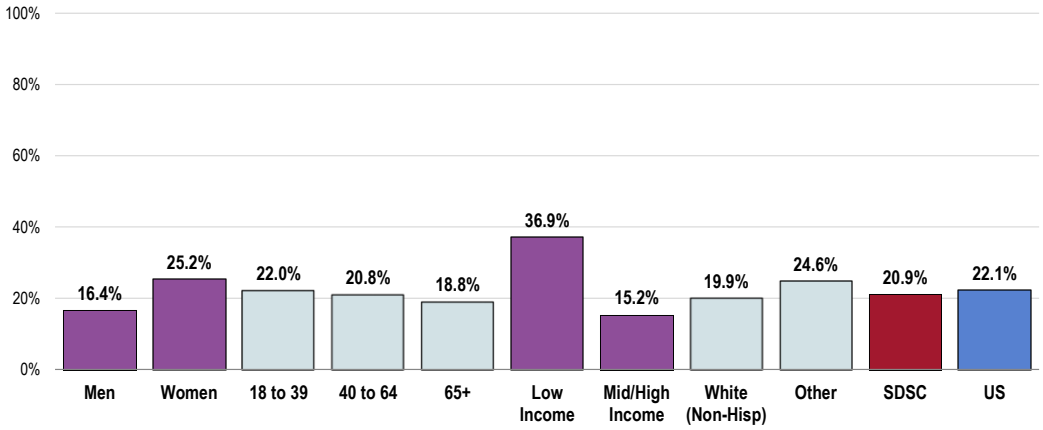
Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- For this issue, respondents were asked to recall their food intake on the previous day.

Access to Fresh Produce

"How difficult is it for you to buy fresh produce like fruits and vegetables at a price you can afford — would you say: very difficult, somewhat difficult, not too difficult, or not at all difficult?"

Find It "Very" or "Somewhat" Difficult to Buy Affordable Fresh Produce

(SDSC Service Area, 2018)



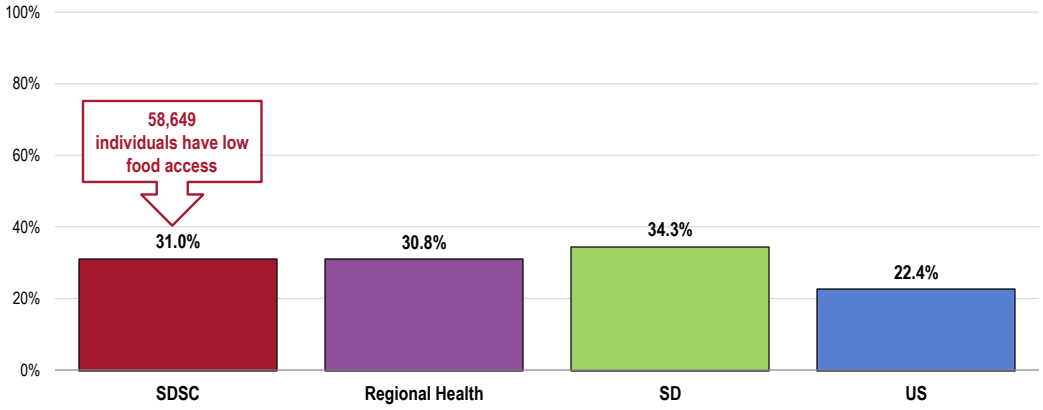
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 189]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

A food desert is defined as a low-income area where a significant number or share of residents is far from a supermarket, where "far" is more than 1 mile in urban areas and more than 10 miles in rural areas. This related chart is based on US Department of Agriculture data.

Population With Low Food Access

(Percent of Population That Is Far From a Supermarket or Large Grocery Store, 2015)



Sources:
- US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas (FARA).
- Retrieved November 2018 from Community Commons at http://www.chna.org.

Notes:
- This indicator reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as low-income areas where a significant number or share of residents is far from a supermarket, where "far" is more than 1 mile in urban areas and more than 10 miles in rural areas. This indicator is relevant because it highlights populations and geographies facing food insecurity.

Physical Activity

About Physical Activity

Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. Among adults, physical activity can lower the risk of: early death; coronary heart disease; stroke; high blood pressure; type 2 diabetes; breast and colon cancer; falls; and depression. Among children and adolescents, physical activity can: improve bone health; improve cardiorespiratory and muscular fitness; decrease levels of body fat; and reduce symptoms of depression. For people who are inactive, even small increases in physical activity are associated with health benefits.

Personal, social, economic, and environmental factors all play a role in physical activity levels among youth, adults, and older adults. Understanding the barriers to and facilitators of physical activity is important to ensure the effectiveness of interventions and other actions to improve levels of physical activity.

Factors **positively** associated with adult physical activity include: postsecondary education; higher income; enjoyment of exercise; expectation of benefits; belief in ability to exercise (self-efficacy); history of activity in adulthood; social support from peers, family, or spouse; access to and satisfaction with facilities; enjoyable scenery; and safe neighborhoods.

Factors **negatively** associated with adult physical activity include: advancing age; low income; lack of time; low motivation; rural residency; perception of great effort needed for exercise; overweight or obesity; 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.

Among children ages 4 to 12, the following factors have a positive association with physical activity: gender (boys); belief in ability to be active (self-efficacy); and parental support.

Among adolescents ages 13 to 18, the following factors have a positive association with physical activity: parental education; gender (boys); personal goals; physical education/school sports; belief in ability to be active (self-efficacy); and support of friends and family.

Environmental influences positively associated with physical activity among children and adolescents include:

- Presence of sidewalks
- Having a destination/walking to a particular place
- Access to public transportation
- Low traffic density
- Access to neighborhood or school play area and/or recreational equipment

People with disabilities may be less likely to participate in physical activity due to physical, emotional, and psychological barriers. Barriers may include the inaccessibility of facilities and the lack of staff trained in working with people with disabilities.

- Healthy People 2020 (www.healthypeople.gov)

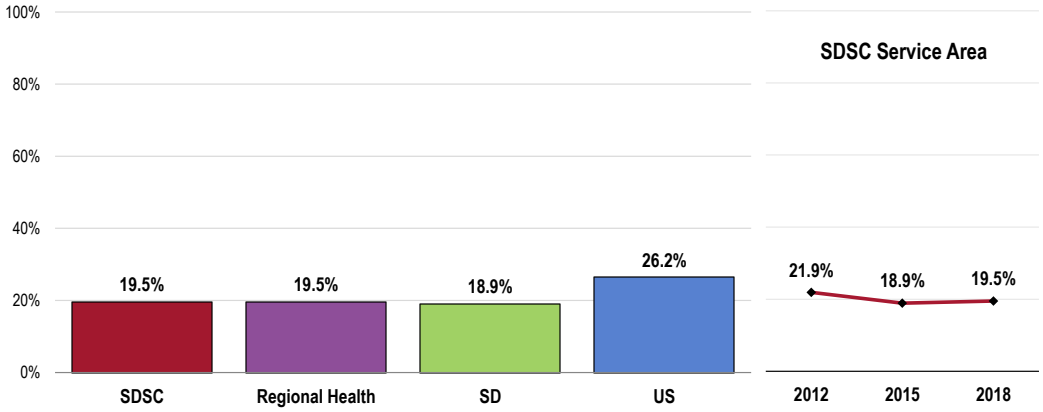
Leisure-Time Physical Activity

Leisure-time physical activity includes any physical activities or exercises (such as running, calisthenics, golf, gardening, walking, etc.) which take place outside of one's line of work.

"During the past month, other than your regular job, did you participate in any physical activities or exercises, such as running, calisthenics, golf, gardening, or walking for exercise?"

No Leisure-Time Physical Activity in the Past Month

Healthy People 2020 Target = 32.6% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 89]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-1]

Notes:
- Asked of all respondents.

Recommended Levels of Physical Activity

Adults should do 2 hours and 30 minutes a week of moderate-intensity (such as walking), or 1 hour and 15 minutes (75 minutes) a week of vigorous-intensity aerobic physical activity (such as jogging), or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity. The guidelines also recommend that adults do muscle-strengthening activities, such as push-ups, sit-ups, or activities using resistance bands or weights. These activities should involve all major muscle groups and be done on two or more days per week.

The report finds that nationwide nearly 50 percent of adults are getting the recommended amounts of aerobic activity and about 30 percent are engaging in the recommended muscle-strengthening activity.

- 2013 Physical Activity Guidelines for Americans, US Department of Health and Human Services. www.cdc.gov/physicalactivity

Meeting Physical Activity Recommendations

To measure physical activity frequency, duration and intensity, respondents were asked:

"During the past month, what type of physical activity or exercise did you spend the most time doing?"

"And during the past month, how many times per week or per month did you take part in this activity?"

"And when you took part in this activity, for how many minutes or hours did you usually keep at it?"

Respondents could answer the above series for up to two types of physical activity. The specific activities identified (e.g., jogging, basketball, treadmill, etc.) determined the intensity values assigned to that respondent when calculating total aerobic physical activity hours/minutes.

Respondents were also asked about strengthening exercises:

"During the past month, how many times per week or per month did you do physical activities or exercises to strengthen your muscles? Do not count aerobic activities like walking, running, or bicycling. Please include activities using your own body weight, such as yoga, sit-ups, or push-ups, and those using weight machines, free weights, or elastic bands."

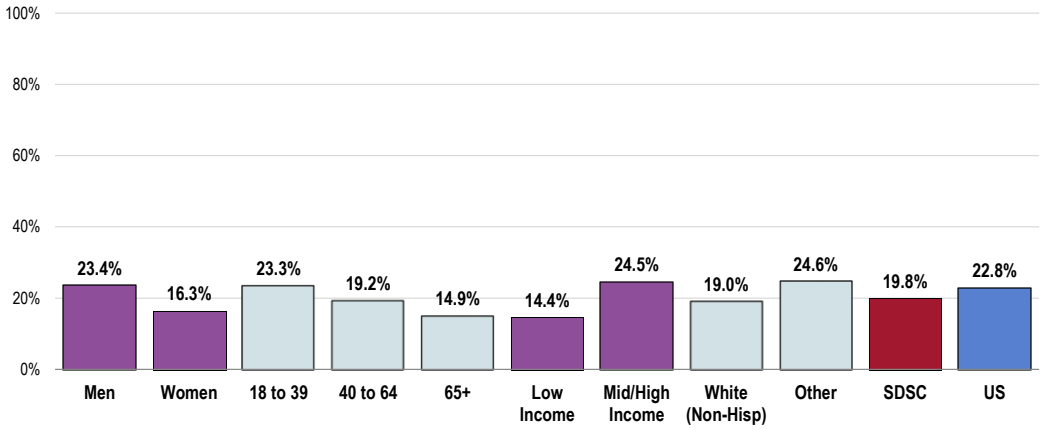
"Meeting physical activity recommendations" includes adequate levels of both aerobic and strengthening activity:

- Aerobic activity is at least 150 minutes per week of light to moderate activity, 75 minutes per week of vigorous physical activity, or an equivalent combination of both;
- Strengthening activity is at least 2 sessions per week of exercise designed to strengthen muscles.

Meets Physical Activity Recommendations

(SDSC Service Area, 2018)

Healthy People 2020 Target = 20.1% or Higher

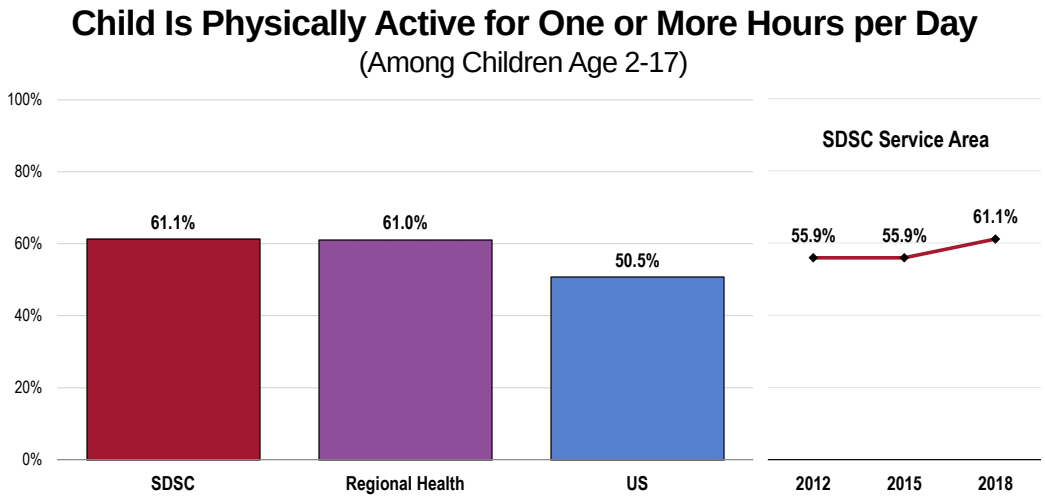


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-2.4]

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- Meeting both guidelines is defined as the number of persons age 18+ who report light or moderate aerobic activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity *and* report doing physical activities specifically designed to strengthen muscles at least twice per week.

Children's Physical Activity

"During the past 7 days, on how many days was this child physically active for a total of at least 60 minutes per day?"



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 124]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents with children age 2-17 at home.
- Includes children reported to have one or more hours of physical activity on each of the seven days preceding the survey.

Weight Status

About Overweight & Obesity

Because weight is influenced by energy (calories) consumed and expended, interventions to improve weight can support changes in diet or physical activity. They can help change individuals' knowledge and skills, reduce exposure to foods low in nutritional value and high in calories, or increase opportunities for physical activity. Interventions can help prevent unhealthy weight gain or facilitate weight loss among obese people. They can be delivered in multiple settings, including healthcare settings, worksites, or schools.

The social and physical factors affecting diet and physical activity (see Physical Activity topic area) may also have an impact on weight. Obesity is a problem throughout the population. However, among adults, the prevalence is highest for middle-aged people and for non-Hispanic black and Mexican American women. Among children and adolescents, the prevalence of obesity is highest among older and Mexican American children and non-Hispanic black girls. The association of income with obesity varies by age, gender, and race/ethnicity.

- Healthy People 2020 (www.healthypeople.gov)

Body Mass Index (BMI), which describes relative weight for height, is significantly correlated with total body fat content. The BMI should be used to assess overweight and obesity and to monitor changes in body weight. In addition, measurements of body weight alone can be used to determine efficacy of weight loss therapy. BMI is calculated as weight (kg)/height squared (m^2). To estimate BMI using pounds and inches, use: [weight (pounds)/height squared ($inches^2$)] x 703.

In this report, overweight is defined as a BMI of 25.0 to 29.9 kg/m^2 and obesity as a BMI ≥30 kg/m^2. The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25 kg/m^2. The increase in mortality, however, tends to be modest until a BMI of 30 kg/m^2 is reached. For persons with a BMI ≥30 kg/m^2, mortality rates from all causes, and especially from cardiovascular disease, are generally increased by 50 to 100 percent above that of persons with BMIs in the range of 20 to 25 kg/m^2.

- Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

Classification of Overweight and Obesity by BMI	BMI (kg/m^2)
Underweight	<18.5
Healthy Weight	18.5 – 24.9
Overweight, not Obese	25.0 – 29.9
Obese	≥30.0

Source: Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

Adult Weight Status

"About how much do you weigh without shoes?"

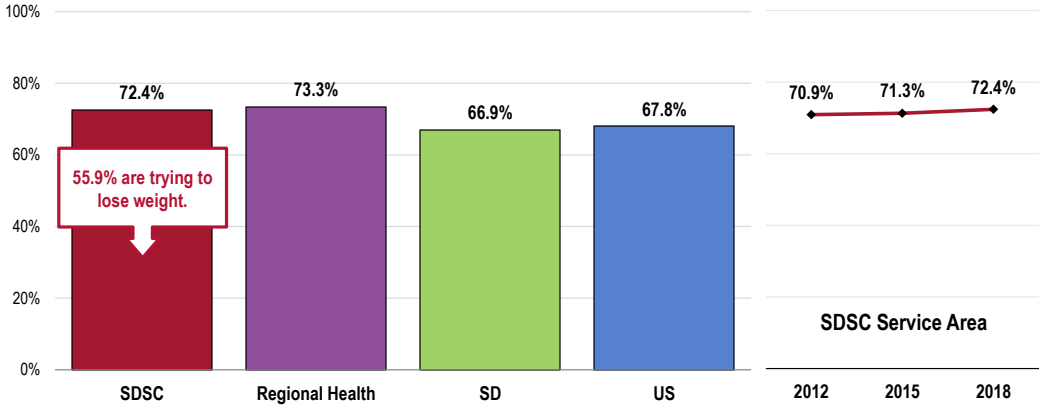
"About how tall are you without shoes?"

"Are you now trying to lose weight?"

Reported height and weight were used to calculate a Body Mass Index or BMI value (described above) for each respondent. This calculation allows us to examine the proportion of the population who is at a healthy weight, or who is overweight or obese (see table above).

Prevalence of Total Overweight (Overweight or Obese)

(Percent of Adults With a Body Mass Index of 25.0 or Higher)



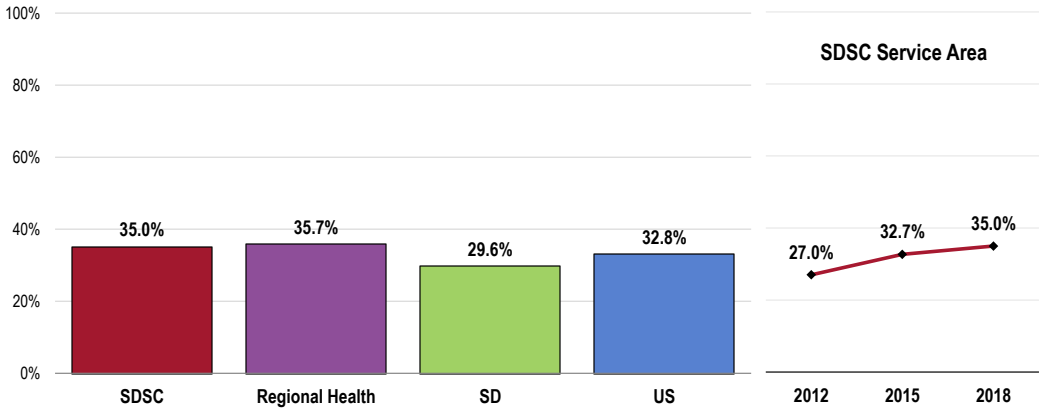
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 154-155]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.

