2012 PRC Community Health Needs Assessment Report

Same Day Surgery Center Service Area

Sponsored by
Same Day Surgery Center

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INTRODUCTION

Project Overview

Project Goals

This Community Health Needs Assessment 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 Community Health Needs Assessment will serve as a tool toward reaching three basic goals:

- **To improve residents' health status, increase their life spans, and elevate their overall quality of life.** A healthy community is not only one where its residents suffer little from physical and mental illness, but also one where its residents enjoy a high quality of life.
- **To reduce the health disparities among residents.** By gathering demographic information along with health status and behavior data, it will be possible to identify population segments that are most at-risk for various diseases and injuries. Intervention plans aimed at targeting these individuals may then be developed to combat some of the socio-economic factors which have historically had a negative impact on residents' health.
- **To increase accessibility to preventive services for all community residents.** More accessible preventive services will prove beneficial in accomplishing the first goal (improving health status, increasing life spans, and elevating the quality of life), as well as lowering the costs associated with caring for late-stage diseases resulting from a lack of preventive care.

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 such as this 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 trending and comparison to benchmark data at the state and national levels. Qualitative data input includes primary research gathered through a Key Informant Focus Group.

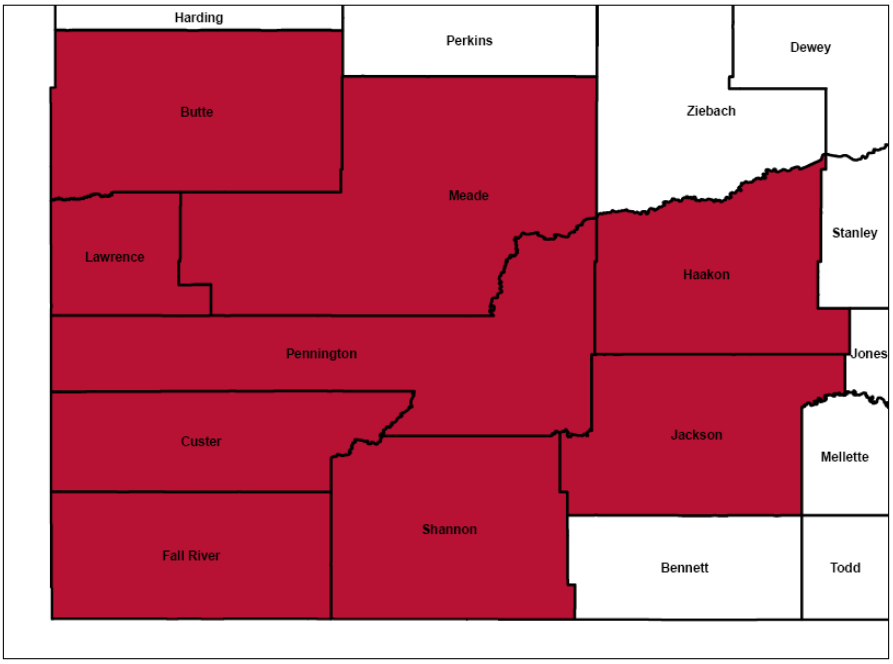
PRC Community Health Survey

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 "Service Area" in this report) is comprised of Butte, Custer, Fall River, Haakon, Jackson, Lawrence, Meade, Pennington and Shannon counties. A geographic description is illustrated in the following map.



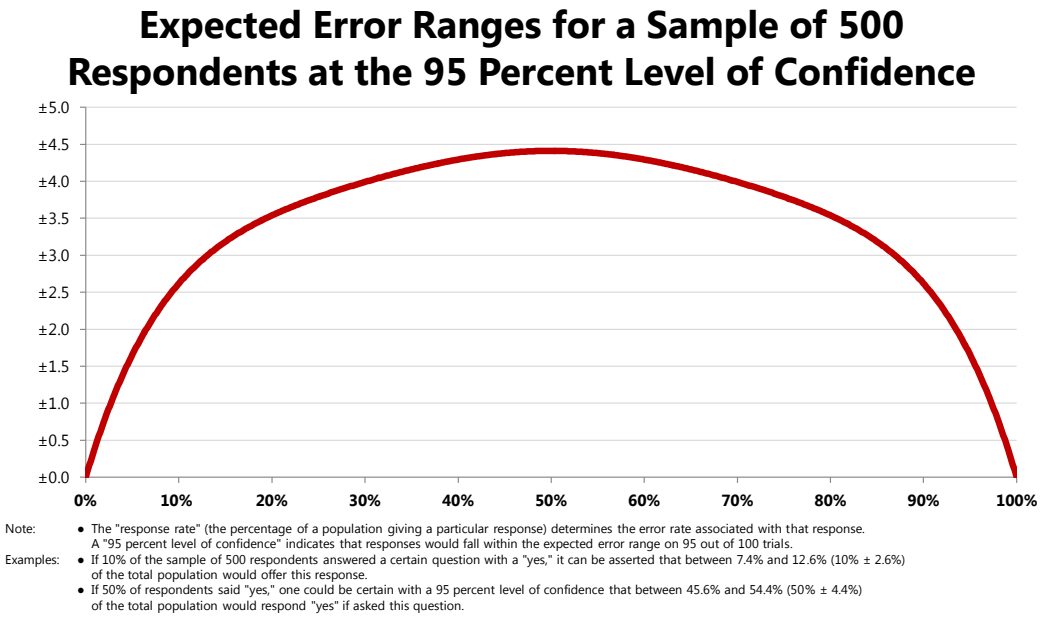
Sample Approach & Design

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 500 individuals age 18 and older in the Service Area. Once the interviews were completed, these were weighted in proportion to the actual population distribution so as to appropriately represent the Service Area as a whole. All administration of the surveys, data collection and data analysis was conducted by Professional Research Consultants, Inc. (PRC).

Sampling Error

For statistical purposes, the maximum rate of error associated with a sample size of 500 respondents is ±4.4% at the 95 percent level of confidence.



Note:
- The "response rate" (the percentage of a population giving a particular response) determines the error rate associated with that response. A "95 percent level of confidence" indicates that responses would fall within the expected error range on 95 out of 100 trials.

Examples:
- If 10% of the sample of 500 respondents answered a certain question with a "yes," it can be asserted that between 7.4% and 12.6% (10% ± 2.6%) of the total population would offer this response.
- If 50% of respondents said "yes," one could be certain with a 95 percent level of confidence that between 45.6% and 54.4% (50% ± 4.4%) of the total population would respond "yes" if asked this question.

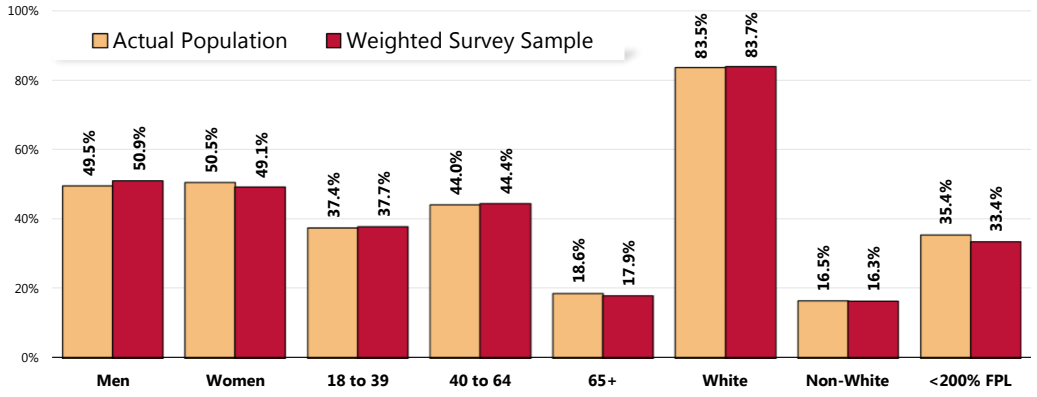
Sample Characteristics

To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. And, 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. Specifically, once the raw data are gathered, respondents are examined by key demographic characteristics (namely gender, age, race, ethnicity, and poverty status) and a statistical application package applies weighting variables that produce a sample which more closely matches the population for these characteristics. Thus, while the integrity of each individual's responses is maintained, one respondent's responses may contribute to the whole the same weight as, for example, 1.1 respondents. Another respondent, whose demographic characteristics may have been slightly oversampled, may contribute the same weight as 0.9 respondents.

The following chart outlines the characteristics of the 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.]

Population & Sample Characteristics

(Service Area, 2012)



Sources:
- Census 2010, Summary File 3 (SF 3). U.S. Census Bureau.
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc.

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 2012 guidelines place the poverty threshold for a family of four at $23,050 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, earning up to twice the poverty threshold; "**mid/high income**" refers to those households living on incomes which are twice or more 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.

Key Informant Focus Group

As part of the community health assessment, one focus group was held on September 24, 2012. The focus group participants were comprised of 13 key informants, including representatives from public health, Indian Health Services, physicians, other health professionals, social service providers, and other community leaders.

A list of recommended participants for the focus group was provided by the sponsors. 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. Participants included a representative of public health, as well as several individuals who work with low-income, minority or other medically underserved populations, and those who work with persons with chronic disease conditions.

Focus group candidates were first contacted by letter to request their participation. Follow-up phone calls were then made to ascertain whether or not they would be able to attend. Confirmation calls were placed the week before the group was scheduled to insure a reasonable turnout.

Audio from the focus group session was recorded, from which verbatim comments in this report are taken. There are no names connected with the comments, as participants were asked to speak candidly and assured of confidentiality.

NOTE: These findings represent qualitative rather than quantitative data. The groups were designed to gather input from participants regarding their opinions and perceptions of the health of the residents in the area. Thus, these findings are based on perceptions, not facts.

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 Service Area were obtained from the following sources (specific citations are included with the graphs throughout this report):

- Centers for Disease Control & Prevention
- National Center for Health Statistics
- South Dakota Department of Health
- US Census Bureau
- US Department of Health and Human Services
- US Department of Justice, Federal Bureau of Investigation

Benchmark Data

South Dakota 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 *2011 PRC National Health Survey*; the methodological approach for the national study is identical 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.

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 a great number of medical conditions that are not specifically addressed.

Summary of Findings

Areas of Opportunity for Community Health Improvement

The following "health priorities" represent recommended areas of intervention, 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 region with regard to the following health areas (see also the summary tables presented in the following section). These areas of concern are subject to the discretion of area providers, the steering committee, or other local organizations and community leaders as to actionability and priority.