Notes:
- Based on reported heights and weights, asked of all respondents.
- The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.

Prevalence of Obesity

(Percent of Adults With a Body Mass Index of 30.0 or Higher)

Healthy People 2020 Target = 30.5% or Lower



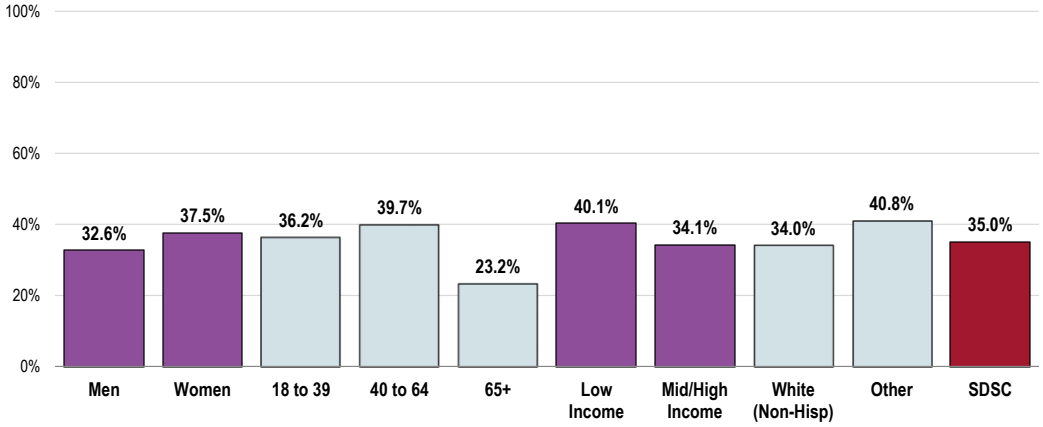
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.

Notes:
- Based on reported heights and weights, asked of all respondents.
- The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

Prevalence of Obesity

(BMI of 30.0 or Higher; SDSC Service Area, 2018)

Healthy People 2020 Target = 30.5% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]

Notes:
- Based on reported heights and weights, asked of all respondents.
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- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

Childhood Overweight & Obesity

About Weight Status in Children & Teens

In children and teens, body mass index (BMI) is used to assess weight status – underweight, healthy weight, overweight, or obese. After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child's BMI number among children of the same sex and age.

BMI-for-age weight status categories and the corresponding percentiles are shown below:

- Underweight — <5th percentile
- Healthy Weight — ≥5th and <85th percentile
- Overweight — ≥85th and <95th percentile
- Obese — ≥95th percentile

- Centers for Disease Control and Prevention

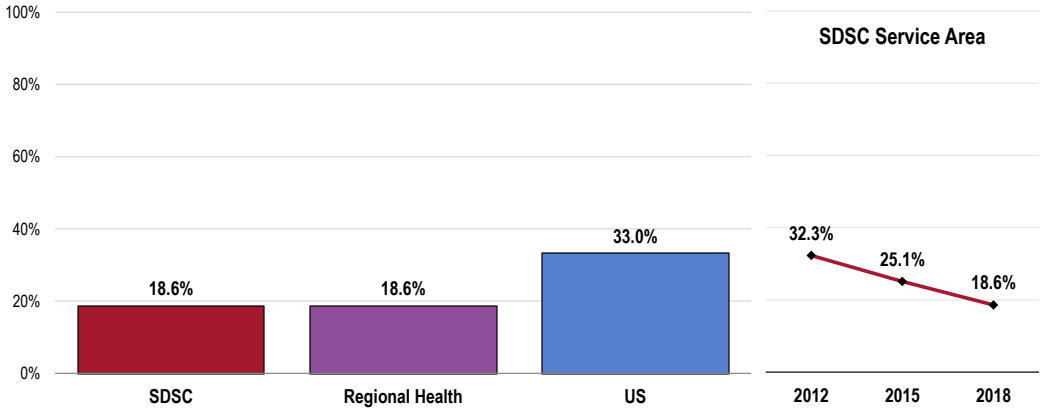
The following questions were used to calculate a BMI value (and weight classification as noted above) for each child represented in the survey:

"How much does this child weigh without shoes?"

"About how tall is this child?"

Child Total Overweight Prevalence

(Children Age 5-17 Who Are Overweight/Obese; BMI in the 85th Percentile or Higher)



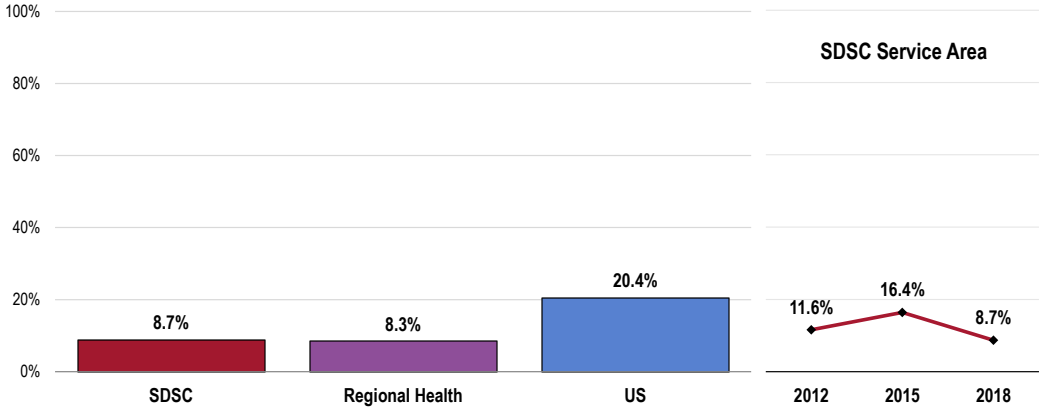
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 158]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents with children age 5-17 at home.
- Overweight among children is determined by children's Body Mass Index status at or above the 85th percentile of US growth charts by gender and age.

Child Obesity Prevalence

(Children Age 5-17 Who Are Obese; BMI in the 95th Percentile or Higher)

Healthy People 2020 Target = 14.5% or Lower

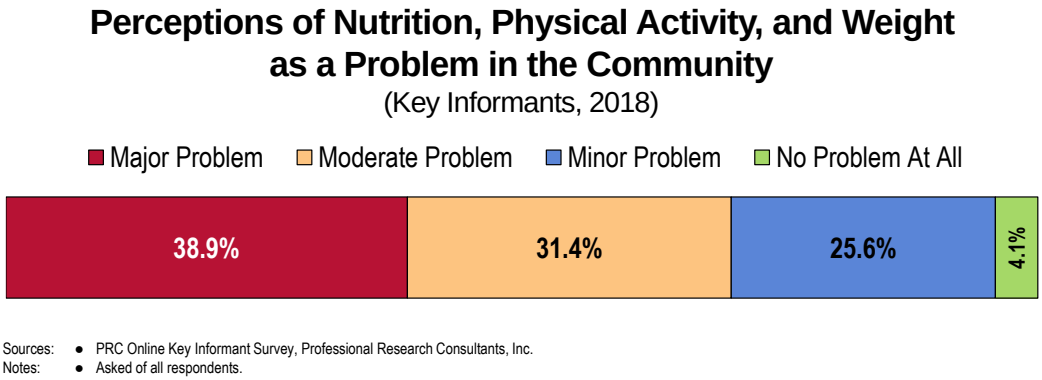


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 158]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-10.4]

Notes:
- Asked of all respondents with children age 5-17 at home.
- Obesity among children is determined by children's Body Mass Index status equal to or above the 95th percentile of US growth charts by gender and age.

Key Informant Input: Nutrition, Physical Activity, & Weight

The following chart outlines key informants' perceptions of the severity of *Nutrition, Physical Activity, & Weight* as a problem in the community:



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Obesity

Obesity, particularly prevalent in this local/regional population. – Other Health Provider

A large percentage of the population is overweight and obese. Few healthy choices for food or activity, little education for nutrition. – Social Services Provider

I think weight is a major problem for many. Fast food is often cheaper and also more fattening so used more often. Regular physical exercise is often not done. – Community/Business Leader

As stated before, levels of obesity and inactivity are contributing to increased diabetes, heart attack and stroke. – Community/Business Leader

Most individual are overweight. – Other Health Provider

Many overweight children and adults. More focus on nutrition and weight. People don't want to change. – Other Health Provider

Increase in obesity and childhood obesity. – Community/Business Leader

So many people being overweight, leading to cause other issues that are on the list. Challenges of getting and maintaining healthy choices. – Other Health Provider

Obesity and diet are big issues. – Other Health Provider

Large percentage of our population who are overweight and do little to no physical activity. – Community/Business Leader

Rising rates of overweight and obesity among adults and children, food security issues, increased sedentary time. – Other Health Provider

Increase in obesity, diabetes and decrease in physical activity. – Other Health Provider

Increase in noted obesity. – Other Health Provider

Awareness/Education

Health education needs to be a priority in all schools from K-12 to improve the health future of the youth. It is not adequate, and the food served in schools is at times the only meals due to food deserts on the Pine Ridge. In addition, the quality of food purchased on the limited stores is not affordable, so Ramen noodles is filler against empty stomachs with no true nutritional value. – Community/Business Leader

Lack of knowledge for exercise and nutrition. Limited programs due to lack of money on behalf of facilities who could program for these areas and lack of money for the patrons/citizens that need them. – Community/Business Leader

Lack of education. – Community/Business Leader

Many Natives lack the education and knowledge that many of these diseases that affect us are preventable. There is no money in prevention so health dollars are aimed at treating after the fact. – Other Health Provider

People are poorly informed on the benefits of nutrition and exercise or they just choose not to participate. Others that would like to eat more nutritiously cannot afford the higher costs of many nutritious foods. As for exercise, the opportunities are abundant at a very low cost but you have to want to do it. – Other Health Provider

Lifestyle

Lack of motivation to do the right thing. – Community/Business Leader

Though people know they "should eat well and exercise," the speed of life, family responsibilities, and careers often limits having a healthy lifestyle. What is needed is a cultural change to encourage hour-long lunchtimes to allow for exercise, and educating employers to encourage this. – Social Services Provider

Consistency, adequate shopping availability, money for food, housing in which to be able to prepare food are the biggest challenges, in OLC. Related to nutrition, physical activity and weight. – Other Health Provider

Motivation. Foods that are healthier to eat that are available at a price affordable on a fixed income. – Other Health Provider

People just don't take care of themselves: they are always on the go and in a hurry so they eat unhealthy. It's a fast-paced lifestyle, and then come home and crash or sit behind technology. – Social Services Provider

Access to Healthy Foods

Access to affordable, nutritious meals is lacking. Very little community resources to educate. – Other Health Provider

Fast/cheap food options are often fattening. Winter weather and short days may limit exercise options. Jobs and recreational activities often involve time spent in front of "screens" instead of physical activity. Major intersections are often not pedestrian-friendly. – Physician

This is not only a societal change but also for the underserved access to healthy foods and activities are lacking. – Social Services Provider

Many individuals in the community do not have access to adequate nutrition. Some of the individuals that do have access to adequate funds to purchase foods lack vital nutritional knowledge to ensure they/their family gets the proper nutrition. – Other Health Provider

Food deserts, long cold winters where it's hard to exercise. People with very low incomes who can stretch money further by purchasing poor quality food. – Other Health Provider

Nutrition. Many of our families purchase processed foods and are not eating a balanced diet. – Community/Business Leader

I would say access to affordable, healthy food options. – Other Health Provider

Socioeconomic Status

Social economic issues, pay, benefits for indoor exercise rates, lifestyle. – Other Health Provider

The low social-economic lifestyle habits and lack of outreach programs to educate the citizens on better lifestyles. – Community/Business Leader

Prevalence/Incidence

This is a national problem as well as a problem in our communities. There seems to be a lack of nutritional food available for our lower income communities. Contributing factors for everyone, are busy lifestyles, gaming, fast food and GMOs. I hate the fact that food is modified. When I buy corn, I want real corn. – Other Health Provider

Affordable Care/Services

We have resources, but the cost to be in these programs is over rated. Most people that need them can't afford them, which leads to more ED visits. Due to poor health conditions because they can't afford a nutritionist or physical activity programs. – Other Health Provider

Poverty

Money, knowledge about nutrition, poor nutrition, poor choices, no knowledge regarding meal preparation, too much junk food. Educational levels. – Other Health Provider

Prevention/Screenings

There is no prevention clinic established. – Other Health Provider

Substance Abuse

About Substance Abuse

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These problems include:

- Teenage pregnancy
- Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)
- Other sexually transmitted diseases (STDs)
- Domestic violence
- Child abuse
- Motor vehicle crashes
- Physical fights
- Crime
- Homicide
- Suicide

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Social attitudes and political and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. In addition to the considerable health implications, substance abuse has been a flash-point in the criminal justice system and a major focal point in discussions about social values: people argue over whether substance abuse is a disease with genetic and biological foundations or a matter of personal choice.

Advances in research have led to the development of evidence-based strategies to effectively address substance abuse. Improvements in brain-imaging technologies and the development of medications that assist in treatment have gradually shifted the research community's perspective on substance abuse. There is now a deeper understanding of substance abuse as a disorder that develops in adolescence and, for some individuals, will develop into a chronic illness that will require lifelong monitoring and care.

Improved evaluation of community-level prevention has enhanced researchers' understanding of environmental and social factors that contribute to the initiation and abuse of alcohol and illicit drugs, leading to a more sophisticated understanding of how to implement evidence-based strategies in specific social and cultural settings.

A stronger emphasis on evaluation has expanded evidence-based practices for drug and alcohol treatment. Improvements have focused on the development of better clinical interventions through research and increasing the skills and qualifications of treatment providers.

- Healthy People 2020 (www.healthypeople.gov)

Related Age-Adjusted Mortality

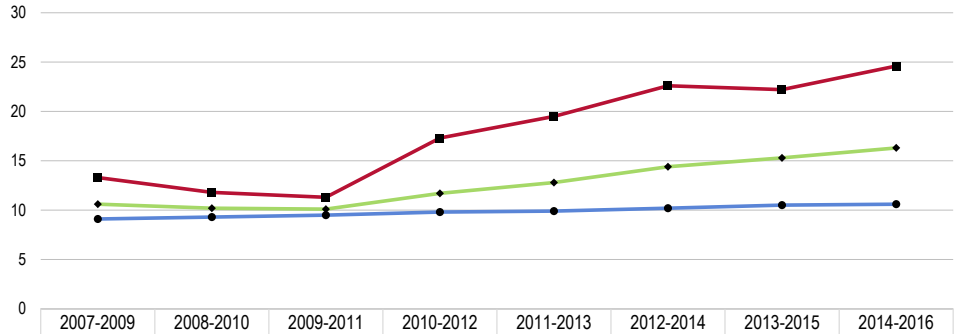
Cirrhosis/Liver Disease. Heavy alcohol use contributes to a significant share of liver disease, including cirrhosis. The following chart outlines age-adjusted mortality for cirrhosis/liver disease in the area.

Unintentional Drug-Related Deaths. Unintentional drug-related deaths include all deaths, other than suicide, for which drugs are the underlying cause. A "drug" includes illicit or street drugs (e.g., heroin and cocaine), as well as legal prescription and over-the-counter drugs; alcohol is not included. The following chart outlines local age-adjusted mortality for unintentional drug-related deaths.

Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 8.2 or Lower



	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	13.3	11.8	11.3	17.3	19.5	22.6	22.2	24.6
SD	10.6	10.2	10.1	11.7	12.8	14.4	15.3	16.3
US	9.1	9.3	9.5	9.8	9.9	10.2	10.5	10.6

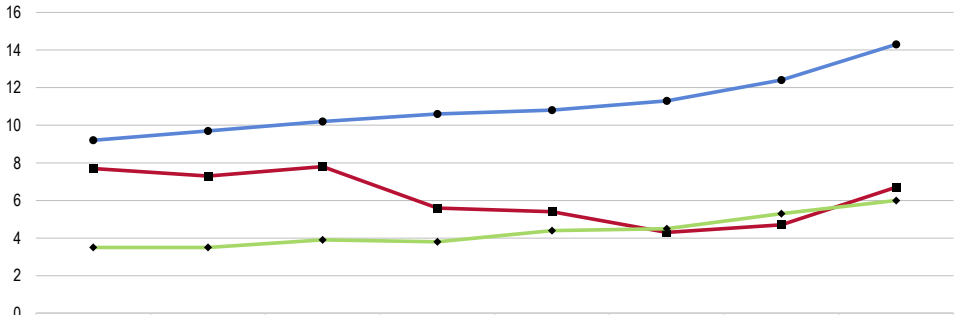
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-11]

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 11.3 or Lower



	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
SDSC	7.7	7.3	7.8	5.6	5.4	4.3	4.7	6.7
SD	3.5	3.5	3.9	3.8	4.4	4.5	5.3	6.0
US	9.2	9.7	10.2	10.6	10.8	11.3	12.4	14.3

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2018.
- UD Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-12].

Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

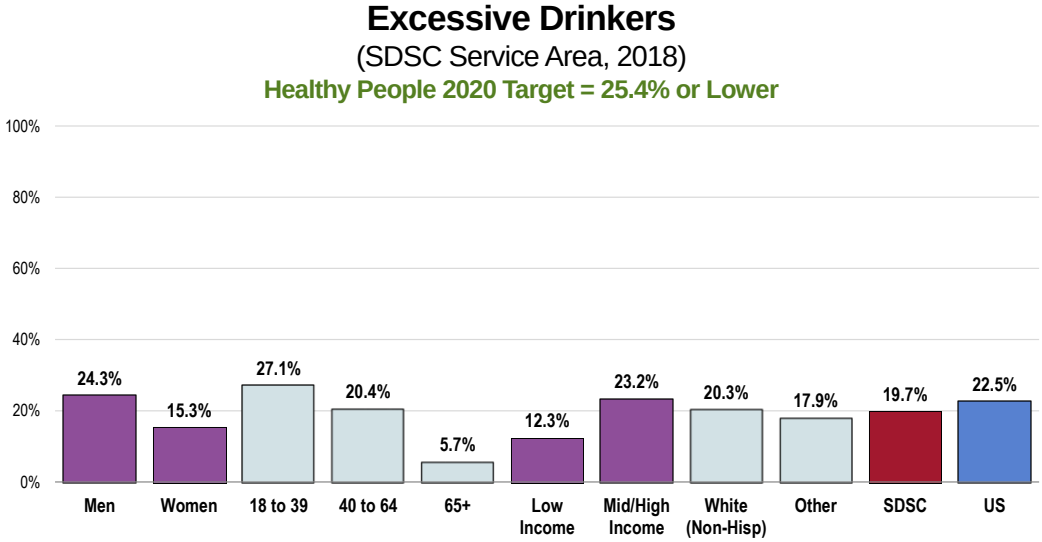
Alcohol Use

Excessive Drinkers. Excessive drinking reflects the number of adults (age 18+) who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women), or who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

"During the past 30 days, on how many days did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage, or liquor?"

"On the day(s) when you drank, about how many drinks did you have on the average?"

"Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 (if male)**/4** (if female) **or more drinks on an occasion?"**



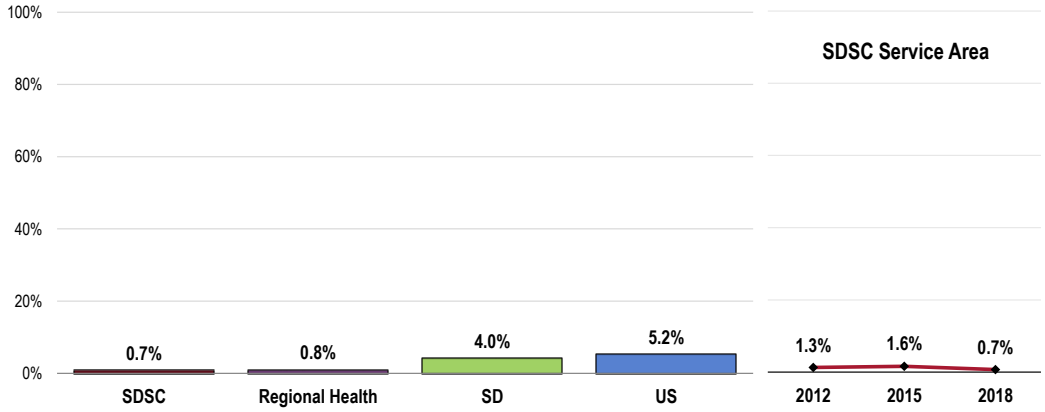
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-15]

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

Drinking & Driving. As a self-reported measure – and because this indicator reflects potentially illegal behavior – it is reasonable to expect that it might be underreported, and that the actual incidence of drinking and driving in the community is likely higher.

"During the past 30 days, how many times have you driven when you've had perhaps too much to drink?"

Have Driven in the Past Month After Perhaps Having Too Much to Drink



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 58]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

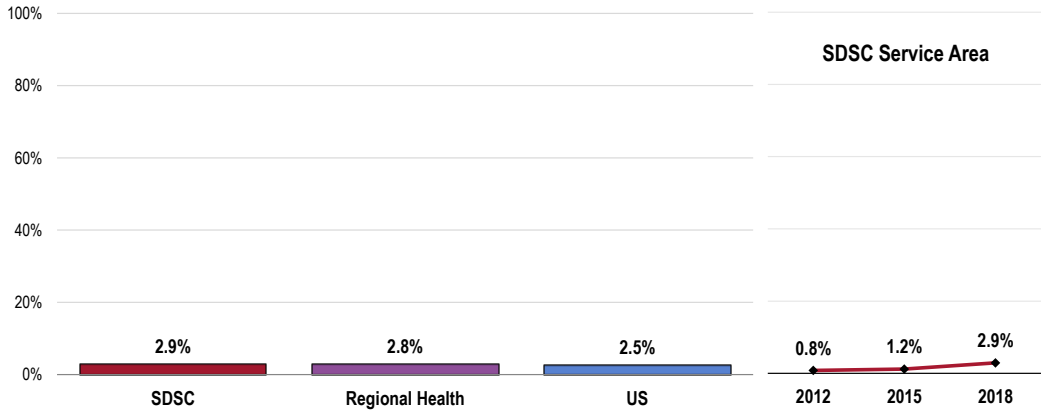
Notes:
- Asked of all respondents.

Drug Use

"During the past 30 days, have you used an illegal drug or taken a prescription drug that was not prescribed to you?"

Illicit Drug Use in the Past Month

Healthy People 2020 Target = 7.1% or Lower



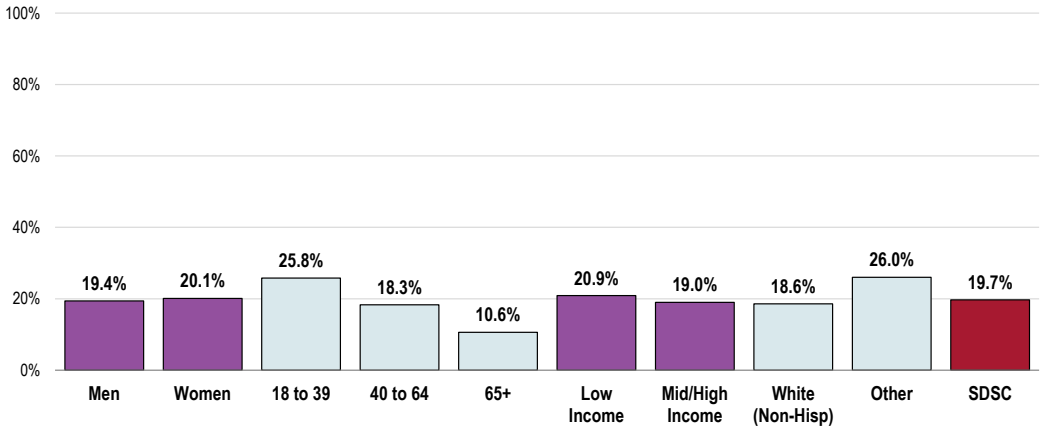
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 59]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-13.3]

Notes:
- Asked of all respondents.

"Opiates or opioids are drugs that doctors prescribe to treat pain. Examples of prescription opiates include morphine, codeine, hydrocodone, oxycodone, methadone, and fentanyl. In the past year, have you used any of these prescription opiates, whether or not a doctor had prescribed them to you?"

Have Used a Prescription Opiate in the Past Year, Whether Prescribed or Not

(SDSC Service Area, 2018)



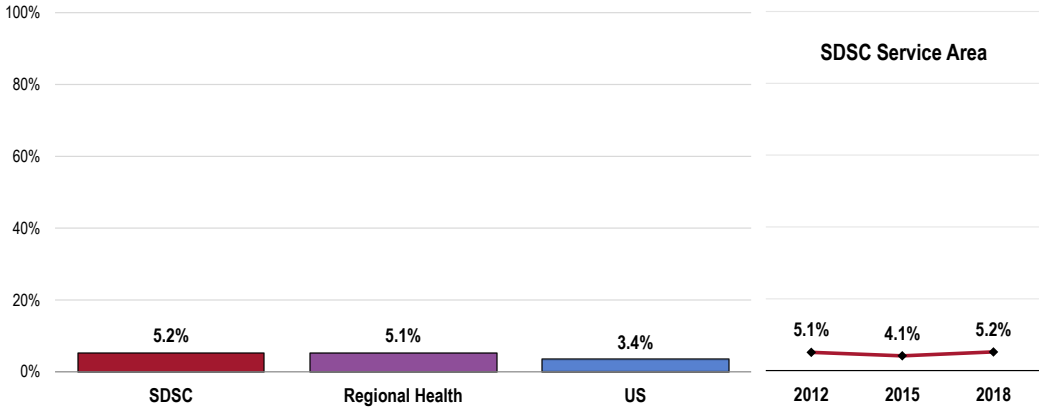
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 316]

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Alcohol & Drug Treatment

"Have you ever sought professional help for an alcohol or drug-related problem?"

Have Ever Sought Professional Help for an Alcohol/Drug-Related Problem



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 60]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

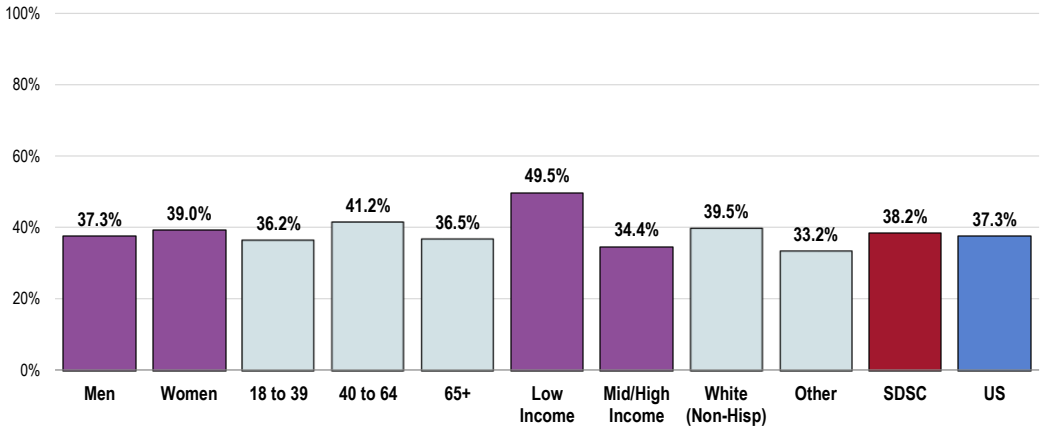
Notes:
- Asked of all respondents.

Personal Impact of Substance Abuse

"To what degree has your life been negatively affected by your own or someone else's substance abuse issues, including alcohol, prescription, and other drugs? Would you say: a great deal, somewhat, a little, or not at all?"

Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else)

(SDSC Service Area, 2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 61]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

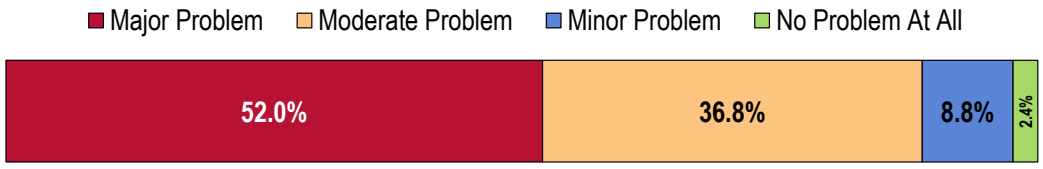
Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Key Informant Input: Substance Abuse

The greatest share of key informants taking part in an online survey characterized *Substance Abuse* as a "major problem" in the community.

Perceptions of Substance Abuse as a Problem in the Community

(Key Informants, 2018)



Sources:
- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Access to Care/Services

Specialized substance abuse treatment needed. Lack of certified counselors in the field. – Other Health Provider

Lack of inpatient long-term treatment services. Lack of method to fund long-term treatment. – Other Health Provider

Adult treatment facility with the ability for a 30-90 program is lacking. If there is one, it is not known. – Community/Business Leader

We need treatment centers that can take in patients when they are ready to go to treatment, not on a three month to one year waiting list. – Other Health Provider

No access, most end up in jail. – Other Health Provider

Nothing is available. Closest facility is 12-15 miles away. Expense of getting there, expense of using the facility unless on Medicaid. – Other Health Provider

Very high methamphetamine and opioid abuse. Minimal access to treatment centers. – Physician

Limited treatment facilities on the reservation. – Other Health Provider

No designated treatment facility. There is an Emergency Department and behavioral health program, but no long-term rehab programs that I am aware of. – Other Health Provider

Few programs and lack of transportation. No in-house withdrawal or recovery facilities. Community lacks financial resources. Also individuals' lack of desire to quit. Fair amount of homeless and vagrant individuals. ethyl alcohol not legal on the reservations but this community is not on native lands so ethyl alcohol is legal and this is where these folks come. Unemployment. Socio-economic issues. Breakdown of family unit. – Public Health Representative

Lack of availability in a timely manner. – Social Services Provider

Effective treatment for meth. Community lacks long-term treatment options for individuals with addiction to meth. This includes residential and half-way house treatment. – Other Health Provider

Availability and desire. – Community/Business Leader

There's too few treatment centers. – Community/Business Leader

Almost all of the substance use treatment programs in the state are 90 days or less. Most of the time this is not adequate to meet the needs of the patient. – Other Health Provider

Lack of private or state treatment centers. – Community/Business Leader

Lack of places for long-term addiction services. – Social Services Provider

No local treatment options for children/teens. – Physician

Prevalence/Incidence

Increase in incidence. – Other Health Provider

There's a whole world of substance abuse right under our noses. – Community/Business Leader

High incidence substance abuse. – Other Health Provider

Meth, heroin, cocaine, marijuana are all overused severely in this community. Law enforcement tries their best to curtail it, but it is rampant in this community. – Other Health Provider

High rate of substance abuse. – Community/Business Leader

Multiple admissions for substance abuse issues. – Other Health Provider

Widespread. – Physician

Substance abuse is huge in this community and nationwide. The cost involved and availability of treatment beds. This issue is tough to wrap hands around because of all the synthetic drugs and damage caused as a result affect the results of those treatments. There are programs in the schools and else in the community for prevention but this is huge. – Social Services Provider

Increase use of meth in community. – Other Health Provider

Denial/Stigma

Willingness to attend, cost and effectiveness of programs. – Social Services Provider

The stigma attached to seeking help for substance abuse issues is a barrier. Also, lack of long term treatment options in the Rapid City area is a barrier. – Social Services Provider

The nature of addiction is that often times those struggling aren't seeking help for themselves. I don't know that providers are assessing and having nonjudgmental conversations with people to help them understand what their options are if and when they choose to get help. And when someone is ready, it seems costly and hard to access. There are a limited number of professionals who are trained in both addictions and mental health and the two are so often linked and cannot be treated separately. – Other Health Provider

I believe the biggest problem especially with alcohol is that people don't want to admit they have a problem. Drinking has been a part of the culture for too long. – Community/Business Leader

Desire to stop. – Other Health Provider

Lack of motivation, denial. – Social Services Provider

There are not many barriers, people are not motivated to quit. – Other Health Provider

Lack of Providers

Not enough providers, stigma of people not wanting to get help, fear of losing jobs if they have one, and addiction takes over one's brain and ability to rationalize, so they won't seek help. – Social Services Provider

Lack of qualified providers and lack of the number of providers. – Community/Business Leader

Another barrier is there are significantly fewer addiction counselors than there are mental health counselors. The addiction field has a challenge in recruiting new addiction counselors at this side of South Dakota as we don't have a college other than OLC that offers any addiction course work, as in Eastern South Dakota there is University of South Dakota and they offer all the course work. – Social Services Provider

Enough professionals prepared to address the issues. A variety of sites to provide treatment - both residential and outpatient, short and long term. Removal of cost barriers. A consensus among professionals on how to deal with pain and a mechanism to distinguish pain treatment from narcotic-use disorders. – Physician

Awareness/Education

Education of healthcare providers as to the programs offered in this area. We have limited outpatient and even less inpatient programs for those seeking to get off various substances. – Social Services Provider

It seems that if you do not have a doctor or ability to pay for private services, your other option for help is to be sent to "detox" by the police. – Other Health Provider

Lack of awareness of resources. No local inpatient treatment facilities. – Other Health Provider

No reach out education protocol and no local treatment facilities. Lack of local funding for programs. – Community/Business Leader

Effects on Young Population

Overall health (physical, mental, emotional, spiritual) of our young people. They observe the significant binge drinking, drug abuse (marijuana, meth, opioids, prescription drugs), trauma, lack of healthy coping skills, poverty, homelessness of the adults around them. This climate impacts our youth in many ways; mentally and spiritually discouraged, sometimes hopeless, physically aren't taking care of their bodies and eating nutritious meals, experiences of trauma impact their choices and health the rest of their lives. – Social Services Provider

Teens with substance abuse. – Other Health Provider

Rampant contribution to child sexual abuse, child homicides, and extreme child neglect. – Community/ Business Leader

Affordable Care/Services

Lack of affordable treatment options, both outpatient and inpatient. Denial is part of being addicted. Addiction treatment is a long-term process, not a "quick fix" but our resources are built around crisis management. People may look down on addicts and think they don't deserve care - Physician

Those with substance abuse issues tend to not have the financial resource to provide for appropriate follow up on managing their recovery. It is a vicious cycle of not being able to keep a job because of their addiction and not being able to pay for services because they can't keep a job. What money they do have is spent to continue the addiction, etc. – Other Health Provider

Accessibility

Availability of illicit drugs, lack of availability of substance abuse centers, hopelessness. – Other Health Provider

Drugs are too easily available. I have heard that with the 24/7 drug program, persons in the program have other people urinate in the test containers to help them pass their tests. Meth, heroin, marijuana are so easily available, and this is extremely disturbing. Also, doctors have to be extremely careful about distributing medications. – Community/Business Leader

Vulnerable Population

The significant homeless and indigent population. – Other Health Provider

Many Natives lack education and have lost hope or are lost through the cracks because of lack of access to care. – Other Health Provider

Contributing Factors

Funding, treatment options, wait lists for inpatient treatment. Not nearly enough transitional facilities for folks once out of treatment. Incidence of abusing again is high due to this. – Other Health Provider

Transportation, access to providers, stigma associated with substance abuse. – Other Health Provider

Contribution to Crime

Rampant contribution to child sexual abuse, child homicides, and extreme child neglect. Not having laws enforced. No real treatment offered on Pine Ridge, folks treat it like it is normal. – Community/ Business Leader

Prevention/Screenings

Prevention and treatment services and not enough resources to deal with need. Much similar to mental health. – Other Health Provider

Most Problematic Substances

Key informants (who rated this as a "major problem") clearly identified **alcohol** and **methamphetamines/other amphetamines** as the most problematic substances abused in the community, followed by **heroin/other opioids** and **prescription medications**.