Areas of Opportunity Identified Through This Assessment	

Access to Health Services	• Insurance Instability
	• Emergency Room Utilization
	• Routine Checkups (Adults & Children)
	• Top Focus Group Concern
	  ○ *Barriers to Access: Insurance, Cost, Complex Healthcare System, and Distance/Lack of Transportation*
	  ○ *Overuse of the ER*

Cancer	• Deaths (Prostate Cancer and Female Breast Cancer) • Pap Smear Testing • Colorectal Cancer Screening
Conditions of Aging	• Alzheimer's Disease Deaths • Activity Limitations • Deafness/Trouble Hearing
Injury & Violence Prevention	• Unintentional Injury Deaths (Including Motor Vehicle Accidents) • Seat Belt Usage (Adults) • Firearm-Related Deaths • Firearms in the Home (Including Homes With Children)
Maternal, Infant & Child Health	• Infant Mortality

Mental Health & Mental Disorders	• Suicides
	• Top Focus Group Concern
	  ○ *Inadequate Number of Providers & Facilities*
	  ○ *Stigma*
	  ○ *Suicides*

Nutrition, Physical Activity & Weight Status	• Overweight Prevalence
	• Weight Control (Overweight Adults)
	• Medical Advice on Nutrition, Physical Activity & Weight
	• Top Focus Group Concern
	  ○ *Hunger*
	  ○ *Need for Nutritional Education*

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Areas of Opportunity (continued)	

Oral Health	• Dental Visits (Adults)
	• Top Focus Group Concern
	  ○ *Preventive Care*
	  ○ *Dental Insurance*

Respiratory Diseases	• Chronic Lower Respiratory Disease (CLRD) Deaths • Chronic Lung Disease
Substance Abuse	• Cirrhosis/Liver Disease Deaths
Tobacco Use	• Current Smokers • Use of Smokeless Tobacco

Top Community Health Concerns Among Community Key Informants

At the conclusion of the key informant focus group, participants were asked to write down what they individually perceive as the top five health priorities for the community, based on the group discussion as well as on their own experiences and perceptions. Their responses were collected, categorized and tallied to produce the top-ranked priorities as identified among key informants. These should be used to complement and corroborate findings that emerge from the quantitative dataset.

1. Access to Healthcare Services, including Transportation

Mentioned resources available to address this issue: Health and Human Services; Community Health Center; Veterans Administration; Indian Health Services; Sioux San Indian Hospital; 211 Helpline; Community Services Connections; Dial-A-Ride; Rapid Transit System

2. Mental Health

Mentioned resources available to address this issue: Behavior Management Systems; Front Porch Coalition; 24-Hour Crisis Center; Rapid City Regional Health; Local Non-Profit Agencies; South Dakota State University Counseling Master's Program; Black Hills Mental Health Collaboration

3. Oral Health

Mentioned resources available to address this issue: Community Health Center; Sioux San Indian Hospital; Mobile Dental Van; 211 Helpline

4. Health Literacy & Prevention

Mentioned resources available to address this issue: School Systems; Local Colleges; Rural America Initiatives

5. Nutrition & Weight Status

Mentioned resources available to address this issue: SNAP Program; Community Health Center; Indian Health Services; Rapid City Regional Health; Providers; Care & Share Program; 211 Helpline; Food Bank; Feeding South Dakota Backpack Program; After-School Programs

Summary Tables: Comparisons With Benchmark Data

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

Reading the Summary Tables

In the following charts, Service Area results are shown in the larger, blue column.

The columns to the right of the Service Area column provide comparisons between the Service Area and any available state and national findings, and Healthy People 2020 targets. Symbols indicate whether the 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.

Access to Health Services	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% [Age 18-64] Lack Health Insurance	14.7	15.4	14.9	0.0
% [65+] With Medicare Supplement Insurance	75.5		75.5	
% [Insured] Insurance Covers Prescriptions	94.0		93.9	
% [Insured] Went Without Coverage in Past Year	9.7		4.8	
% Difficulty Accessing Healthcare in Past Year (Composite)	39.8		37.3	
% Inconvenient Hrs Prevented Dr Visit in Past Year	13.6		14.3	
% Cost Prevented Getting Prescription in Past Year	11.1		15.0	
% Cost Prevented Physician Visit in Past Year	16.8		14.0	
% Difficulty Getting Appointment in Past Year	17.9		16.5	
% Difficulty Finding Physician in Past Year	8.6		10.7	
% Transportation Hindered Dr Visit in Past Year	9.4		7.7	
% Skipped Prescription Doses to Save Costs	14.3		14.8	
% Difficulty Getting Child's Healthcare in Past Year	3.9		1.9	
% [Age 18+] Have a Specific Source of Ongoing Care	75.4		76.3	95.0
% [Age 18-64] Have a Specific Source of Ongoing Care	74.5		75.1	89.4
% [Age 65+] Have a Specific Source of Ongoing Care	79.0		82.6	100.0
% Have Had Routine Checkup in Past Year	59.8		67.3	
% Child Has Had Checkup in Past Year	77.8		87.0	

Access to Health Services (continued)	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% Two or More ER Visits in Past Year	10.1		6.5	
% Rate Local Healthcare "Fair/Poor"	17.0		15.3	
		better	similar	worse

Arthritis, Osteoporosis & Chronic Back Conditions	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% [50+] Arthritis/Rheumatism	38.4		35.4	
% [50+] Osteoporosis	9.6		11.4	5.3
% Sciatica/Chronic Back Pain	22.5		21.5	
% Migraine/Severe Headaches	12.5		16.9	
% Chronic Neck Pain	11.6		8.3	
		better	similar	worse

Cancer	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
Cancer (Age-Adjusted Death Rate)	175.4	168.9	176.7	160.6
Lung Cancer (Age-Adjusted Death Rate)	48.1	45.9	49.5	45.5
Prostate Cancer (Age-Adjusted Death Rate)	25.5	23.6	23.0	21.2
Female Breast Cancer (Age-Adjusted Death Rate)	24.0	20.4	22.7	20.6
Colorectal Cancer (Age-Adjusted Death Rate)	15.1	16.8	16.6	14.5
% Skin Cancer	6.3	5.9	8.1	

Cancer (continued)	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% Cancer (Other Than Skin)	5.0	7.1	5.5	
% [Men 50+] Prostate Exam in Past 2 Years	72.6		70.5	
% [Women 50-74] Mammogram in Past 2 Years	75.4	78.7	79.9	81.1
% [Women 21-65] Pap Smear in Past 3 Years	75.8	80.9	84.7	93.0
% [Age 50+] Sigmoid/Colonoscopy Ever	66.6	67.1	72.0	
% [Age 50+] Blood Stool Test in Past 2 Years	20.5	16.8	28.3	
% [Age 50-75] Colorectal Cancer Screening	62.9			70.5
		better	similar	worse

Chronic Kidney Disease	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
Kidney Disease (Age-Adjusted Death Rate)	10.2	8.1	15.0	
		better	similar	worse

Diabetes	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
Diabetes Mellitus (Age-Adjusted Death Rate)	22.4	24.3	22.0	19.6
% Diabetes/High Blood Sugar	11.6	9.5	10.1	
		better	similar	worse

Dementias, Including Alzheimer's Disease	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
Alzheimer's Disease (Age-Adjusted Death Rate)	30.2	34.7	24.5	
		better	similar	worse

Educational & Community-Based Programs	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% Attended Health Event in Past Year	21.1		22.2	
		better	similar	worse

General Health Status	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% "Fair/Poor" Physical Health	14.7	14.6	16.8	
% Activity Limitations	22.6	24.4	17.0	
		better	similar	worse

Hearing & Other Sensory or Communication Disorders	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% Deafness/Trouble Hearing	16.5		9.6	
		better	similar	worse

Heart Disease & Stroke	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
Diseases of the Heart (Age-Adjusted Death Rate)	163.1	168.2	190.9	152.7
Stroke (Age-Adjusted Death Rate)	33.5	40.7	41.8	33.8
% Heart Disease (Heart Attack, Angina, Coronary Disease)	8.0		6.1	
% Stroke	4.0	2.6	2.7	
% Blood Pressure Checked in Past 2 Years	96.8		94.7	94.9
% Told Have High Blood Pressure (Ever)	36.1	31.0	34.3	26.9
% [HBP] Taking Action to Control High Blood Pressure	84.3		89.1	

Heart Disease & Stroke (continued)	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% Cholesterol Checked in Past 5 Years	87.8	72.3	90.7	82.1
% Told Have High Cholesterol (Ever)	31.4	36.6	31.4	13.5
% [HBC] Taking Action to Control High Blood Cholesterol	85.3		89.1	
% 1+ Cardiovascular Risk Factor	84.9		86.3	
		better	similar	worse

HIV	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
HIV/AIDS (Age-Adjusted Death Rate)	1.4	0.9	3.3	3.3
% [Age 18-44] HIV Test in the Past Year	18.6		19.9	16.9
		better	similar	worse

Immunization & Infectious Diseases	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% [Age 65+] Flu Shot in Past Year	74.4	68.3	71.6	90.0
% [High-Risk 18-64] Flu Shot in Past Year	45.1		52.5	90.0
% [Age 65+] Pneumonia Vaccine Ever	67.7	67.1	68.1	90.0
% [High-Risk 18-64] Pneumonia Vaccine Ever	32.2		32.0	60.0
% Ever Vaccinated for Hepatitis B	40.1		38.4	
		better	similar	worse

Injury & Violence Prevention	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
Unintentional Injury (Age-Adjusted Death Rate)	53.9	44.8	39.1	36.0
Motor Vehicle Crashes (Age-Adjusted Death Rate)	22.8	18.6	13.0	12.4
% "Always" Wear Seat Belt	69.6	82.1	85.3	92.4
% Child [Age 0-17] "Always" Uses Seat Belt/Car Seat	87.5		91.6	
% Child [Age 5-17] "Always" Wears Bicycle Helmet	38.1		35.3	
Firearm-Related Deaths (Age-Adjusted Death Rate)	11.0	9.0	10.2	9.2
% Firearm in Home	59.4		37.9	
% [Homes With Children] Firearm in Home	63.1		34.4	
% [Homes With Firearms] Weapon(s) Unlocked & Loaded	20.7		16.9	
Homicide (Age-Adjusted Death Rate)	3.7	2.7	5.8	5.5
% Victim of Violent Crime in Past 5 Years	3.0		1.6	
% Ever Threatened With Violence by Intimate Partner	10.1		11.7	
% Victim of Domestic Violence (Ever)	11.1		13.5	
		better	similar	worse