Problematic Substances as Identified by Key Informants

	Most Problematic	Second-Most Problematic	Third-Most Problematic	**Total Mentions**
Alcohol	63.5%	21.2%	9.8%	49
Methamphetamines or Other Amphetamines	36.5%	40.4%	11.8%	46
Heroin or Other Opioids	0.0%	17.3%	25.5%	22
Prescription Medications	0.0%	5.8%	25.5%	16
Marijuana	0.0%	7.7%	13.7%	11
Over-The-Counter Medications	0.0%	3.8%	3.9%	4
Cocaine or Crack	0.0%	1.9%	2.0%	2
Synthetic Drugs (e.g. Bath Salts, K2/Spice)	0.0%	1.9%	2.0%	2
Inhalants	0.0%	0.0%	3.9%	2
Hallucinogens or Dissociative Drugs (e.g. Ketamine, PCP, LSD, DXM)	0.0%	0.0%	2.0%	1

Tobacco Use

About Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. Scientific knowledge about the health effects of tobacco use has increased greatly since the first Surgeon General's report on tobacco was released in 1964.

Tobacco use causes:

- Cancer
- Heart disease
- Lung diseases (including emphysema, bronchitis, and chronic airway obstruction)
- Premature birth, low birth weight, stillbirth, and infant death

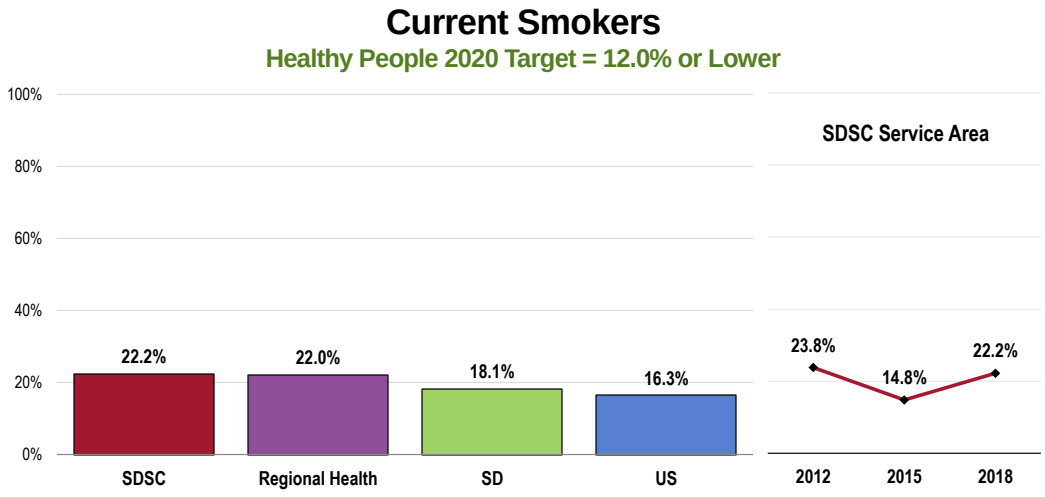
There is no risk-free level of exposure to secondhand smoke. Secondhand smoke causes heart disease and lung cancer in adults and a number of health problems in infants and children, including: severe asthma attacks; respiratory infections; ear infections; and sudden infant death syndrome (SIDS).

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.

- Healthy People 2020 (www.healthypeople.gov)

Cigarette Smoking

"Do you now smoke cigarettes every day, some days, or not at all?"



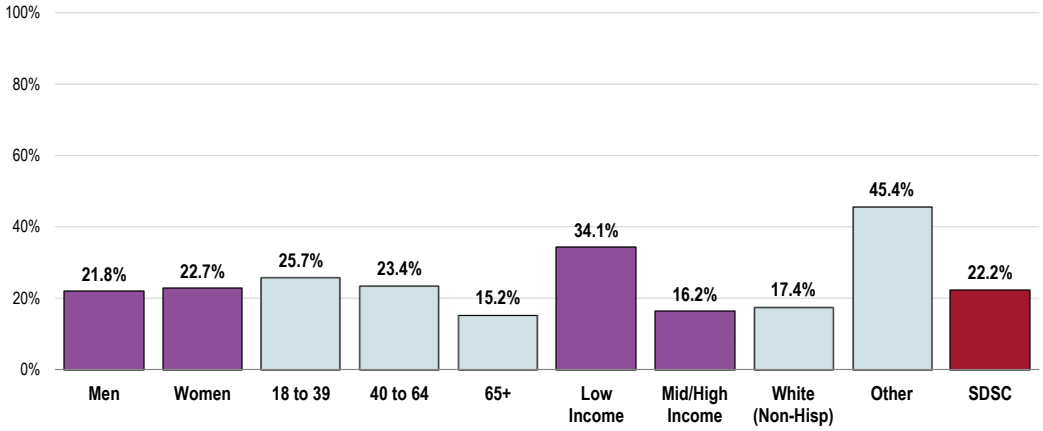
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 193]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1]

Notes:
- Asked of all respondents.
- Includes regular and occasional smokers (those who smoke cigarettes every day or on some days).

Current Smokers

(SDSC Service Area, 2018)

Healthy People 2020 Target = 12.0% or Lower



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 193]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1]

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- Includes regular and occasion smokers (every day and some days).

Smoking Cessation

About Reducing Tobacco Use

Preventing tobacco use 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.

Many factors influence tobacco use, disease, and mortality. Risk factors include race/ethnicity, age, education, and socioeconomic status. Significant disparities in tobacco use exist geographically; such disparities typically result from differences among states in smoke-free protections, tobacco prices, and program funding for tobacco prevention.

- Healthy People 2020 (www.healthypeople.gov)

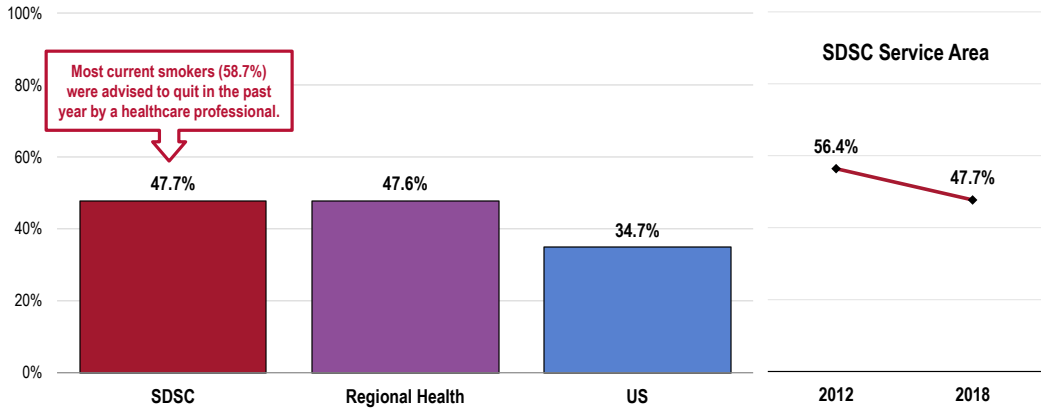
"In the past 12 months, has a doctor, nurse, or other health professional advised you to quit smoking?" (Asked of respondents who smoke every day or on some days.)

"During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?" (Asked of respondents who smoke every day.)

Have Stopped Smoking for One Day or Longer in the Past Year in an Attempt to Quit Smoking

(Among Everyday Smokers)

Healthy People 2020 Target = 80.0% or Higher



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 50-51]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-4.1]

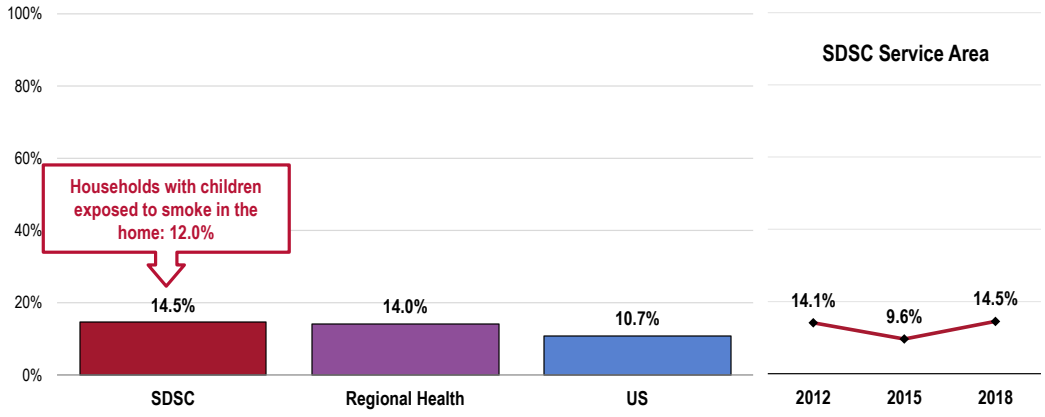
Notes:
- Asked of respondents who smoke cigarettes every day.

Secondhand Smoke

"In the past 30 days, has anyone, including yourself, smoked cigarettes, cigars or pipes anywhere in your home on an average of four or more days per week?"

The following chart details these responses among the total sample of respondents, as well as among only households with children (age 0-17).

Member of Household Smokes at Home



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 52, 162]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

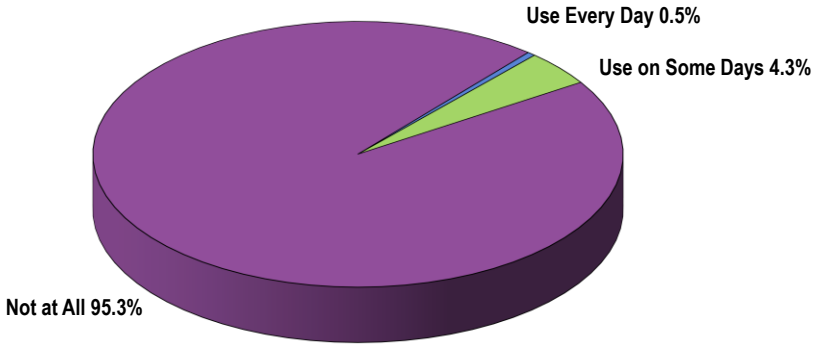
Notes:
- Asked of all respondents.
- "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.

Use of Vaping Products

"The next questions are about electronic vaping products, such as electronic cigarettes, also known as e-cigarettes. These are battery-operated devices that simulate traditional cigarette smoking, but do not involve the burning of tobacco. The cartridge or liquid "e-juice" used in these devices produces vapor and comes in a variety of flavors. Have you ever used an electronic vaping product, such as an e-cigarette, even just one time in your entire life?"

"Do you now use electronic vaping products, such as e-cigarettes, "every day," "some days," or "not at all"?"

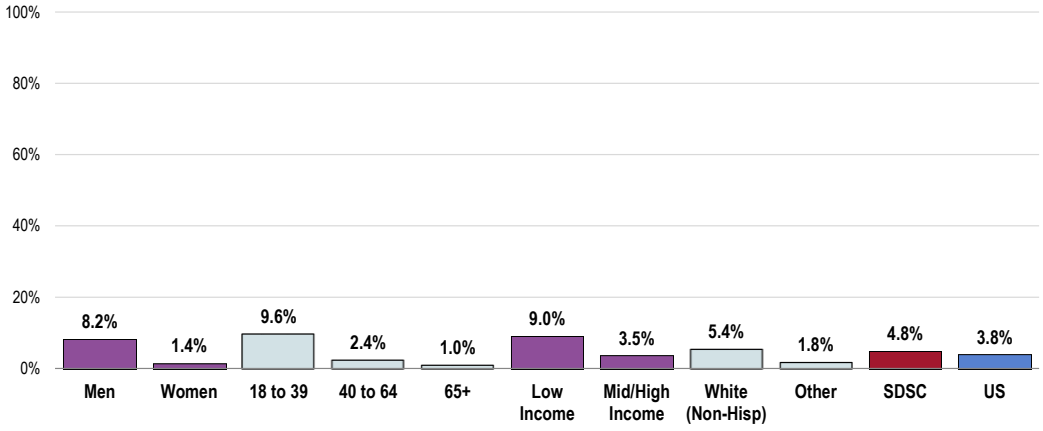
Use Vaping Products
(SDSC Service Area, 2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 163]

Notes:
- Asked of all respondents.

Currently Use E-Cigarettes or Other Vaping Products
(SDSC Service Area, 2018)



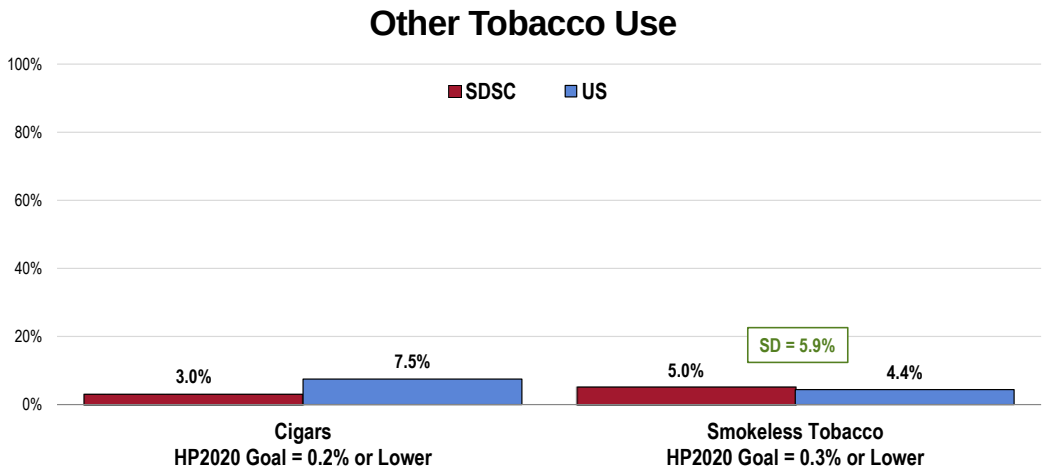
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 194]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1]

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- Includes regular and occasion users (every day and some days).

Other Tobacco Use

"Do you now smoke cigars every day, some days, or not at all?"

"Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all?"

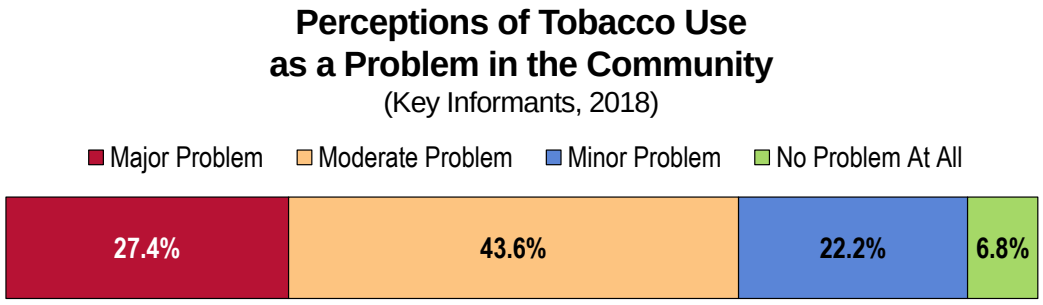


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 314-315]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives TU-1.2, TU-1.3]

Notes:
- Reflects the total sample of respondents.
- Smokeless tobacco includes chewing tobacco or snuff.

Key Informant Input: Tobacco Use

The following chart outlines key informants' perceptions of the severity of *Tobacco Use* as a problem in the community:



Sources:
- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Prevalence/Incidence

Tobacco products are all over the place and are encouraged by the tobacco companies and they are at community programs handing out products, like rodeos, fairs, high school activities. – Other Health Provider

Gateway drug, common and increase in chew as well. – Community/Business Leader

While tobacco use seems to have diminished over time, there remains a need to combat this use. I believe the addition of e-cigarettes have actually worked to increase tobacco use. – Community/ Business Leader

Very large portion of community smokes. – Other Health Provider

Relatively high percentage of the community smokes, especially younger people. – Other Health Provider

High incidence of smoking. – Other Health Provider

High rate of tobacco usage. – Community/Business Leader

High use of chewing and smoking. – Other Health Provider

Many young and older people smoke. We have programs in the schools for prevention. – Other Health Provider

Smoking has always been an issue. – Other Health Provider

There is a lot of it. – Physician

High number of people using tobacco. High numbers of high school students using smokeless tobacco products. – Public Health Representative

Tobacco use is widespread and causes both physical and financial hardships. – Social Services Provider

Cultural/Personal Beliefs

Ranching and native cultural habits, alcohol and substance abuse issues for many others. – Public Health Representative

The culture. Goes along with drinking. – Other Health Provider

Comorbidities

Tobacco use contributes to heart and lung disease. The incidence of cancer and many other medical conditions. It is often used as a coping mechanism for those who have time on their hands due to unemployment, mental health disease and other causes. – Social Services Provider

Poverty

Its use is very prevalent among the poor. Pregnant mothers smoke. New parents smoke near babies. – Community/Business Leader

Aging Population

Aging population. – Other Health Provider

Awareness/Education

Lack of education to the dangers of smoking. – Other Health Provider

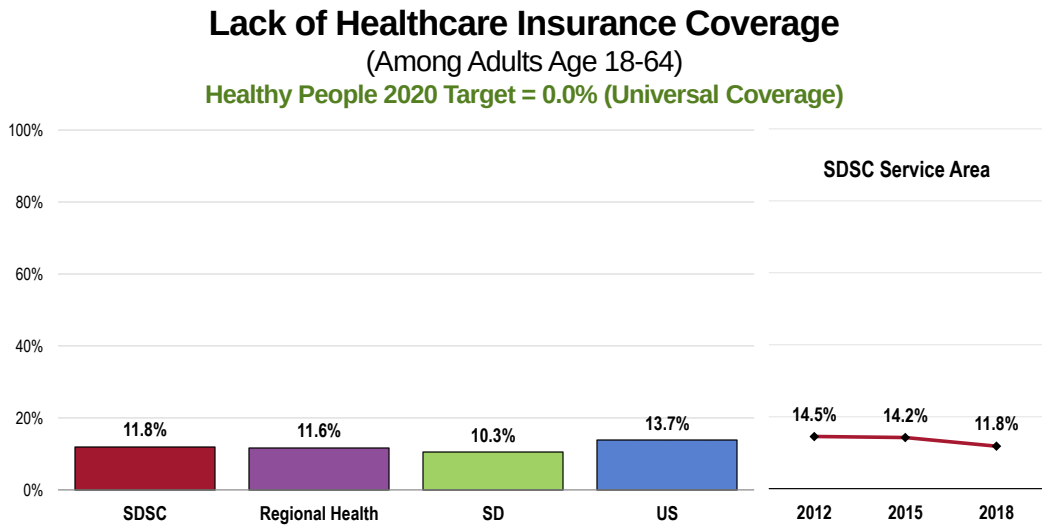
Access to Health Services

Lack of Health Insurance Coverage (Age 18 to 64)

Survey respondents were asked a series of questions to determine their healthcare insurance coverage, if any, from either private or government-sponsored sources. Here, lack of health insurance coverage reflects respondents age 18 to 64 (thus excluding the Medicare population), who have no type of insurance coverage for healthcare services – neither private insurance nor government-sponsored plans (e.g., Medicaid).

"Do you have any government-assisted healthcare coverage, such as Medicare, Medicaid (or another state-sponsored program), or VA/military benefits?"

"Do you currently have: health insurance you get through your own or someone else's employer or union; health insurance you purchase yourself; or, you do not have health insurance and pay for health care entirely on your own?"



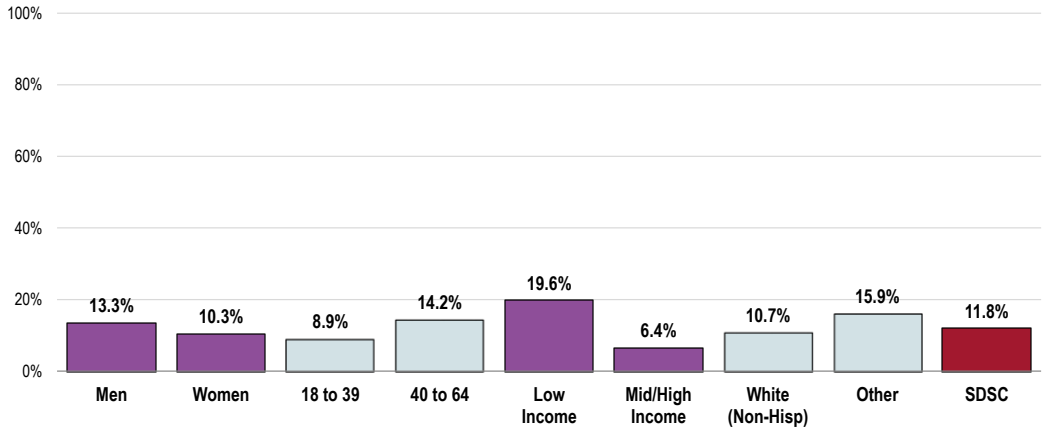
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]

Notes:
- Asked of all respondents under the age of 65.

Lack of Healthcare Insurance Coverage

(Among Adults Age 18-64; SDSC Service Area, 2018)

Healthy People 2020 Target = 0.0% (Universal Coverage)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]

Notes:
- Asked of all respondents under the age of 65.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Difficulties Accessing Healthcare

About Access to Healthcare

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts: overall physical, social, and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps: 1) Gaining entry into the health care system; 2) Accessing a health care location where needed services are provided; and 3) Finding a health care provider with whom the patient can communicate and trust.

- Healthy People 2020 (www.healthypeople.gov)

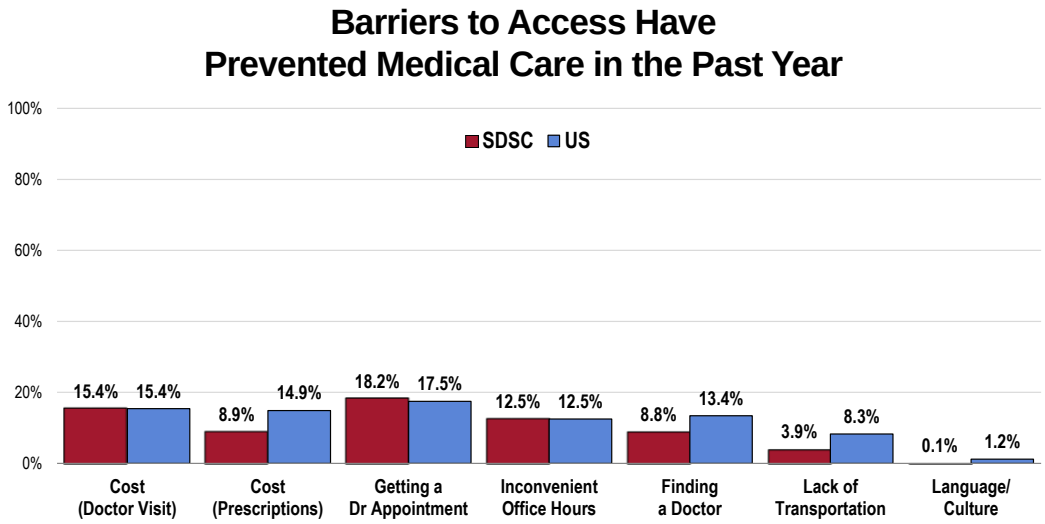
Barriers to Healthcare Access

To better understand healthcare access barriers, survey participants were asked whether any of the following barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

"Was there a time in the past 12 months when…

- … you needed medical care, but had **difficulty finding a doctor**?"
- … you had difficulty getting an **appointment** to see a doctor?"
- … you needed to see a doctor, but could not because of the **cost**?"
- … a **lack of transportation** made it difficult or prevented you from seeing a doctor or making a medical appointment?"
- … you were not able to see a doctor because the **office hours were not convenient**?"
- … you needed a **prescription medicine**, but did not get it because you could not afford it?"
- … you were not able to see a doctor due to **language or cultural differences**?"

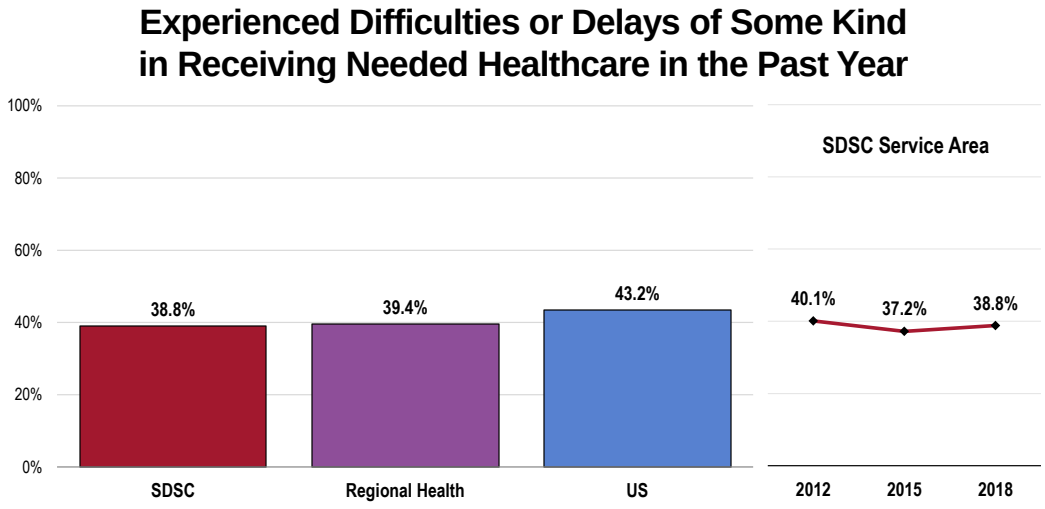
The percentages shown in the following chart reflect the total population, regardless of whether medical care was needed or sought.



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-12,14]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

The following charts reflect the composite percentage of the total population experiencing problems accessing healthcare in the past year (indicating one or more of the aforementioned barriers or any other problem not specifically asked), again regardless of whether they needed or sought care.

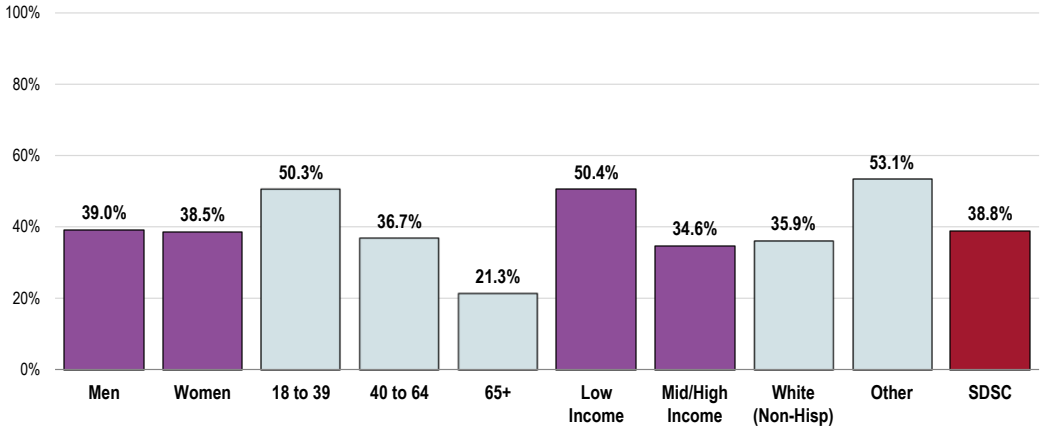


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 171]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.

Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year

(SDSC Service Area, 2018)



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 171]

Notes:
- Asked of all respondents.
- Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Accessing Healthcare for Children

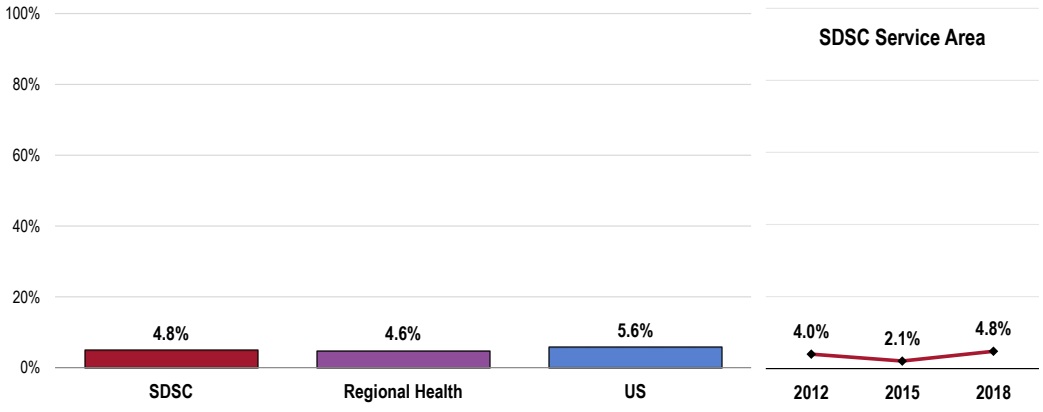
Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly-selected child in their household.

"Was there a time in the past 12 months when you needed medical care for this child, but could not get it?"

"What was the main reason you could not get medical care for this child?"

Had Trouble Obtaining Medical Care for Child in the Past Year

(Among Parents of Children 0-17)

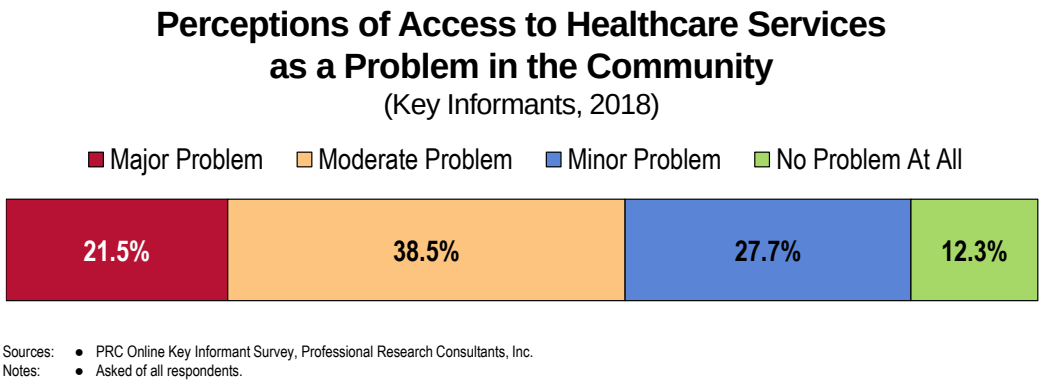


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 118-119]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents with children 0 to 17 in the household.

Key Informant Input: Access to Healthcare Services

The following chart outlines key informants' perceptions of the severity of *Access to Healthcare Services* as a problem in the community:



Among those rating this issue as a "major problem," reasons related to the following:

Access to Care/Services

Mental health services are hard to find in our community. – Other Health Provider

There are no evening or weekend hours for many clinics that are primary care facilities. Lack of funds to pay for co-pays and medications. – Social Services Provider

The rural nature of the community and simply getting to healthcare facilities coupled with a low socio-economic population level. There is a significant lack of healthcare education and knowledge in the community. – Other Health Provider

Availability/appointments with providers. – Other Health Provider

Access to insurance. Access to mental health. Access to substance abuse programs. – Other Health Provider

People who use IHS have a major decision to make about their healthcare. If they have chest pain should I go to IHS urgent care and get scolded for going there because chest pain is an emergency or if I go to RCRH and it turns out to be gas and not heart related I get stuck with the bill. IHS won't pay for non-emergencies. There are limited number of providers in IHS so seeing a provider is hard to get appointments. Many problems turn into major problems if they aren't caught early on in the process. – Other Health Provider

Lack of Providers

Availability of primary care providers and transportation to and from appointments. – Other Health Provider

Reported by patients when they arrive that they do not have a PCP or were unable to get an appointment. Many of these visits to the Emergency Department happen after regular business hours. – Other Health Provider

Shortage of primary care providers, especially those willing to see Medicare/Medicaid patients. Shortage of providers with training in geriatric medicine. Shortage of physical/occupational/speech therapists. Shortage of nursing staff. Shortage of particular specialists including pulmonary medicine, endocrinology, urology, psychiatry, hematology, etc. – Physician

Not enough providers and ancillary staff. – Other Health Provider

There is a lack of specialists in our community as well as a lack of affordable preventative healthcare options for those living in poverty. – Social Services Provider

However, we have no healthcare facility in the Hermosa community. Closest is Rapid City and then Custer. Many community members are older and need help getting to RC or Custer. – Other Health Provider

The current provider should be replaced with the patient-identified medical care that is not determined by the Indian Health Services (IHS). – Community/Business Leader

Transportation

Transportation, quality healthcare, insurance. – Social Services Provider

Transportation, primarily in rural communities. I see this as a barrier for access to both primary care and mental healthcare. Limited or no mental healthcare options in certain communities - I believe a big reason for this has to do with health professional shortages as well as a lack of information (those that need to know aren't finding out about what's available). I see this as a marketing/communication issue. Another barrier is the belief/attitude that you don't seek care until things are bad - prevention is not the standard way of thinking. – Other Health Provider

Community hospital serves such a vast, poverty-stricken area with no public transportation services available. Many socio-economic issues. Community located between Pine Ridge and Rosebud Indian reservations. – Public Health Representative

This is not specifically a health issue, but rather a quality of life issue. Transportation. – Other Health Provider

Lack of services for para and quadriplegics and no transportation means even if services were available. – Public Health Representative

Individual being able to get to healthcare appointments. – Other Health Provider

Access for Underinsured/Uninsured

The number of people who don't have insurance and do not qualify for Medicare or Medicaid is significant in my community. People do not go for wellness checks or prevention. – Other Health Provider

I don't think there is any comprehensive plan to be sure that all residents of the area have affordable, consistent and timely access to primary care providers. – Physician

The biggest problem in the community related to health issues is a lack of health insurance or ability to afford healthcare, dental care, and prescriptions. – Other Health Provider

Poverty

Poverty. – Community/Business Leader

Oglala Lakota County (OLC) is large. In general, poverty is an issue. Therefore, things that play a part in accessing healthcare services for an individual in the community, and cannot be taken for granted, are as follows: ability to travel a distance to the nearest healthcare facility, a vehicle, gasoline for vehicle, a telephone to make an appointment, data minutes on the telephone, etc. In addition, IHS has problems getting and retaining providers, so without providers, it is very difficult to access healthcare within the community. This may lead to patients need to be referred to another facility, which can become a problem due to limited funds available through HIS; thus, at times, patients are denied care. – Other Health Provider

Affordable Care/Services

Affordability. Access to medical assistance and dental care is adequate but there are a lot of people that cannot afford it. – Other Health Provider

There is no way for people who can't afford care to access service other than the emergency room. Thus little health conditions may turn into big health conditions. – Community/Business Leader

Diagnosis/Treatment

In our outlying communities the facilities are "stabilize and ship." This leads to prolonged care and large expenses many times. – Community/Business Leader

Funding

Indian Health Service and purchased referred care dollars not being enough for our tribal people. – Public Health Representative

Type of Care Most Difficult to Access

Key informants (who rated this as a "major problem") most often identified elder care, dental care, chronic disease care, and specialty care as the most difficult to access in the community.