Maternal, Infant & Child Health	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% No Prenatal Care in First Trimester	30.6	32.1		22.1
% of Low Birthweight Births	6.9	9.2	8.2	7.8
Infant Death Rate	9.0	7.3	6.7	6.0
		better	similar	worse

Mental Health & Mental Disorders	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% "Fair/Poor" Mental Health	6.7		11.7	
% Major Depression	9.6		11.7	
% Symptoms of Chronic Depression (2+ Years)	21.2		26.5	
Suicide (Age-Adjusted Death Rate)	19.7	15.6	11.6	10.2
% [Those With Major Depression] Seeking Help	93.4		82.0	75.1
% Typical Day Is "Extremely/Very" Stressful	7.8		11.5	
% Child [Age 5-17] Takes Prescription for ADD/ADHD	3.9		6.5	
		better	similar	worse

Nutrition & Weight Status	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% Eat 5+ Servings of Fruit or Vegetables per Day	45.4		48.8	
% Medical Advice on Nutrition in Past Year	32.7		41.9	
% Healthy Weight (BMI 18.5-24.9)	28.2		31.7	33.9
% Overweight	70.4	64.4	66.9	
% Obese	27.1	28.1	28.5	30.6
% Medical Advice on Weight in Past Year	18.4		25.7	
% [Overweights] Counseled About Weight in Past Year	22.1		30.9	
% [Obese Adults] Counseled About Weight in Past Year	31.0		47.4	31.8
% [Overweights] Trying to Lose Weight Both Diet/Exercise	30.6		38.6	
% Children [Age 5-17] Overweight	32.3		30.7	
% Children [Age 5-17] Obese	11.9		18.9	14.6
		better	similar	worse

Oral Health	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% [Age 18+] Dental Visit in Past Year	58.9	73.5	66.9	49.0
% Child [Age 2-17] Dental Visit in Past Year	76.7		79.2	49.0
% Have Dental Insurance	57.8		60.8	
		better	similar	worse

Physical Activity	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% [Employed] Job Entails Mostly Sitting/Standing	**53.2**		63.2	
% No Leisure-Time Physical Activity	**22.5**	27.0	28.7	32.6
% Meeting Physical Activity Guidelines	**48.3**		42.7	
% Moderate Physical Activity	**29.1**		23.9	
% Vigorous Physical Activity	**38.2**		34.8	
% Medical Advice on Physical Activity in Past Year	**40.8**		47.8	
% Child [Age 5-17] Watches TV 3+ Hours per Day	**7.5**		19.7	
% Child [Age 5-17] Uses Computer 3+ Hours per Day	**8.3**		9.9	
% Child [Age 5-17] 3+ Hours per Day of Total Screen Time	**28.5**		43.4	
		better	similar	worse

Respiratory Diseases	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
CLRD (Age-Adjusted Death Rate)	50.4	44.3	42.4	
Pneumonia/Influenza (Age-Adjusted Death Rate)	16.9	16.2	16.9	
% Nasal/Hay Fever Allergies	27.9		27.3	
% Sinusitis	14.4		19.4	
% Chronic Lung Disease	14.1		8.4	
% [Adult] Currently Has Asthma	10.6	6.9	7.5	
% [Child 0-17] Currently Has Asthma	9.9		6.8	
		better	similar	worse

Sexually Transmitted Diseases	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
Gonorrhea Incidence per 100,000	106.7	57.8	101.0	
Primary & Secondary Syphilis Incidence per 100,000	1.1	0.2	4.5	
Chlamydia Incidence per 100,000	485.1	393.7	429.6	
% [Unmarried 18-64] 3+ Sexual Partners in Past Year	7.6		7.1	
% [Unmarried 18-64] Using Condoms	41.1		18.9	
		better	similar	worse

Substance Abuse	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	**13.9**	10.4	9.1	8.2
% Current Drinker	**57.9**	58.8	58.8	
% Chronic Drinker (Average 2+ Drinks/Day)	**4.8**	5.9	5.6	
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	**14.9**	22.1	16.7	24.3
% Drinking & Driving in Past Month	**1.2**		3.5	
% Driving Drunk or Riding with Drunk Driver	**2.9**		5.5	
Drug-Induced Deaths (Age-Adjusted Death Rate)	**8.8**	6.2	12.7	11.3
% Illicit Drug Use in Past Month	**0.7**		1.7	7.1
% Ever Sought Help for Alcohol or Drug Problem	**5.1**		3.9	
		better	similar	worse

Tobacco Use	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% Current Smoker	23.6	23.1	16.6	12.0
% Someone Smokes at Home	14.0		13.6	
% [Non-Smokers] Someone Smokes in the Home	6.4		5.7	
% [Household With Children] Someone Smokes in the Home	7.2		12.1	
% [Smokers] Received Advice to Quit Smoking	64.0		63.7	
% [Smokers] Have Quit Smoking 1+ Days in Past Year	56.9		56.2	80.0
% Smoke Cigars	2.7		4.2	0.2
% Use Smokeless Tobacco	6.0		2.8	0.3
		better	similar	worse

Vision	Service Area	Service Area vs. Benchmarks		
		vs. SD	vs. US	vs. HP2020
% Blindness/Trouble Seeing	8.8		6.9	
% Eye Exam in Past 2 Years	62.8		57.5	
		better	similar	worse

GENERAL HEALTH STATUS

Overall Health Status

Self-Reported Health Status

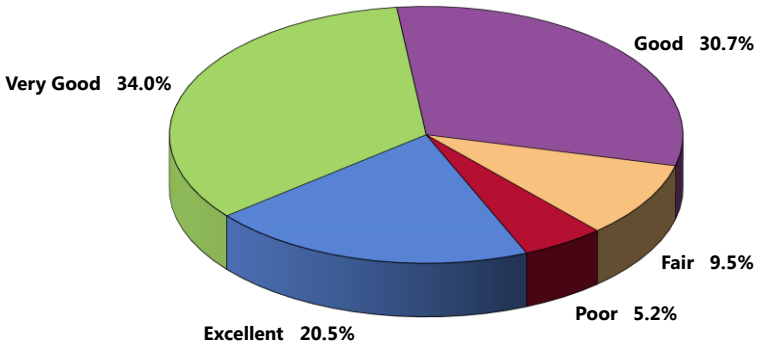
The initial inquiry of the PRC Community Health Survey asked respondents the following:

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

A total of 54.5% of Service Area adults rate their overall health as "excellent" or "very good."

- Another 30.7% gave "good" ratings of their overall health.

Self-Reported Health Status
(Service Area, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
Notes: • Asked of all respondents.

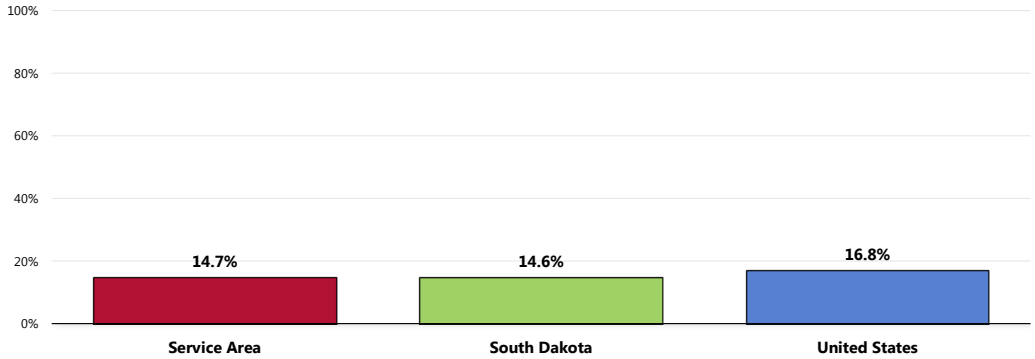
However, 14.7% of Service Area adults believe that their overall health is "fair" or "poor."

- Almost identical to statewide findings.
- Statistically similar to the national percentage.

NOTE:

- Differences noted in the text represent significant differences determined through statistical testing.

Experience "Fair" or "Poor" Overall Health



Sources: • 2012 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): 2011 South Dakota data.
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

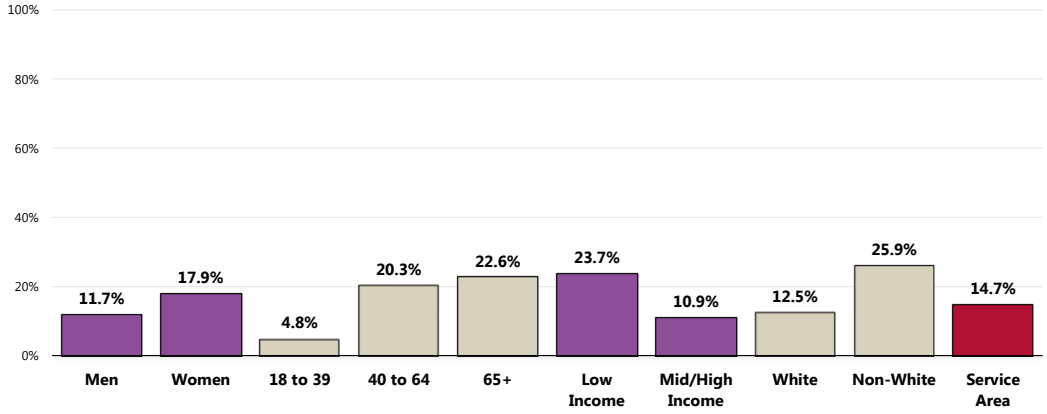
Adults more likely to report experiencing "fair" or "poor" overall health include:

- Women.
- Those aged 40 and older.
- Residents in households with lower incomes.
- Non-Whites (which also includes Hispanic respondents).

Charts throughout this report (such as that here) detail survey findings among key demographic groups – namely by gender, age groupings, income (based on poverty status), and race/ethnicity.

Experience "Fair" or "Poor" Overall Health

(Service Area, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "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

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.