Medical Care Difficult to Access as Identified by Key Informants				
	Most Difficult	Second-Most Difficult	Third-Most Difficult	Total Mentions
Elder Care	8.0%	16.7%	13.0%	9
Dental Care	16.0%	16.7%	0.0%	8
Chronic Disease Care	8.0%	8.3%	13.0%	7
Specialty Care	0.0%	4.2%	21.7%	6
Primary Care	4.0%	0.0%	13.0%	4
Pain Management	0.0%	0.0%	4.3%	1
Insurance Coverage	0.0%	0.0%	4.3%	1
Crisis Services	0.0%	0.0%	4.3%	1

Primary Care Services

About Primary Care

Improving health care services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs. Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. Having a usual PCP is associated with:

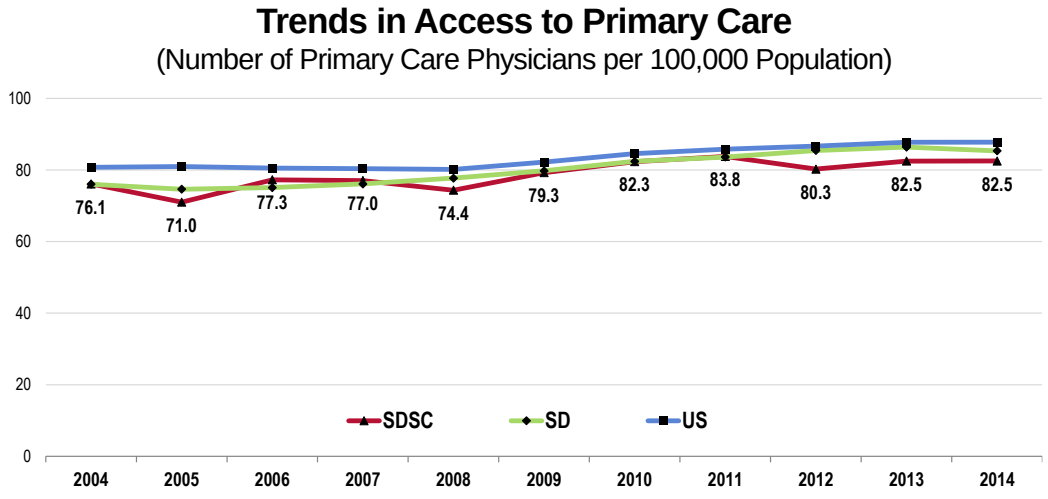
- Greater patient trust in the provider
- Good patient-provider communication
- Increased likelihood that patients will receive appropriate care

Improving health care services includes increasing access to and use of evidence-based preventive services. Clinical preventive services are services that: **prevent** illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention); or **detect** a disease at an earlier, and often more treatable, stage (secondary prevention).

- Healthy People 2020 (www.healthypeople.gov)

Access to Primary Care

This indicator is relevant because a shortage of health professionals contributes to access and health status issues.



Sources:
- US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.
- Retrieved November 2018 from Community Commons at http://www.chna.org.

Notes:
- This indicator is relevant because a shortage of health professionals contributes to access and health status issues.
- These figures represent all primary care physicians practicing patient care, including hospital residents.

Specific Source of Ongoing Care

Having a specific source of ongoing care includes having a doctor's office, clinic, urgent care center, walk-in clinic, health center facility, hospital outpatient clinic, HMO or prepaid group, military/VA clinic, or some other kind of place to go if one is sick or needs advice about his or her health. This resource is crucial to the concept of "patient-centered medical homes" (PCMH).

"Is there a particular place that you usually go to if you are sick or need advice about your health?"

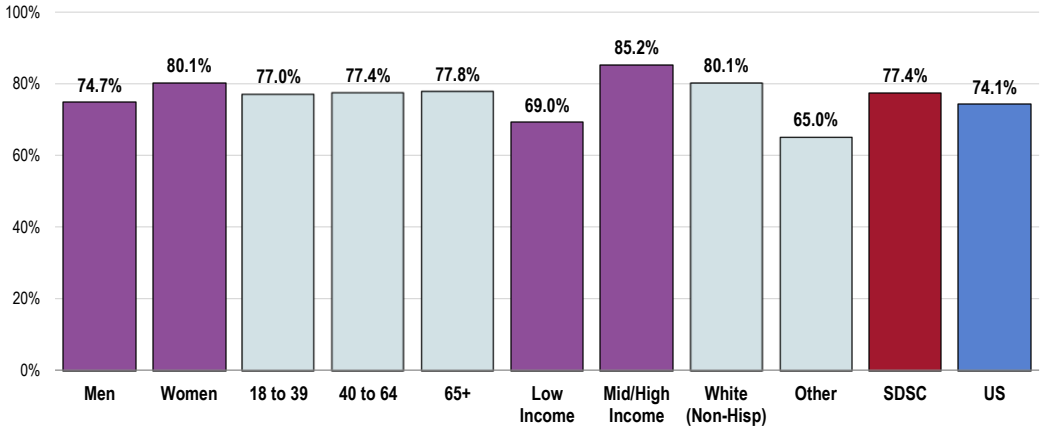
"What kind of place is it: a medical clinic, an urgent care center/walk-in clinic, a doctor's office, a hospital emergency room, military or other VA healthcare, or some other place?"

The following chart illustrates the proportion of the SDSC Service Area population with a specific source of ongoing medical care. Note that a hospital emergency room is not considered a specific source of ongoing care in this instance.

Have a Specific Source of Ongoing Medical Care

(SDSC Service Area, 2018)

Healthy People 2020 Target = 95.0% or Higher



Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 170]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-5.1]

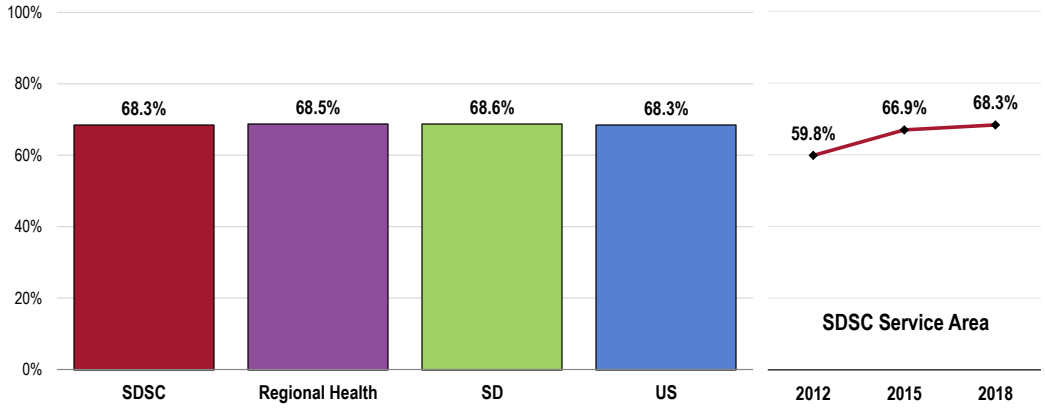
Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Utilization of Primary Care Services

Adults: "A routine checkup is a general physical exam, not an exam for a specific injury, illness or condition. About how long has it been since you last visited a doctor for a routine checkup?"

Children: "About how long has it been since this child visited a doctor for a routine checkup or general physical exam, not counting visits for a specific injury, illness, or condition?"

Have Visited a Physician for a Checkup in the Past Year

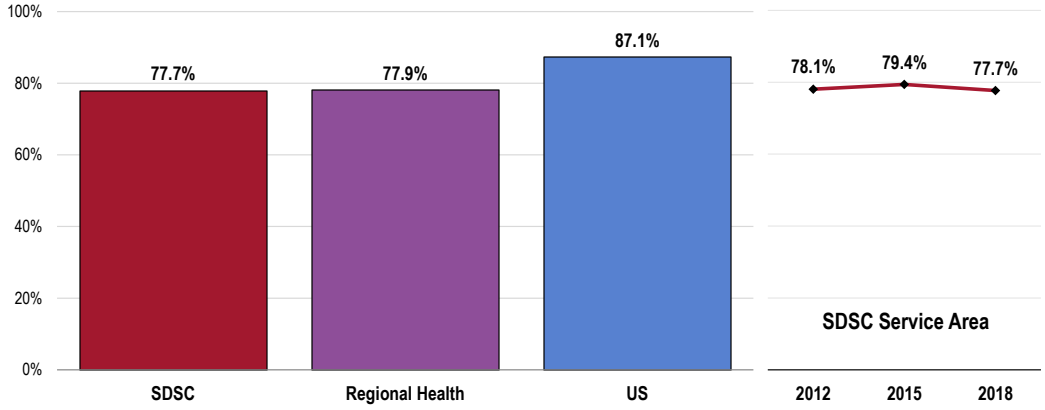


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 SD data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Child Has Visited a Physician for a Routine Checkup in the Past Year

(Among Parents of Children 0-17)



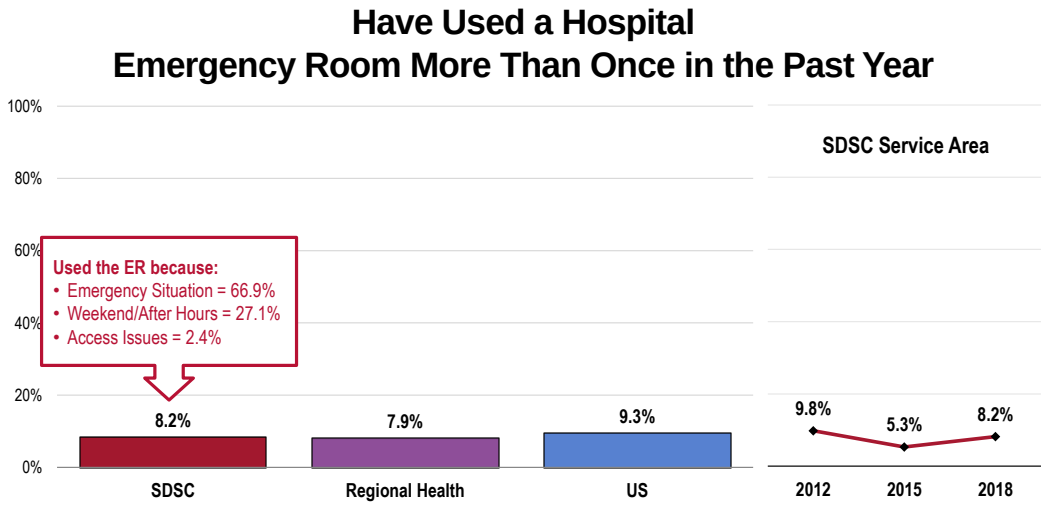
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 120]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents with children 0 to 17 in the household.

Emergency Room Utilization

"In the past 12 months, how many times have you gone to a hospital emergency room about your own health? This includes ER visits that resulted in a hospital admission." (Responses here reflect the percentage with two or more visits in the past year.)

"What is the main reason you used the emergency room instead of going to a doctor's office or clinic?"



Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 22-23]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Oral Health

About Oral Health

Oral health is essential to overall health. Good oral health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions. However, oral diseases, from cavities to oral cancer, cause pain and disability for many Americans. Good self-care, such as brushing with fluoride toothpaste, daily flossing, and professional treatment, is key to good oral health. Health behaviors that can lead to poor oral health include: **tobacco use; excessive alcohol use;** and **poor dietary choices**.

The significant improvement in the oral health of Americans over the past 50 years is a public health success story. Most of the gains are a result of effective prevention and treatment efforts. One major success is community water fluoridation, which now benefits about 7 out of 10 Americans who get water through public water systems. However, some Americans do not have access to preventive programs. People who have the least access to preventive services and dental treatment have greater rates of oral diseases. A person's ability to access oral healthcare is associated with factors such as education level, income, race, and ethnicity.

Barriers that can limit a person's use of preventive interventions and treatments include: limited access to and availability of dental services; lack of awareness of the need for care; cost; and fear of dental procedures.

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 oral health.

Potential strategies to address these issues include:

- Implementing and evaluating activities that have an impact on health behavior.
- Promoting interventions to reduce tooth decay, such as dental sealants and fluoride use.
- Evaluating and improving methods of monitoring oral diseases and conditions.
- Increasing the capacity of State dental health programs to provide preventive oral health services.
- Increasing the number of community health centers with an oral health component.

- Healthy People 2020 (www.healthypeople.gov)

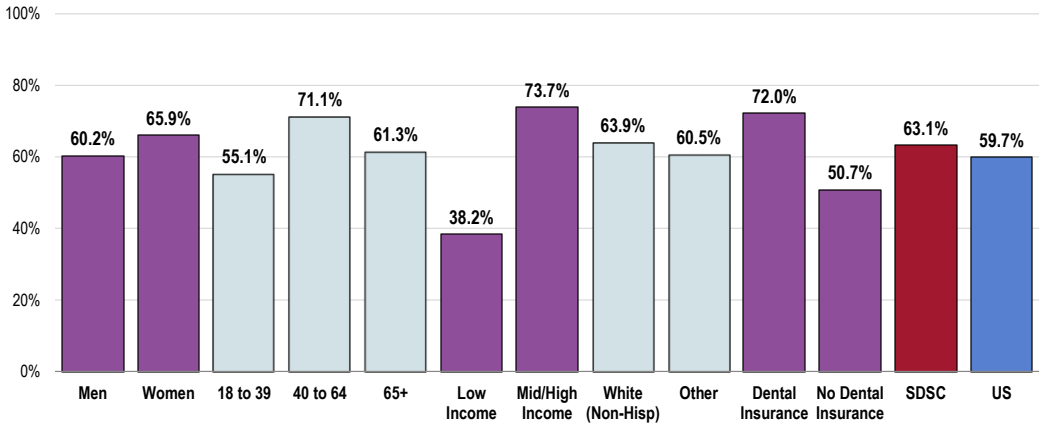
Dental Care

"About how long has it been since you last visited a dentist or a dental clinic for any reason?"

Have Visited a Dentist or Dental Clinic Within the Past Year

(SDSC Service Area, 2018)

Healthy People 2020 Target = 49.0% or Higher



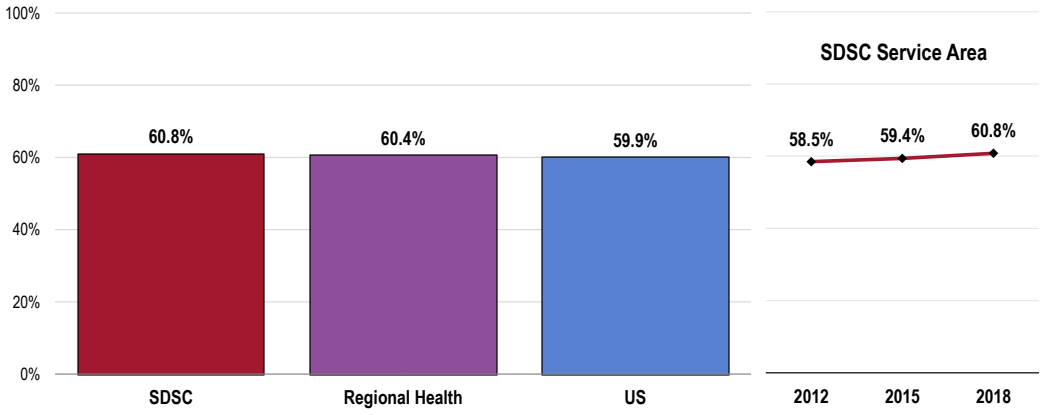
Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Dental Insurance

"Do you currently have any health insurance coverage that pays for at least part of your dental care?"