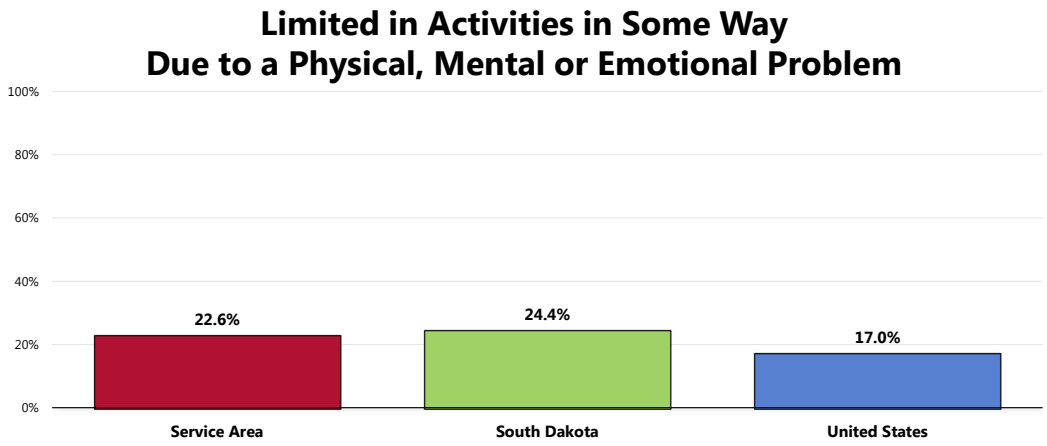
- **Address the inequitable distribution of resources among people with disabilities and those without disabilities** by increasing: appropriate health care for people with disabilities; education and work opportunities; social participation; and access to needed technologies and assistive supports.
- **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)

RELATED ISSUE: See also *Potentially Disabling Conditions* in the **Death, Disease & Chronic Conditions** section of this report.

A total of 22.6% of Service Area adults are limited in some way in some activities due to a physical, mental or emotional problem.

- Comparable to the prevalence statewide.
- Less favorable than the national prevalence.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 116]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

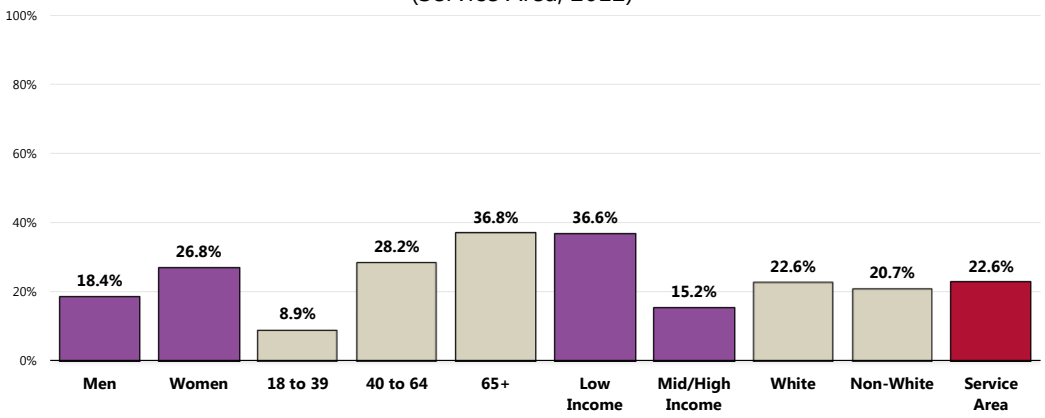
Notes:
- Asked of all respondents.

In looking at responses by key demographic characteristics, note the following:

- Women are statistically more likely than men to report some type of activity limitation.
- Adults age 40 and older are much more often limited in activities (note the positive correlation with age).
- Low-income residents are more likely than those with higher incomes to report activity limitations.
- Other differences within demographic groups, as illustrated in the following chart, are not statistically significant.

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

(Service Area, 2012)

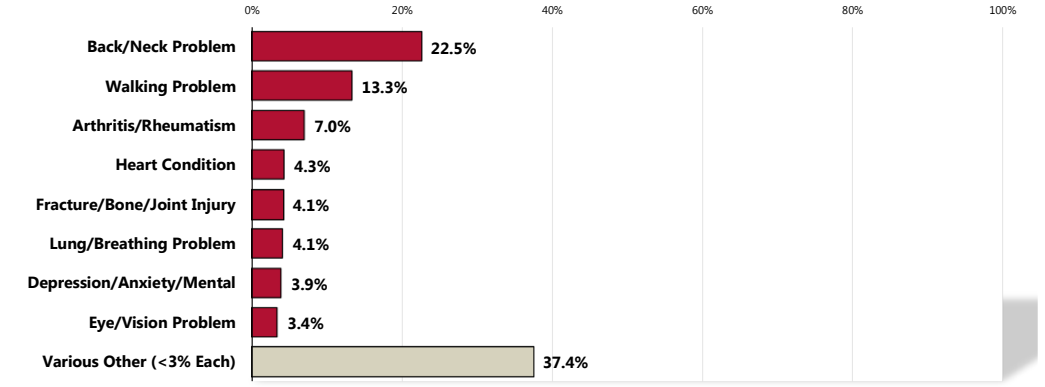


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 116]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "White" reflects non-Hispanic White respondents.
• Income categories reflect respondent's household income as a ratio to the federal poverty 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.

Among persons reporting activity limitations, these are most often attributed to musculoskeletal issues, such as back/neck problems, difficulty walking, arthritis/ rheumatism, or fractures or bone/joint injuries.

Type of Problem That Limits Activities

(Among Those Reporting Activity Limitations; Service Area, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 117]
Notes: • Asked of those respondents reporting activity limitations.

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. According to the national Institute of Mental Health (NIMH), in any given year, an estimated 13 million American adults (approximately 1 in 17) have a seriously debilitating mental illness. Mental health disorders are the leading cause of disability in the United States and Canada, accounting for 25% of all years of life lost to disability and premature mortality. Moreover, suicide is the 11th leading cause of death in the United States, accounting for the deaths of approximately 30,000 Americans each year.

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 understanding of how the brain functions under normal conditions and in response to stressors, combined with knowledge of how the brain develops over time, has been essential to that progress. 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 among 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)

Mental Health Status

Self-Reported Mental Health Status

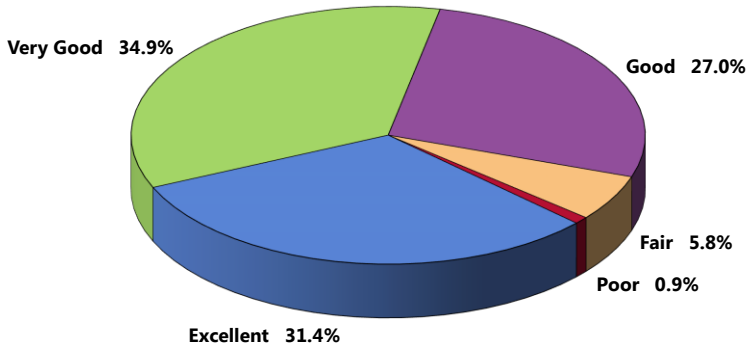
"Now thinking about your mental health, which includes stress, depression and problems with emotions, would you say that, in general, your mental health is: excellent, very good, good, fair or poor?"

Nearly two in three (66.3%) Service Area adults rate their overall mental health as "excellent" or "very good."

- Another 27.0% gave "good" ratings of their own mental health status.

Self-Reported Mental Health Status

(Service Area, 2012)

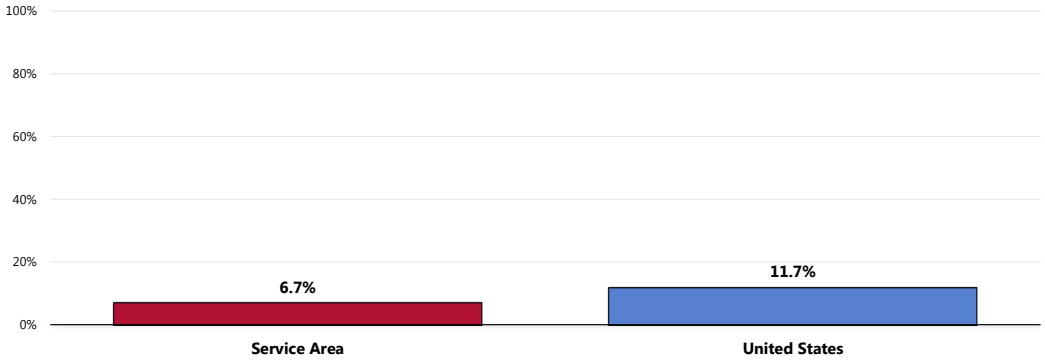


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 112]
Notes: • Asked of all respondents.

A total of 6.7% of Service Area adults, however, believe that their overall mental health is "fair" or "poor."

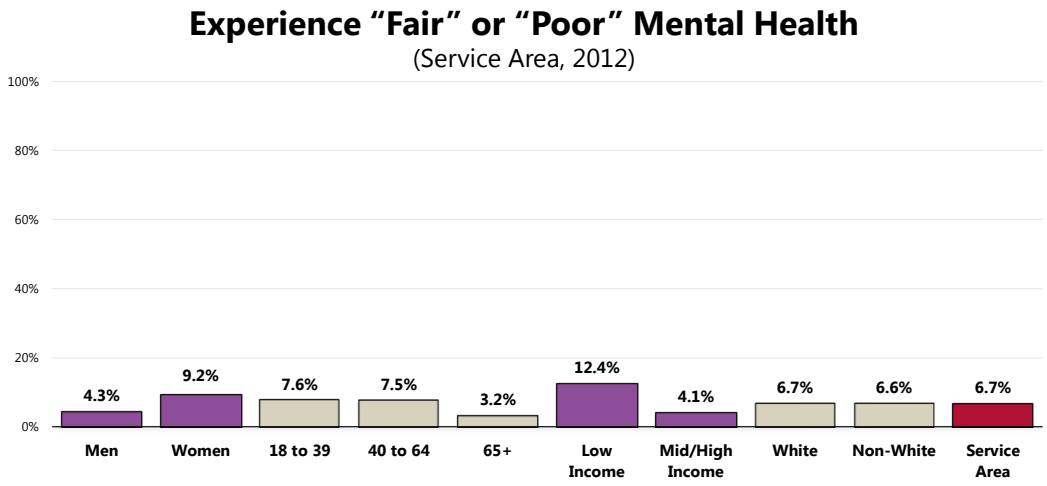
- More favorable than the "fair/poor" response reported nationally.

Experience "Fair" or "Poor" Mental Health



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 112]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

- Women and residents in low-income households are statistically more likely to report experiencing "fair/poor" mental health than their demographic counterparts.