Have Insurance Coverage That Pays All or Part of Dental Care Costs

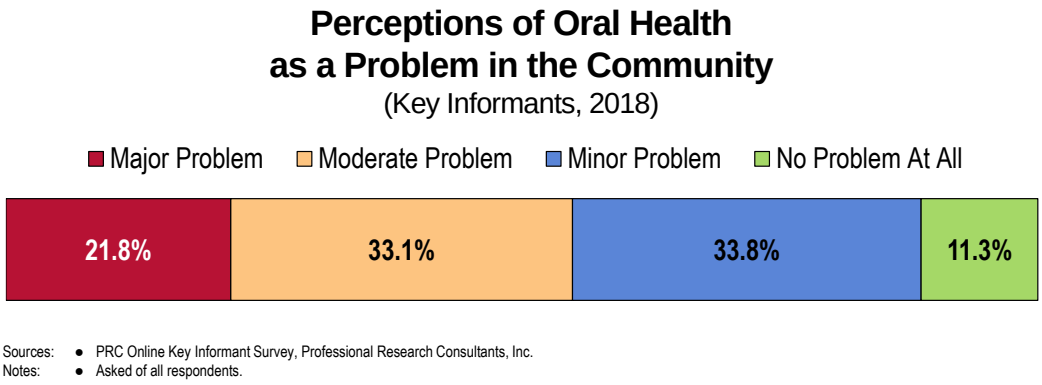


Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 21]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Key Informant Input: Oral Health

The following chart outlines key informants' perceptions of the severity of *Oral Health* as a problem in the community:



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

Affordable Care/Services

Access to dental care due to financial constraints. Education regarding good mouth/teeth care. – Other Health Provider

The high cost of dental care limits access. Even with Medicaid as insurance it is difficult to find a dentist who will accept a new Medicaid patient. There is no dental care coverage for those on Medicare. Community Health Center does not take self-pay dental patients for routine care. – Social Services Provider

Very expensive. Plenty of dentists within the community but again the expense involved has created an oral health crisis within the community. Dentists do not want to accept Medicaid rates/patients. – Social Services Provider

Dental care is too costly for South Dakota. – Community/Business Leader

Extremely expensive even for those with insurance at times. Typically not an option for those without insurance. Many don't take Medicaid or only take a limited number of Medicaid patients. This means prevention goes out the window and we're treating more urgent dental issues that at times become major medical issues. – Other Health Provider

Access to dental care is difficult to those with Medicaid. – Other Health Provider

Most dental providers do not take payment plans or SD Medicaid. CHCBH is a resource; however, there are stipulations with getting appointments. New patients without insurance have to walk in for appointments. This is difficult for folks, especially if they work. – Other Health Provider

Going to the dentist is not affordable for low income people. – Other Health Provider

Limited availability for low income community members. – Other Health Provider

Access for Underinsured/Uninsured

Many individuals in the community lack dental health insurance making dental health a luxury that is often not afforded. Few dentists in Rapid City accept Medicaid making it difficult for those covered by Medicaid to access dental care. The only clinic that offers a sliding fee scale for dental care is Community Health Center of the Black Hills – Oral Health, making their clinic very busy. – Other Health Provider

Many patients that present to the Emergency Department with dental problems, state they don't have dental insurance and can't afford to pay cash therefore they can't get an appointment with a dentist. – Other Health Provider

There is a lack of services to those without insurance, many dentists do not take Medicare/Medicaid. Even with insurance dental care is expensive. Taking time off unpaid for preventative care and having the funds for a co-pay for something that may feel unnecessary at the time when you have other bills to pay is a tough choice to make. Dental care has become something that is needed as a crisis not preventative. – Social Services Provider

Access to it. People don't have insurance. Long waiting line at Community Health Center of the Black Hills for free or reduced cost dental care. Plus people hate going to the dentist. – Social Services Provider

Access to Care/Services

> *Access to service providers. – Community/Business Leader*
>
> *Only two clinics. People are losing teeth due to the practice of pull and not retain original teeth. Many young adults have many teeth missing. Dentures worn by many adults in their 40's and 50's. – Community/Business Leader*
>
> *Among some people, it's easier to pull a tooth than to fix it. Lack of dentist to treat people and access to care are lacking. – Other Health Provider*
>
> *Community members often report to the ED with their dental complaints. Native Americans can be seen at Rapid City IHS on a first-come, first-served basis. The lines are often long. – Other Health Provider*

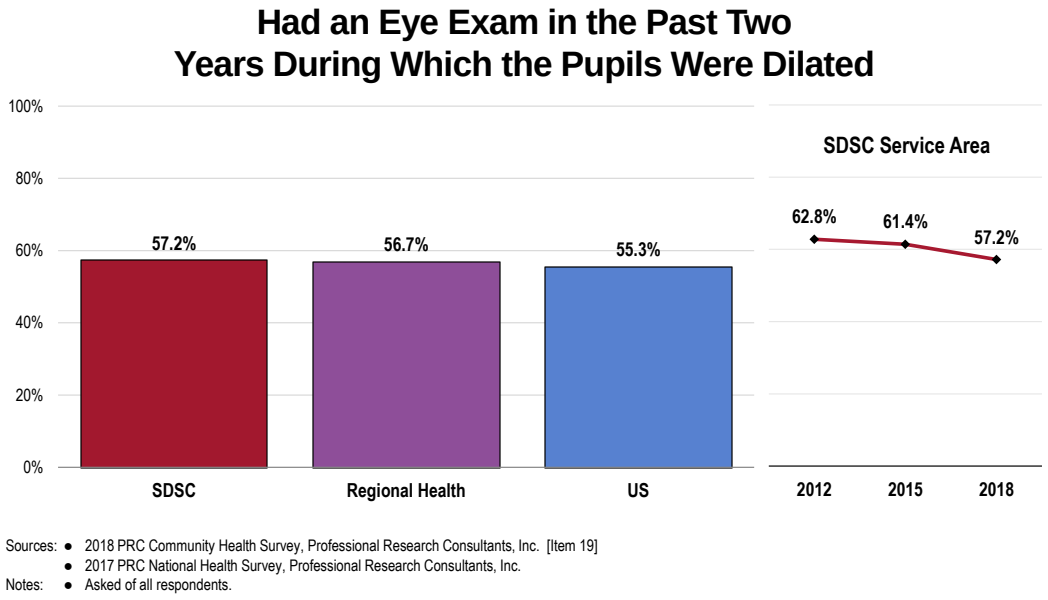
Poverty

> *Lack of options for those living in poverty. – Social Services Provider*

Vision Care

"When was the last time you had an eye exam in which the pupils were dilated? This would have made you temporarily sensitive to bright light." (Responses in the following chart represent those with an eye exam within the past 2 years.)

See also *Potentially Disabling Conditions: Vision & Hearing* in the **Death, Disease, & Chronic Conditions** section of this report.

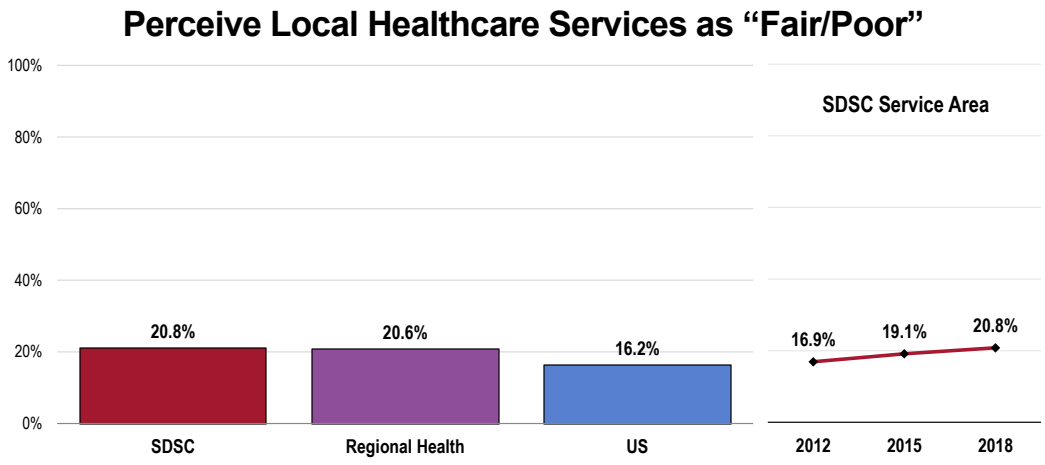


Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 19]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Local Resources

Perceptions of Local Healthcare Services

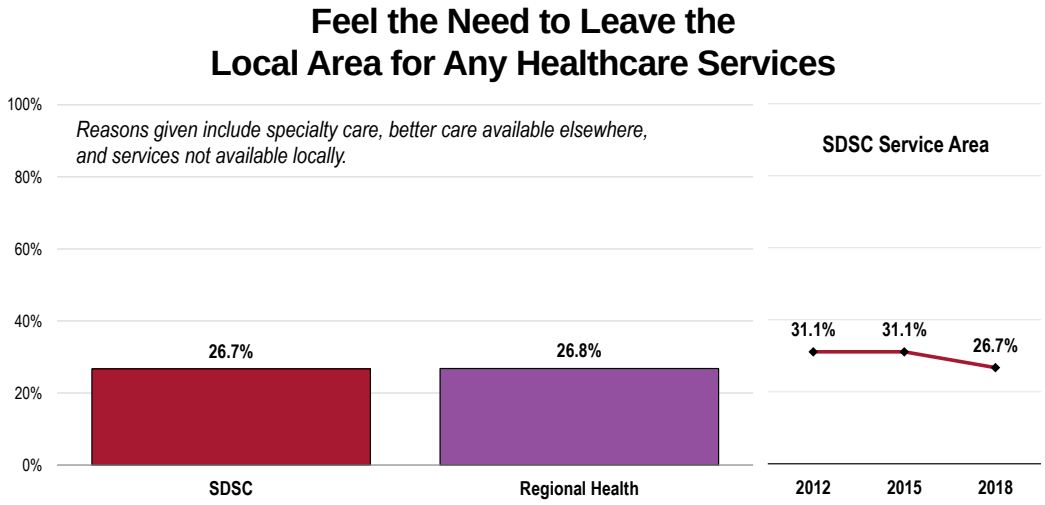
"How would you rate the overall health care services available to you? Would you say: excellent, very good, good, fair, or poor?"



Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Outmigration for Healthcare Services

"Is there any health care service for which you feel the need to leave the local area to receive care?"



Sources: ● 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 310]
Notes: ● Asked of all respondents.

Resources Available to Address the Significant Health Needs

The following represent potential measures and resources (such as programs, organizations, and facilities in the community) identified by key informants as available to address the significant health needs identified in this report. This list only reflects input from participants in the Online Key Informant Survey and should not be considered to be exhaustive nor an all-inclusive list of available resources.

Access Problems

All Women Count
Ambulance Service
Behavior Management Systems
Bennett County Hospital and Rural Health Clinic
Black Hills Works
CHR Van for IHS Patients
Community Bus Services
Community Health Center
Community Health Programs
Cornerstone Rescue Mission
Crisis Care Center
Delta Dental Mobile Unit
Department of Social Services
Dial-a-Ride
Girls Inc.
Good Shepherd Clinic
Horizon Clinic
Hospital
Indian Health Service
KILI Radio
Long-Term Care Centers
Medicare/Medicaid
Midland
Mobile Healthcare Van
Native Women's Health Center
Prairie Hills Transit
Purchased Referred Care
Rapid City Bus
Rapid Ride
Regional Health
Same Day Surgery Center
South Dakota Department of Health
Taxi Services
Transportation from the Reservation
Urgent Care
USD/SDSU Training Programs

Arthritis/Osteoporosis/Back Conditions

Arthritic Facilities
Arthritis Foundation
Aspen Center
Belle Fourche Regional Clinic
Black Hills Arthritis Association
Black Hills Arthritis Support Group
Black Hills Orthopedics and Spine Center
Black Hills Surgical Hospital
Doctor's Offices
Fitness Centers/Gyms
Indian Health Service
Osteo Strong
Pain Management
Pharmacies
Physical Therapy
Purchased Referred Care
Regional Health
Same Day Surgery Center
Regional Medical Clinic
Sioux San Hospital
Urgent Care

Cancer

American Cancer Society
Cancer Care Institute
Cancer Navigator Program
Cancer Services
Cancer Support Group
Colorectal Cancer Screening
Community Health Representative Program
Doctor's Offices
Home Health Services
Home Plus Hospice
Hospice
Hospital
Indian Health Service
John T. Vucurevich Cancer Care Institute
KILI Radio
Lead-Deadwood Regional Hospital Foundation

Medicare/Medicaid
National Cancer Institute
Philip Health Services
Prairie Hills Transit
Regional Health
Same Day Surgery Center
Road to Recovery
South Dakota Good and Healthy
South Dakota Quit Line
Support Networks
Tough Enough to Wear Pink
Veterans Administration

Chronic Kidney Disease

Aspen Center
Davida
Dialysis Clinic at Sharps Corner
DM Education
Doctor's Offices
Hospital
ID
IM
Indian Health Service
KILI Radio
Northern Hills Dialysis
Nutrition Services
Philip Health Services
Regional Health
Same Day Surgery Center

Dementia/Alzheimer's Disease

Adult and Aging/Health and Human Services
Adult Daycare Services
Alzheimer's Association
Alzheimer's Support Groups
Assisted Living Facilities
Bella Vista Care and Rehabilitation
Bella Vista Nursing Home
Belle Fourche Regional Clinic
Caregiver Support Groups
Caregivers Training
Custer Regional Senior Care
Day Care Facilities
Doctor's Offices
Dorsett and Belle Fourche Welcov Nursing Home
Dorsett Home
Edgewood Vista
Extended Care Facilities
Fountain Springs
Golden Living Center
Good Samaritan Center
Good Shepherd Clinic
Home Health Services
Hospital
Long-Term Care Centers
Memory Care Units
Mental Health Services
Nursing Homes
Philip Nursing Home
Primrose
Shirley's Day Care
Somerset Court
South Dakota Quality Improvement Network
Support Groups
The Village at Skyline Pines
Welcov Nursing Home

Diabetes

Behavior Management Systems
Belle Fourche Regional Clinic
Bennett County Hospital and Rural Health Clinic
Better Choices, Better Health
Black Hills Diabetes Association
Black Hills Eye Institute
Butte County Health Nurse
Community Clinic
Community Health Center
Diabetes Association
Diabetic Services
Doctor's Offices
Feeding South Dakota
Fitness Centers/Gyms
Food Bank
Haakon County Prairie Transport
Healthy Choices - South Dakota
Horizon Clinic
Hospital
Indian Health Service
LaCreek Medical Clinic
National Diabetes Prevention Program
Nutrition Services
Outpatient Wound Care
Pharmacies
Philip Health Services
Regional Health

Same Day Surgery Center
Regional Medical Clinic
Sioux San Hospital
South Dakota Department of Health
South Dakota Good and Healthy
Tribal Diabetes Prevention Program
Tribal Health Administration
Tribal Health Education
Weight Management
Weight Watchers

Family Planning

Boy's Club
Churches
Community Health Center
Crisis Pregnancy Center
Doctor's Offices
Family Health Education Services
Girls Inc.
Native Healing Treatment Program
Native Women's Health Center
OST Health Education
Pennington County Welfare Services/HHS
Planned Parenthood
Regional Medical Clinic
Sioux San Hospital
South Dakota Department of Health
State Social Services
WIC

Hearing and Vision Problems

Black Hills Eye Institute
Community Clinic
Doctor's Offices
Glasses/Hearing Aids
Home Health Services
Library
Medicare/Medicaid
Regional Medical Clinic

Heart Disease and Stroke

Allied Health Professionals
American Heart Association
Belle Fourche Regional Clinic
Better Choices, Better Health
Cardiac Rehab
Community Clinic
Community Health Center
Doctor's Offices
Hospital
Indian Health Service
Parks and Recreation
Rapid City Heart and Vascular Institute
Regional Health
Same Day Surgery Center
Regional Health Weight Management
Regional Medical Clinic
Silver Sneakers
Sioux San Hospital
South Dakota Department of Health
South Dakota Good and Healthy
Stroke Education Awareness Campaign
Weight Watchers

HIV/AIDS

Department of Health Disease Intervention Specialists
Hospital
Regional Health

Immunization/Infectious Disease

Community Health Center
Good Shepherd Clinic
Same Day Surgery Center
School System

Infant and Child Health

Birth to Three
Black Hills Pediatrics
Community Health Center
Department of Social Services
Doctor's Offices
Indian Health Service
KidShape 2.0
Medicare/Medicaid
Native Women's Health Center
Same Day Surgery Center
South Dakota Good and Healthy
WIC

Injury and Violence

Behavior Management Systems
Behavioral Health Services
Children's Home Society
City/County Drug and Alcohol Drug Detox
Community Health Center
Cornerstone Rescue Mission
Counseling Resources
Crisis Care Center
Department of Social Services
Doctor's Offices
Domestic Violence Therapists
FBI Victims Advocates
First Responders
Indian Health Service
KILI Radio
Law Enforcement
Parks and Recreation
Pennington County Victims Assistance
Rapid City Domestic Violence
Rapid City Police Department
Regional Health
Regional Health Behavioral Health Center
Same Day Surgery Center
Restorative Justice
Substance Abuse Services
Teen Distracted Driving Campaigns
Urgent Care
Veterans Administration
Victims of Crime Assistance
Working Against Violence, Inc.
Women and Children's Apartments

Mental Health Issues

Behavior Management Systems
Behavioral Health Services
Bennett County Hospital and Rural Health Clinic
Black Hills Works
Catholic Social Services
Community Health Center
Compass Point
Crisis Care Center
Crisis Intervention Center
Department of Social Services
Doctor's Offices
Grief Recovery Institute
Horizon Clinic
Hospital
Indian Health Service
KILI Radio
LifeScapes
Lutheran Social Services
Manlove Psychiatric Group
Mental Health Services
National Alliance on Mental Illness
New Dawn
Outpatient Services
Pennington County Health and Human Services
Pennington County Jail
Pennington County Welfare Services/HHS
Philip Health Services
RCFD Mobile Medic Program
Regional Health Behavioral Health Center
Same Day Surgery Center
Regional Health West
School System
Sioux San Hospital
South Dakota Department of Health
State Helpline
State of South Dakota
Substance Abuse Services
The Wall School
Tribal Health Administration
Veterans Administration
Wellfully
Wellspring

Nutrition, Physical Activity, and Weight

Bariatric Services
Belle Fourche Regional Clinic
Better Choices, Better Health
Black Hills State University Young Center
CAP Office
Community Center
Community Health Center
Coordinated Approach to Child Health
Cornerstone Rescue Mission
CrossFit
Deadwood Rec Center
Department of Social Services
Diabetic Services
Doctor's Offices
Feeding South Dakota
Fitness Centers/Gyms
Food Bank
Fork Real Community Cafe

Health Concepts
Healthy Choices - South Dakota
Indian Health Service
KidShape 2.0
KILI Radio
Meals on Wheels
Natural Resources
Northern Hills Training Center
Nuhart Fitness
Nutrition Services
Parks and Recreation
Planet Fitness
Profile by Sanford Health
Rapid City Street Planning Department
Regional Health
Same Day Surgery Center
Regional Health Weight Management
Regional Medical Clinic
School System
Silver and Fit
Silver Sneakers
Sioux San Hospital
South Dakota Good and Healthy
Spearfish Rec Center
Special Olympics
Upper Level Fitness
Weight Management
Weight Watchers
WIC
YMCA

Oral Health/Dental Care

Black Hills Pediatric Dental
Community Health Center
Dakota Smiles Mobile
Delta Dental
Delta Dental Mobile Unit
Dentist's Offices
Department of Social Services
Indian Health Service
Pine Ridge Hospital

Respiratory Diseases

Doctor's Offices

Sexually Transmitted Diseases

Community Health Center
Doctor's Offices
Hospital
Indian Health Service
Regional Health
Same Day Surgery Center
School System
Teen Education

Substance Abuse

AA/NA
Addiction Recovery Center
Adolescent Substance Abuse Prevention Inc.
Behavior Management Systems
Belle Forche Police Department
Belle Fourche Regional Clinic
Butte County Health Nurse
Butte County Sheriff's Office
Catholic Social Services
City/County Drug and Alcohol Drug Detox
Community Health Center
Compass Point
Cornerstone Rescue Mission
Crisis Care Center
Crisis Center of the Black Hills
Crisis Management Center
DARE
Detox Center
First Responders
Full Circle
Indian Health Service
Inpatient and Outpatient Treatment Programs
Involuntary Committment for Substance Abuse
Law Enforcement
Lifeways, Inc.
Lutheran Social Services
Martin Addiction Recovery Center
Native Healing Treatment Program
Pennington County Alcohol and Drug Program
Pennington County Detox
Pennington County Jail
Pennington County Welfare Services/HHS
Pharmacies
Rapid City/Pennington County Drug/Alcohol Treatment
Regional Health
Regional Health Behavioral Health Center

Same Day Surgery Center
Roads
South Dakota Quit Line
State-Funded Treatment Programs
Substance Abuse Services
Tribal Alcohol/Substance Abuse Program
Wellfully

Tobacco Use

American Lung Association
Doctor's Offices
Don't Know
Good Shepherd Clinic
Hospital
Indian Health Service
Regional Health
Smoking Cessation Programs
South Dakota Quit Line

Appendix

Professional Research Consultants, Inc.