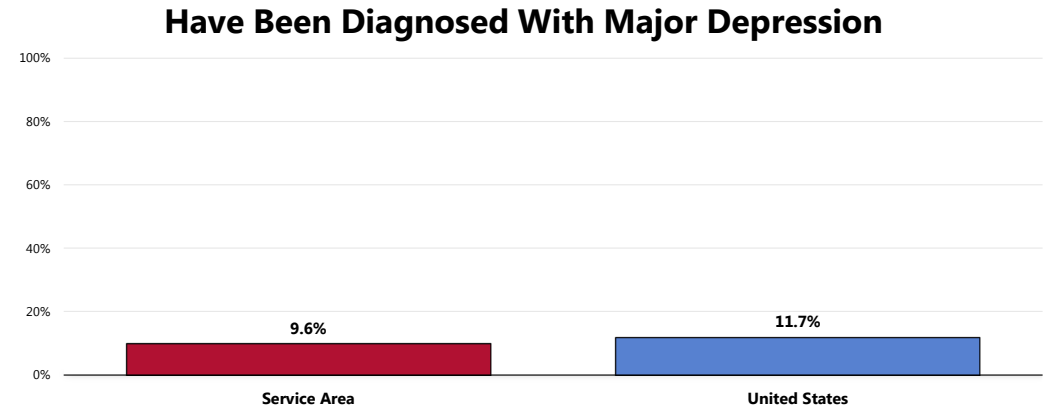
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 112]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "White" reflects non-Hispanic White respondents.
• Income categories reflect respondent's household income as a ratio to the federal poverty 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

Major Depression

A total of 9.6% of Service Area adults have been diagnosed with major depression by a physician.

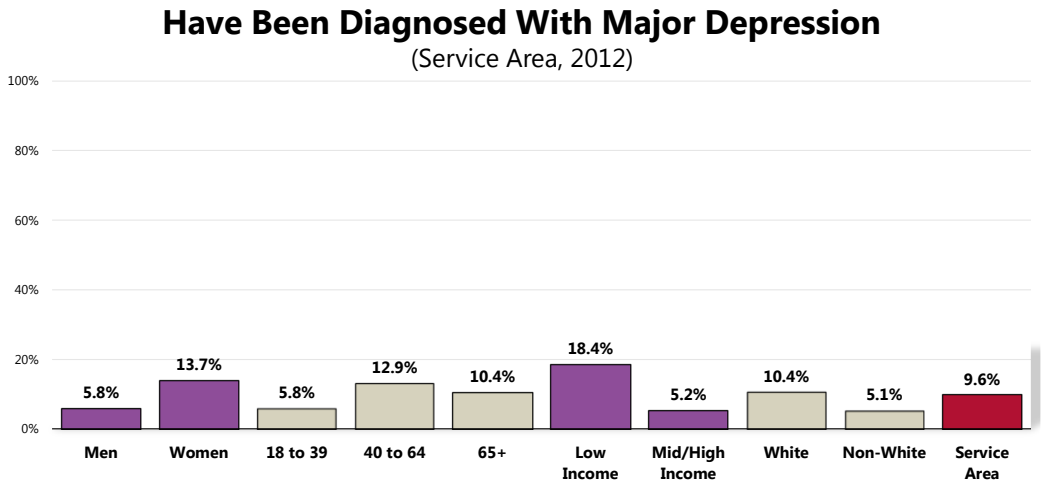
- Similar to the national finding.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

The prevalence of major depression is notably higher among:

- Women.
- Adults between the ages of 40 and 64.
- Community members living at lower incomes.



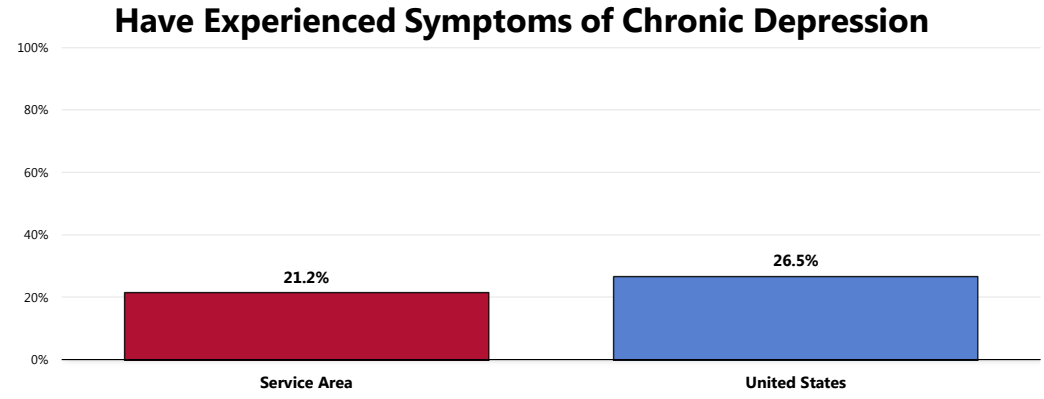
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.

Symptoms of Chronic Depression

A total of 21.2% of Service Area adults have had two or more years in their lives when they felt depressed or sad on most days, although they may have felt okay sometimes (chronic depression).

- More favorable than national findings.



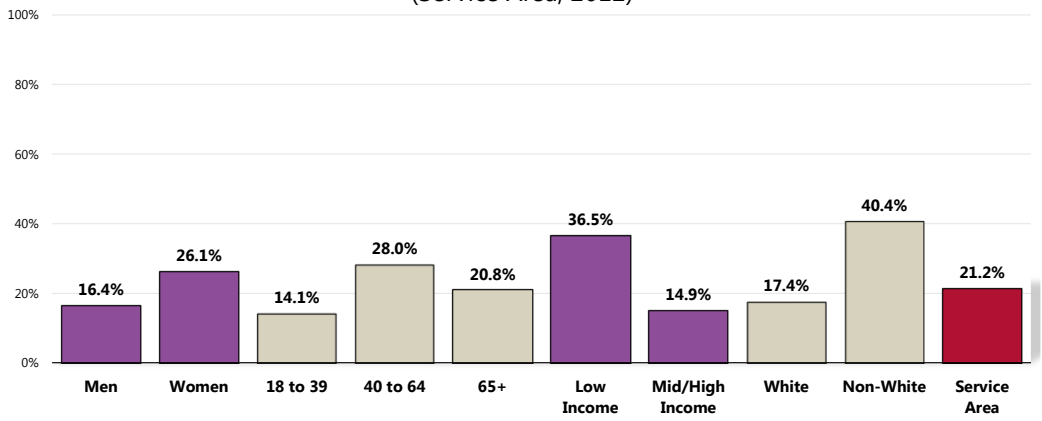
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 113]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Note that the prevalence of chronic depression is notably higher among:

- Women.
- Adults age 40 to 64.
- Adults with lower incomes.
- Non-Whites.

Have Experienced Symptoms of Chronic Depression
(Service Area, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 113]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "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.

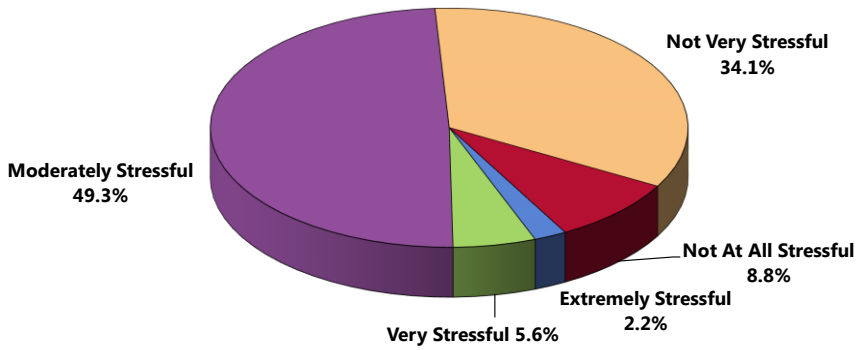
Stress

RELATED ISSUE:
See also *Substance Abuse* in the **Modifiable Health Risks** section of this report.

More than four in 10 Service Area adults consider their typical day to be "not very stressful" (34.1%) or "not at all stressful" (8.8%).

- Another 49.3% of survey respondents characterize their typical day as "moderately stressful."

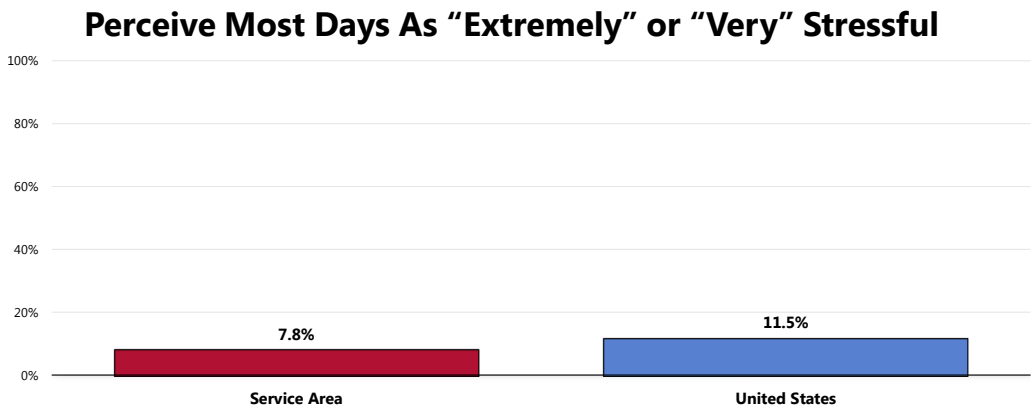
Perceived Level of Stress On a Typical Day
(Service Area, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 114]
Notes: • Asked of all respondents.

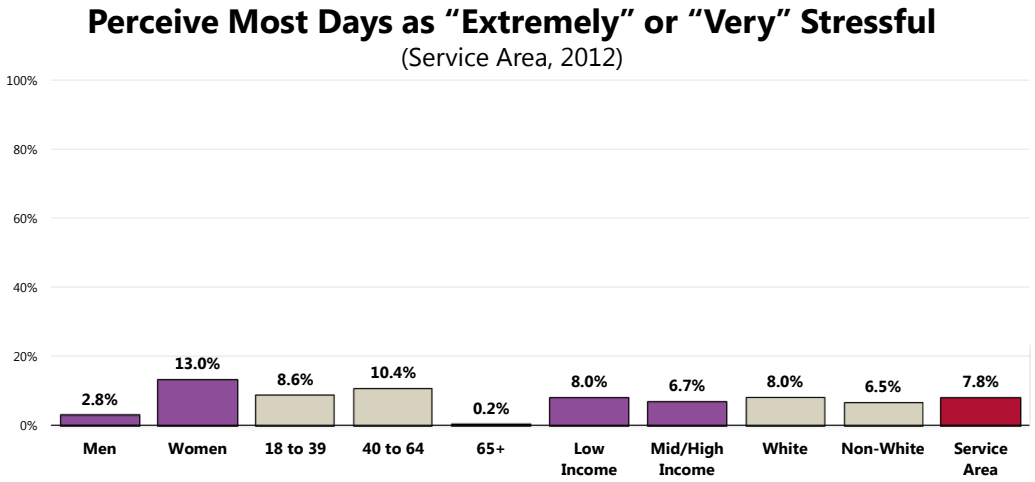
In contrast, 7.8% of Service Area adults experience "very" or "extremely" stressful days on a regular basis.