Evaluation of Past Activities

Access to Health Care Services		
Goal	*Evaluate needs and gaps to develop strategies to support timely access to primary care, specialty care, diagnostic, and inpatient services.*	
Objective 1	Improve Patient Access for Primary Care, Specialists, and Diagnostic Procedures	
Anticipated Impact	Improved patient satisfaction, decrease in patient wait times to see a provider or have a service	**Results (July 2016 - October 2018)**
Strategies	Optimize scheduling rules, templates, and processes	In June 2018, a pilot of a 24/7 call center option was rolled out for primary care patients in a clinic location in Rapid City. As part of the pilot, simplified scheduling rules and decision trees were created in the electronic health record system. In November 2018, this service will be expanded with 6.5 FTE's and will grow to serve additional locations in the system over the next year.
	Standardize scheduling practices	Physician work standards were implemented in July 2018 across the Regional Health System to increase access to care. In addition, since FY17, 12 family physicians and 4 APPs have been hired across the system to increase access to care. In 2016 and 2017, patient satisfaction surveys for the primary care clinics were based on one question rating provider satisfaction on a scale of 0-10. Starting in FY19, the organization moved to Press Ganey to measure patient satisfaction and specific questions about access and wait times are now included in the survey. Survey results are rolled up to provide a total score. In the first quarter of FY19, the pilot location had a top box score of 78.3% (patients reporting a rating of very good).
	Develop specialist referral criteria	In FY18, direct scheduling became available for orthopedics and general surgery. Direct scheduling allows patients to leave one location with an already scheduled appointment at a different location without having to take any additional steps. The team is currently working on expanding this project to other specialties.
Objective 2	Develop and implement a community-based population health program	
Anticipated Impact	Patients better directed to the appropriate level of care, improved management of resources, and reduced Emergency Department utilization among target population	**Results (July 2016 - October 2018)**
Strategies	Build Population Health Infrastructure	In FY18, work began on a population health initiative for Diabetes. The goal was to systemize diabetes care, including processes and education, across all Regional Health locations. A physician champion for Diabetes started in October 2018 and diabetes outreach clinic days will begin in December 2018.

	Develop Primary Case Management program	In FY17, Regional Health began the development of community case management in the outpatient clinics. The system now has five Patient Care Coordinators serving the communities of Rapid City, Spearfish, Lead/Deadwood, Sturgis, Custer, Hot Springs, and Hill City. Part of the role of the Patient Care Coordinator is to connect patients with needed community resources.
	Provide education and promotion concerning the use of advanced directives	As of early October 2018, 13 Regional Health caregivers have been certified in Respecting Choices® First Steps Advance Care Planning Facilitation. The goal is to provide consistent facilitated conversations for advanced care planning resulting in thoughtful advanced directive completion and scanned documents to the medical records. The group of certified facilitators will also provide consistent/standard community education on advance care planning.
Objective 3	Investigate, Plan, Build and Launch First Phase of a Connected Health Strategy	
Anticipated Impact	Increased access for patients through digital technology, including access to specialty care	**Results (July 2016 - October 2018)**
Strategies	Determine organizational and community needs and solutions options	In May 2016, the connected health team conducted an assessment of the current state of digital technology solutions. Work began on the development of a strategy for a connected health initiative for the organization. Five teams (operational experts plus mentors) completed Needs Assessments in the areas of specialty care, primary care, chronic disease management, caregiver engagement, and community engagement. The assessments provided a better understanding of the current environment, opportunities, and challenges associated with "digital health." A new patient portal, MyChart, was launched in January 2018 allowing patients to better access their health information including test results and appointment information. Patients can also use MyChart to communicate directly with their physicians and other providers. In May 2018, open scheduling was launched to allow patients to use MyChart to schedule their appointments with their primary care provider.
	Develop a business plan for the connected health strategy	In March 2017, the connected health team finalized the strategy proposal and shared with executive leadership. This strategy included a maturity model to serve as a foundation and guide for the evolution of the program. Part of this work includes focusing on further MyChart development/expansion to continue increased patient engagement.
Objective 4	Support access to primary and preventive care for vulnerable populations.	
Anticipated Impact	Increase number of patients screened.	**Results (July 2016 - October 2018)**

Strategies	Increase support of All Women Count SD program	The access workgroup worked to develop a process for identifying and reaching out to patients that would qualify for the program. A process was created to mail an outreach letter to qualifying individuals to encourage them to sign-up for the program.
	Continued provision of ancillary services for Good Shepard Clinic referrals (SPRH CHIP only)	Since February 2009, the Good Shepard Clinic has been providing quality medical care to financially-qualified area residents (ages 19-64) in the Northern Hills without health insurance due to various economic and technical reasons. Regional Health physicians and caregivers have been supporting the efforts of the Good Shepard Clinic for more than nine years, providing in-kind and volunteer support. There are approximately 16 physicians, PAs, CNAs, and Licensed Nurse Practitioners plus 140 rotating scheduled volunteers trained in various capacities to meet the clinical operations and administrative needs of the Clinic.
Additional added strategies to support this health priority	Cancer screening reminders	In October 2017, Regional Health was awarded a grant from the South Dakota Department of Health to implement strategies to increase breast, cervical, and colorectal cancer screening rates. More than 59,000 patients were identified that met screening criteria for each of these cancers and paper and/or electronic reminder letters will be sent by December 30, 2018.

Mental Health		
Goal	*Increase access to and awareness of culturally appropriate mental health resources and education.*	
Objective 1	Reduce stigma of mental health and increase public and provider awareness of available mental health resources available in their community.	
Anticipated Impact	Better understanding of services available, increased website traffic, increased use of 211 Helpline for mental health	**Results (July 2016 - October 2018)**
Strategies	Partner with 211 Helpline to develop a comprehensive list of mental health resources in the service area	Each year, 211 Helpline publishes the Black Hills Behavioral Health Guide as well as the Helping Hand Resource guide. In FY17, the mental health workgroup reviewed the Behavioral Health guide for gaps and found it to be a very comprehensive list of the available resources to address mental health in the region. The workgroup also reviewed and created a process for updating the organization's listings in the guide to help ensure accuracy. Regional Health provided in-kind printing of 2,000 Helping Hand Resource guides for distribution in the community. In FY18, Regional Health contributed $2,500 to 211 Helpline Center in support of operations. From 2016 to 2017, 211 Helpline Center calls for mental health and addiction needs rose from 9.29% to 11.5%, and the number of suicide-related contacts increased by 28%.
	Create a community mental health asset map	In FY17, The Rapid City Collective Impact (RCCI) initiative completed a programs network map that showed the working relationships between social service programs in Rapid City, SD, including those providing mental health resources. Regional Health served as the backbone organization for RCCI in FY17, providing in-kind and monetary support for the initiative. Also, one of the members of the mental health workgroup served on RCCI's mental health committee. Between the information provided in 211 Helpline's Behavioral Health guide and the RCCI program network map, this strategy is complete.
	Develop a publicity campaign in partnership with the community to reduce the stigma of mental health	In May 2018, Regional Health hosted a meeting that was attended by 25 community organizations to discuss suicide prevention for the Black Hills region. A second meeting is planned to take place in FY19 to further develop a community-wide approach for suicide prevention.
Objective 2	Improve mental health screening process across the Black Hills region (starting with Regional Health system)	
Anticipated Impact	More people seeking services for mental health-related issues	**Results (July 2016 - October 2018)**

Strategies	Develop education for providers on importance of screening process	In FY18, work began to implement the Zero Suicide initiative at Regional Health. The Zero Suicide approach aims to improve care and outcomes for individuals at risk of suicide in health care systems. This will require a system-wide approach to improve outcomes and close gaps as well as engaging with the broader community to make an impact. One of the primary components of this initiative is to train the health care workforce, including providers, on the use and importance of screening tools for recognizing and treating suicidal patients. An implementation team has been formed, and a workforce survey has been distributed to Regional Health physicians and caregivers that encounter/interact with Emergency Department patients and/or Behavioral Health inpatients. The results of the survey will help in the training development for the initiative by identifying how many caregivers have training specifically aimed at identifying, assessing and treating patients at risk for suicide; whether caregivers know the organization's existing policies and procedures for managing patients at risk for suicide, and how supported they feel by the organization in caring for this population; and by measuring how confident and competent caregivers feel in caring for patients who are at risk for suicide.
	Standardize mental health screening tool	The workgroup helped to standardize the mental health screening tools used for inpatient and outpatient settings across the system. The group reviewed current mental health screening tools used and provided recommendations to the Epic implementation team on which tool to include in the new electronic health record that went live in October 2017. This strategy is complete.
	Standardize process for referrals of patients who screen positive	This is part of the work of the Zero Suicide initiative and will be ongoing in FY19. The implementation team will take the results of the workforce survey to develop the training for physicians and caregivers. Part of this training will include the process for working with patients that screen positive for being at risk of suicide and linking them to the appropriate resources needed for their care.
	Develop case management program for mental health	Three social workers serve as Case Coordinators working with Behavioral Health patients (adult and pediatric) to set up access to services needed after discharge.
Objective 3	Explore adding mental health access into primary care clinics	
Anticipated Impact	More access for vulnerable populations, improved productivity in primary care, improved outcomes	**Results (July 2016 - October 2018)**
Strategies	Build a business case	In early 2017, a CSW-PIP (certified social worker in private and independent practice) began seeing patients 20 hours per week at the Regional Health Flormann Street Clinic.
	Explore other access solutions (telehealth, mobile)	This strategy is considered part of the work of the connected health strategy under Access to Health Care Services.

Wellness (Physical Activity, Nutrition, and Weight)		
Goal	*Explore, develop, and support opportunities that will positively impact the health of our communities.*	
Objective 1	Increase community awareness of chronic disease prevention and management programs that promote healthy lifestyle choices	
Anticipated Impact	Increased participation in health promotion programs and improved health outcomes	**Results (July 2016 - October 2018)**
Strategies	Marketing campaign for existing health promotion programs	Regional Health received a grant from the South Dakota Department of Health (SDDOH) to conduct a Prediabetes Marketing and Outreach Campaign. Funds were used to raise awareness of Prediabetes and encourage people at risk to enroll in the National Diabetes Prevention Program (NDPP). The campaign included digital billboards, radio ads, and print ads that totaled an estimated reach of more than 400,000 impressions. Regional Health Diabetes Educators also went out to six local events as part of the campaign. At these events, 161 people completed the prediabetes risk test, and the 61 who were found to be high-risk were provided additional information/education on DPP and other diabetes resources. Regional Health received additional grant dollars from SDDOH to produce three videos aimed at promoting the Better Choices, Better Health® with Diabetes program. These were completed in October 2018 and have been made available to share with other health care providers from around the state to help promote the program. This strategy is complete.
	Enhance access to the Regional Health Diabetes Prevention Program (DPP)	In FY17, the wellness workgroup developed a survey for DPP participants to help identify locations for DPP to be held and timing of classes (day of the week, time of day, and time of year). Surveys were conducted February – March 2017 and in September 2017. Responses indicated that beginning in the Fall and having evening classes (after 5 pm) located at the clinic worked best for participants. Members of the workgroup also assessed the program and found there is a need for additional instructors to open up new DPP locations. One of Regional Health's Diabetes Educators has been selected to become a Master Trainer for DPP and will complete training in December 2018. As a Master Trainer, she will be able to train new instructors for DPP as needed to help grow the program.

	Develop a pediatric diabetes prevention program	CATCH (Coordinated Approach to Child Health) is an evidence-based program that provides both school-based and after-school curriculum and activities to improve nutrition, weight, and behavioral health of children from Kindergarten through middle school. The wellness workgroup helped with the grant application for the program which was awarded from the Black Hills Area Community Foundation. In FY17 and FY18, CATCH curriculum was implemented in 5 Spearfish locations, 4 Rapid City locations, and 1 Blackhawk location. In FY18, Regional Health received a Kohl's Cares grant to implement an evidence-based program called KidShape 2.0. The program strives to increase the knowledge of healthy behaviors related to nutrition, physical activity, and health efficacy among community youth and families. KidShape is designed for children ages 6 to 12 who are overweight or wish to maintain a healthy lifestyle. To date, 5 KidShape workshops have been offered in Rapid City serving more than 20 families. A sixth workshop will be held in February 2019.
	Enhance access to the Better Choices Better Health (BCBH) Program	Regional Health's Patient Care Coordinators have completed a BCBH workshop, and three became trained as Lay Leaders for the program in FY19. This will facilitate ongoing offerings of BCBH curriculum (chronic disease management, diabetes, pain management) throughout our service area. Since FY17, 19 Better Choices, Better Health (BCBH) workshops have been held in the Black Hills communities of Sturgis, Spearfish, and Rapid City with 129 participants that completed out of 170 total attendees. Regional Health provided the location for one of these workshops and provided nine lay leaders from the system to help lead workshops.
	Explore partnership with local Native American agencies	Staff members from the Great Plains Tribal Chairman's Health Board were involved in the production of the BCBH promotion videos as well as the steering committee for the 2018 Community Health Needs Assessment. Regional Health is also an active supporter of Rapid City Community Conversations (RCCC). Formed as a native-led grassroots movement, RCCC's mission is to foster a citizen dialogue that collaborates with community leaders to design innovative approaches to steadily reverse the long history of institutional and individual racism in the community. Regional Health encourages caregivers to be involved with RCCC, including accepting roles as facilitators for various teams and participating on the Council of Elders. Regional Health also supports RCCC by providing meeting space, sponsoring meals for various events, supplying give-away items, and printing support materials.
Objective 2	Enhance access to organized well-being programs and activities in the community	
Anticipated Impact	Increase in referrals to programs, increased awareness of health risks, increased programming, improved health outcomes	**Results (July 2016 - October 2018)**

Strategies	Expand Regional Health Employee Well-being program to offer consulting to organizations in the Rapid City and Spearfish Communities by the end of 2017 and Lead/Deadwood, Custer, and Sturgis communities by the end of 2018	In collaboration with Live Well Black Hills, members of Regional Health's well-being team reached out to businesses in the Rapid City area to provide Worksite Toolkits and offer assistance in starting a worksite wellness program. Team members also created a survey to assess nutrition in the workplace. The survey was sent out to 28 worksites, and the team has reached out to the locations that expressed interest in providing healthier options for catering/vending. A team from Regional Health worked to develop marketing tools and a pricing list for worksite wellness services. Since FY17, five businesses in Rapid City have been approached by Regional Health's well-being program staff to discuss consulting services. Two of these businesses chose to implement onsite wellness screenings with and without health coaching for their staff utilizing Regional Health's services.
	Live Well Black Hills resource support	Three members of the well-being workgroup have been involved with Live Well Black Hills since FY17. The workgroup members have helped with the organization's efforts around Eat Well, Move More, and Feel Better. They have also helped with the work being done in the communities of Spearfish, Custer, and Lead/Deadwood to start local wellness coalitions using the Healthy Hometown℠ powered by Wellmark model. In October 2018, Live Well Black Hills was presented with the inaugural Healthy Hometown Community Award recognizing the important work of improving the physical, social and emotional well-being of the Rapid City community.
	Develop a toolkit of disease prevention and disease management resources for providers (including referral process)	One of the components of the new Electronic Health Record system launched in October 2017 is the Healthy Planet module. This is a population health system module that provides health care systems with the tools to aid in disease management, including coordinating care delivery and engaging with patients. Additionally, the Patient Care Coordinators have been using 211 Helpline as a tool for linking patients to needed resources.