- More favorable than national findings.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 114]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Note that high stress levels are more prevalent among women and adults under age 65.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 114]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "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.

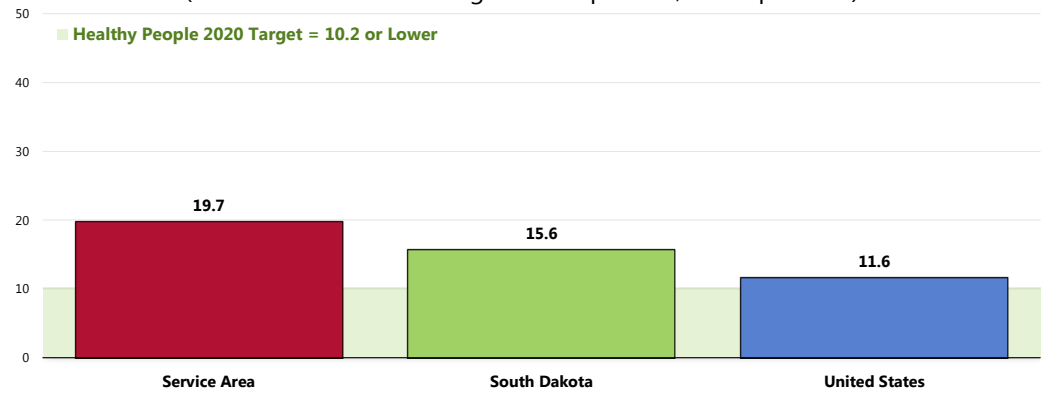
Suicide

Between 2006 and 2010, there was an annual average age-adjusted suicide rate of 19.7 deaths per 100,000 population in the Service Area.

- Worse than the statewide rate.
- Worse than the national rate.
- Fails to satisfy the Healthy People 2020 target of 10.2 or lower.

Suicide: Age-Adjusted Mortality

(2006-2010 Annual Average Deaths per 100,000 Population)



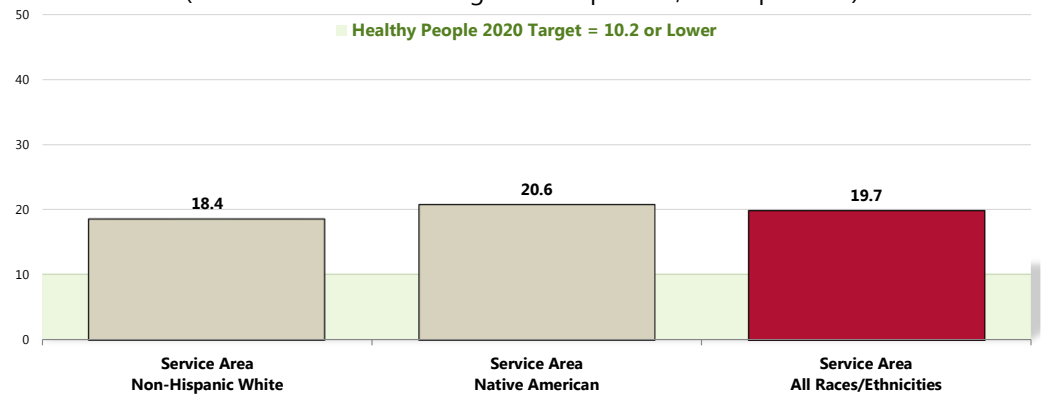
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [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 U.S. Standard Population.
- Local, state and national data are simple three-year averages.

The suicide rate in the Service Area is slightly higher among the Native American population than among Whites.

Suicide: Age-Adjusted Mortality by Race

(2006-2010 Annual Average Deaths per 100,000 Population)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- 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 U.S. Standard Population.
- Local, state and national data are simple three-year averages.

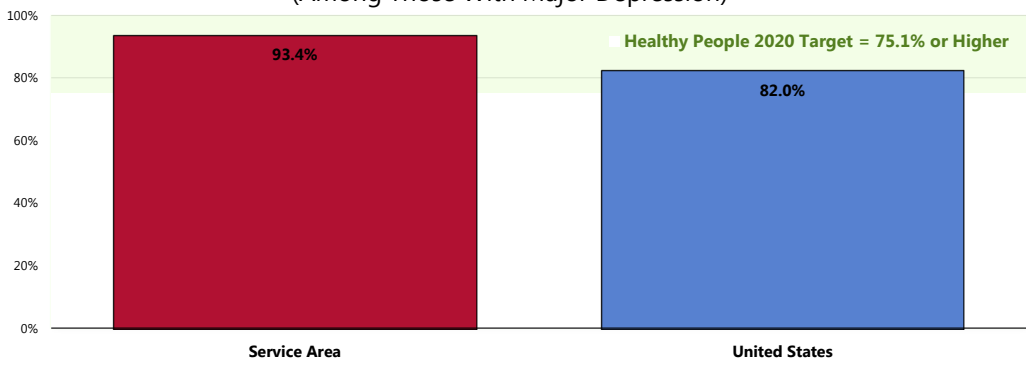
Mental Health Treatment

Among adults with diagnosed depression, 93.4% acknowledge that they have sought professional help for a mental or emotional problem.

- More favorable than national findings.
- Satisfies the Healthy People 2020 target of 75.1% or higher.

Have Sought Professional Help for a Mental or Emotional Problem

(Among Those With Major Depression)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 140]
- 2011 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 MHMD-9.2]

Notes:
- Asked of those respondents with major depression diagnosed by a physician.

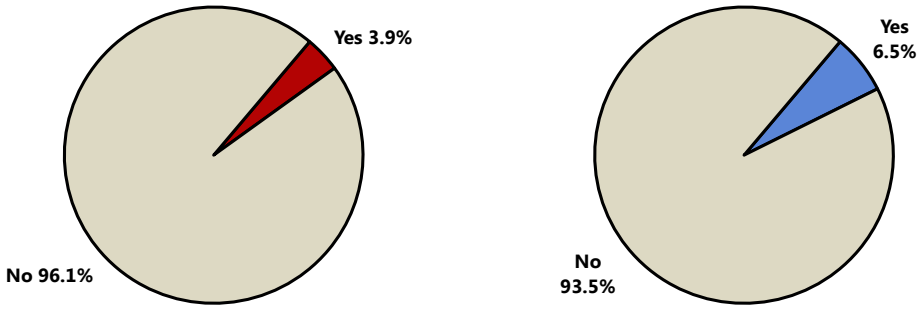
Children & ADD/ADHD

Among Service Area adults with children age 5 to 17, 3.9% report that their child takes medication for ADD/ADHD.

- Statistically similar to the national prevalence.
- No statistical difference in ADD/ADHD prevalence by age or gender.

Child Takes Medication for ADD/ADHD

(Among Parents of Children 5-17)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 131]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents with children age 5 to 17.

"Diagnosed depression" includes respondents reporting a past diagnosis of major depression by a physician.

Related Focus Group Findings: Mental Health

Concerns surrounding mental health arose often during focus group discussion, with emphasis on these issues:

- Inadequate number of psychiatrists and treatment facilities
- Suicide
- Stigma

During the focus group, the topic of behavioral healthcare came up several times. The Black Hills community recently came together to address mental health gaps, subsequently developing a crisis center and creating a mental health collaborative. Overall, participants believe that the community still suffers due to an **inadequate number of psychiatrists and treatment facilities** available to address residents' behavioral health needs. The local inpatient facility serves both children and adults, but remains overwhelmed.

> *"My office is over there and probably the past couple months most of the staff have shared with me that they're just overwhelmed. They're just way beyond overwhelmed, constantly have patients overflowing to the main unit, and those people in there have already at least made a serious attempt or have some serious ideation and have expressed that they really want to die. So it's not the general depression."*

According to focus group participations, a limited number of outpatient treatment options exist. Few psychiatrists practice in the Black Hills region and those who do are generally located in Rapid City. Participants worry about the future availability of psychiatrists as current physicians reach retirement age. The Behavior Management System serves the population with severe emotional and behavioral disorders and offers counseling and transportation. The Crisis Center, 2-11 listening services, and South Dakota State University's Master's Program also provide counseling services. Attendees worry for the residents who do not qualify for these services:

> *"The farther you're spread out, the fewer behavioral healthcare services become. You get down into the southern hills and it becomes very small. Northern hills are actually growing their capacity through private practitioners out there, but that's primarily outpatient counseling… The person that just has general depression that works, doesn't have insurance, and makes $15,000.00 a year is really the folks that I think fall through the cracks because there's really no funding mechanism there for those individuals."*

Participants report that **suicide** affects the entire region. The Front Porch Coalition conducts suicide prevention education, but **stigma** in the community really impacts the organizations' ability to make headway. People must be willing to access behavioral healthcare services, but the cultural ideas surrounding mental health may hamper an individual's desire to access services. Residents lack coping skills and may use drugs or alcohol to self-medicate. Beyond the self-medication, the current mentality is to "pull yourself up by your boots" and handle it, as one participant explains:

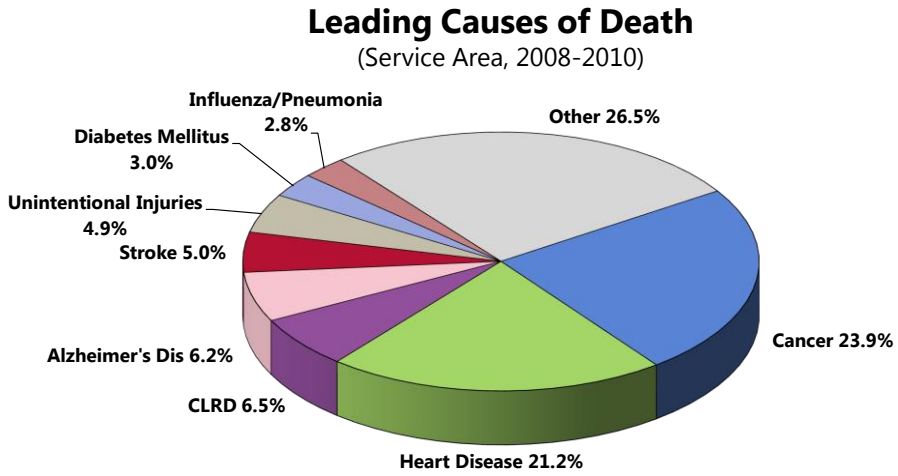
> *"We also live in a state, a community, where we just pull ourselves up by our bootstraps, and it's normal to go to the bar and have a drink when you've had a bad day because that's how you deal with things, and some people will just flat out tell me, 'That's the way we used to do it in the old days. That's the way we do it now.'"*

DEATH, DISEASE & CHRONIC CONDITIONS

Leading Causes of Death

Distribution of Deaths by Cause

Together, cardiovascular disease (heart disease and stroke) and cancers accounted for one-half of all deaths in the Service Area between 2008 and 2010.



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
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, South Dakota 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.

The following chart outlines 2006-2010 annual average age-adjusted death rates per 100,000 population for selected causes of death in the Service Area.

For infant mortality data, see "Birth Outcomes & Risks" in the **Births** section of this report.

Age-adjusted mortality rates in the Service Area are worse than national rates for unintentional injuries (including motor vehicle accidents), chronic lower respiratory disease (CLRD), Alzheimer's disease, suicide, cirrhosis/liver disease, and firearm-related deaths.

Of the causes outlined in the following chart for which Healthy People 2020 objectives have been established, Service Area rates fail to satisfy the related goals for cancer, heart disease, unintentional injuries (including motor vehicle accidents), diabetes mellitus, suicide, cirrhosis/liver disease, and firearm-related deaths.

Age-Adjusted Death Rates for Selected Causes

(2006-2010 Deaths per 100,000)

	Service Area	South Dakota	United States	HP2020
Malignant Neoplasms (Cancers)	175.4	168.9	176.7	160.6
Diseases of the Heart	163.1	168.2	190.9	152.7*
Unintentional Injuries	53.9	44.8	39.1	36.0
Chronic Lower Respiratory Disease (CLRD)	50.4	44.3	42.4	n/a
Cerebrovascular Disease (Stroke)	33.5	40.7	41.8	33.8
Alzheimer's Disease	30.2	34.7	24.5	n/a
Motor Vehicle Deaths	22.8	18.6	13.0	12.4
Diabetes Mellitus	22.4	24.3	22.0	19.6*
Intentional Self-Harm (Suicide)	19.7	15.6	11.6	10.2
Pneumonia/Influenza	16.9	16.2	16.9	n/a
Cirrhosis/Liver Disease	13.9	10.4	9.1	8.2
Firearm-Related **	11.0	9.0	10.2	9.2
Kidney Disease**	10.2	8.1	15.0	n/a
Drug-Induced**	8.8	6.2	12.7	11.3
Homicide/Legal Intervention **	3.7	2.7	5.8	5.5
HIV/AIDS**	1.4	0.9	3.3	3.3

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov.

Note:
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population and coded using ICD-10 codes.
- *The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart; the Diabetes target is adjusted to reflect only diabetes mellitus-coded deaths.
- **Rates represent 2001-2010 data.

Cardiovascular Disease

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.

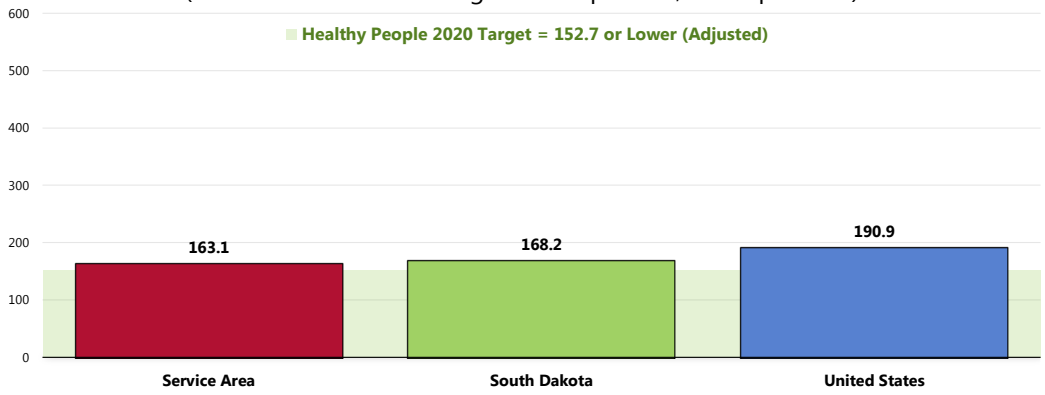
Heart Disease Deaths

Between 2006 and 2010 there was an annual average age-adjusted heart disease mortality rate of 163.1 deaths per 100,000 population in the Service Area.

- Comparable to the statewide rate.
- Better than the national rate.
- Fails to satisfy the Healthy People 2020 target (as adjusted to account for all diseases of the heart).

Heart Disease: Age-Adjusted Mortality

(2006-2010 Annual Average Deaths per 100,000 Population)



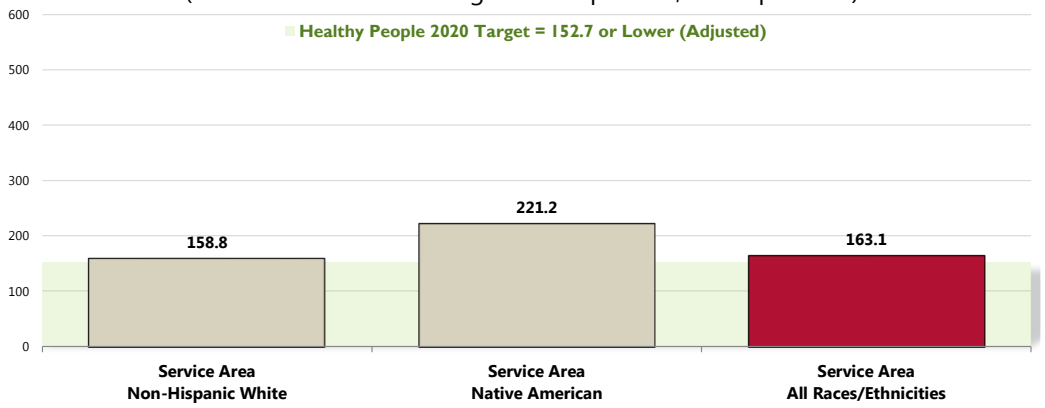
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [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 U.S. Standard Population.
- The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

By race, the heart disease mortality rate is notably higher among Native Americans than among Whites in the Service Area.

Heart Disease: Age-Adjusted Mortality by Race

(2006-2010 Annual Average Deaths per 100,000 Population)



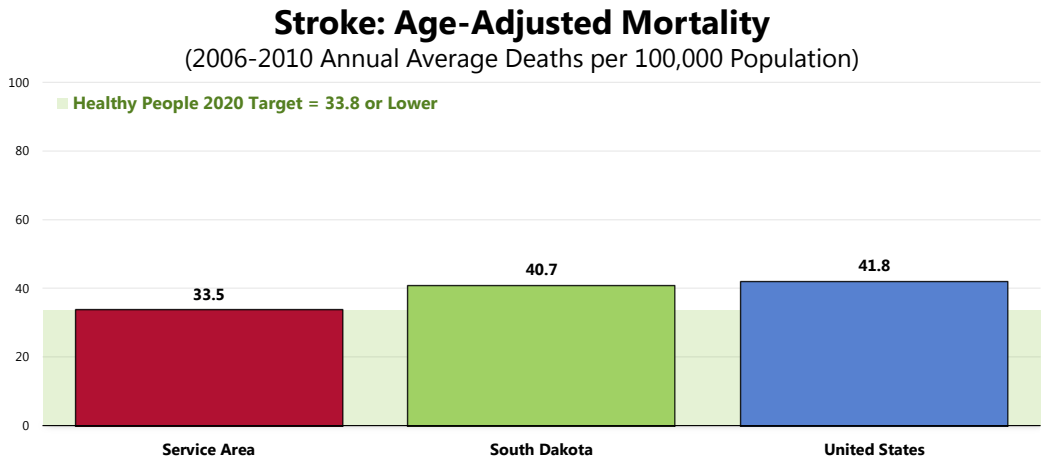
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [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 U.S. Standard Population.
- The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

Stroke Deaths

Between 2006 and 2010, there was an annual average age-adjusted stroke mortality rate of 33.5 deaths per 100,000 population in the Service Area.

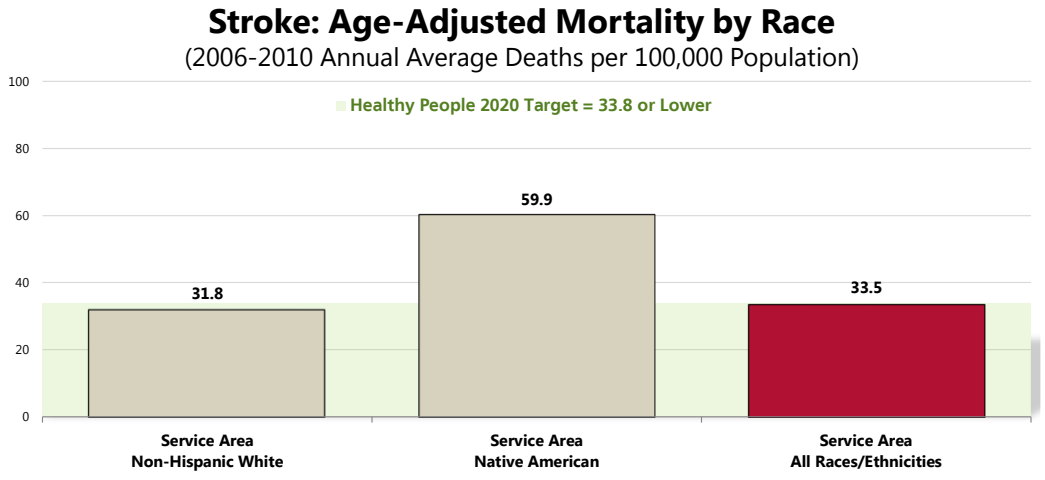
- More favorable than the South Dakota rate.
- More favorable than the national rate.
- Almost identical to the Healthy People 2020 target of 33.8 or lower.



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- 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 U.S. Standard Population.

The stroke mortality rate is almost twice as high among Native Americans in the Service Area as among Whites.



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-3]

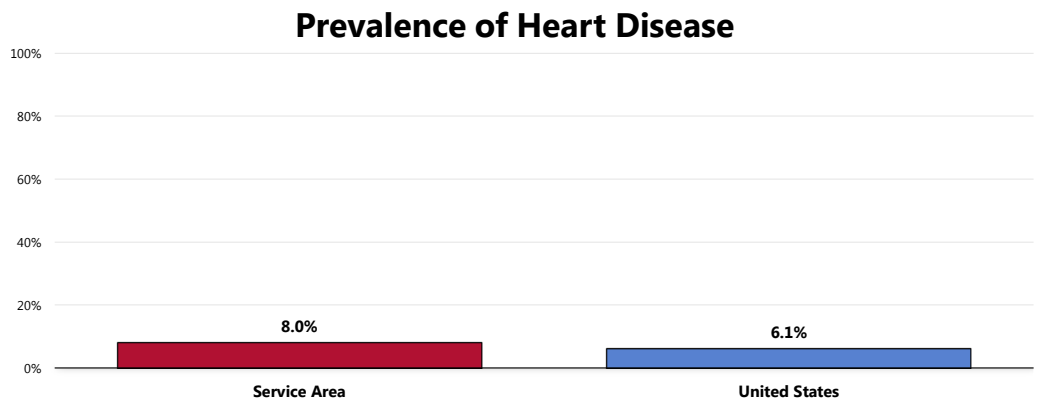
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.

Prevalence of Heart Disease & Stroke

Prevalence of Heart Disease

A total of 8.0% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina or heart attack.

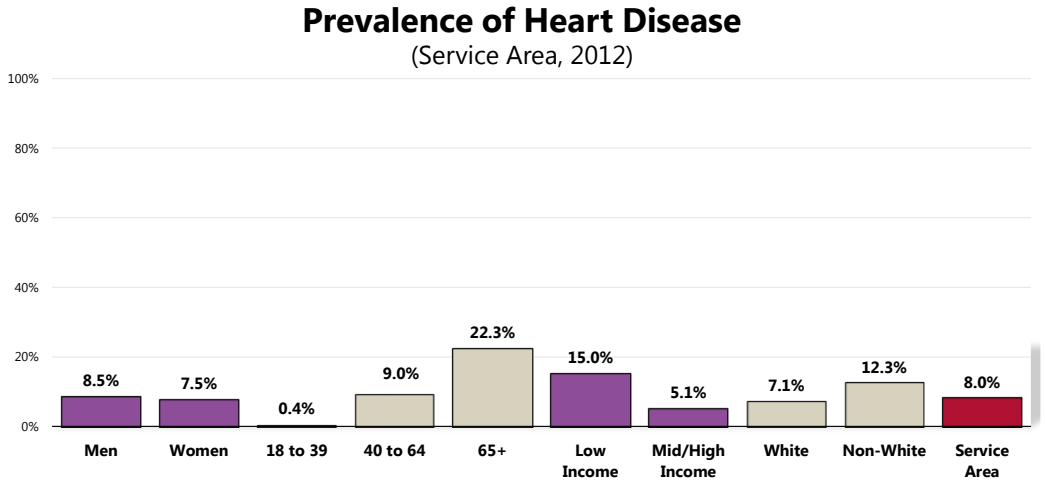
- Similar to the national prevalence.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 141]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Adults more likely to have been diagnosed with chronic heart disease include:

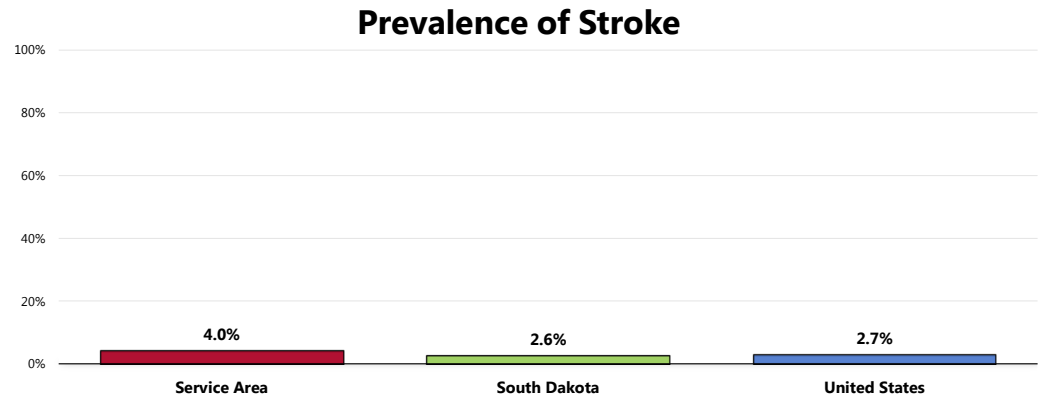
- Adults aged 40 and older (note the correlation with age).
- Residents in low-income households.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 141]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "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 total of 4.0% of surveyed adults report that they suffer from or have been diagnosed with cerebrovascular disease (a stroke).

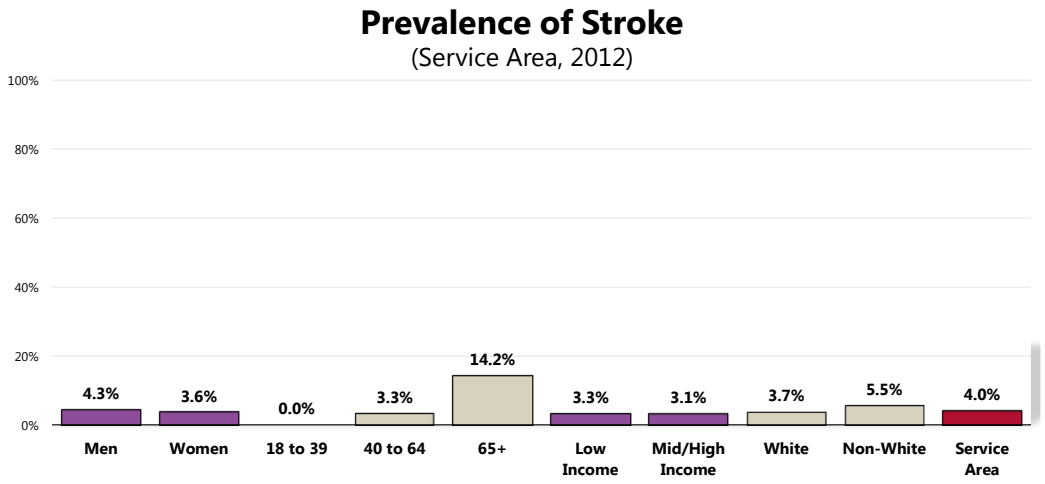
- Similar to statewide findings.
- Similar to national findings.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 40]
- 2011 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): 2011 South Dakota data.

Notes:
- Asked of all respondents.

Service Area seniors (age 65+) are more likely to have been diagnosed with stroke.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 40]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.

Cardiovascular Risk Factors

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)

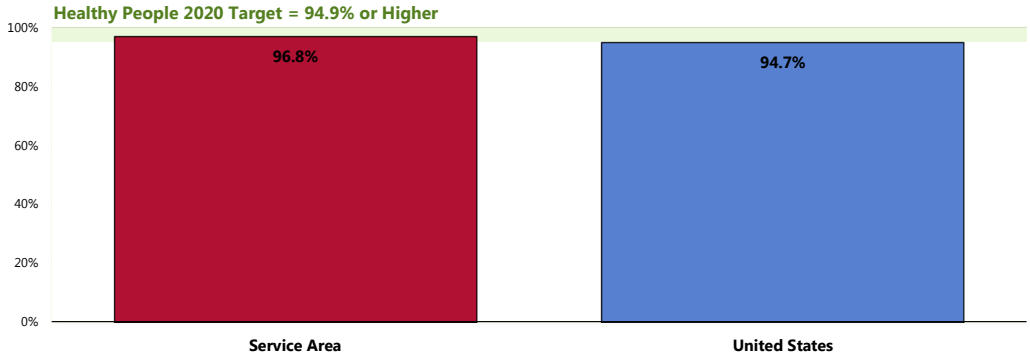
Hypertension (High Blood Pressure)

High Blood Pressure Testing

A total of 96.8% of Service Area adults have had their blood pressure tested within the past two years.

- Better than national findings.
- Satisfies the Healthy People 2020 target (94.9% or higher).

Have Had Blood Pressure Checked in the Past Two Years



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 49]
- 2011 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-4]

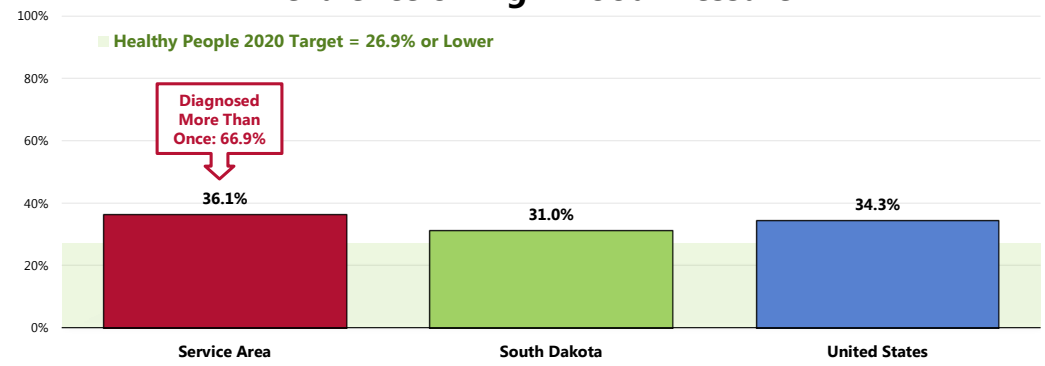
Notes:
- Asked of all respondents.

Prevalence of Hypertension

A total of 36.1% of adults have been told at some point that their blood pressure was high.

- Less favorable than the South Dakota prevalence.
- Similar to the national prevalence.
- Fails to satisfy the Healthy People 2020 target (26.9% or lower).
- Among hypertensive adults, 66.9% have been diagnosed with high blood pressure more than once.

Prevalence of High Blood Pressure



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 47, 142]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.
- 2011 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]

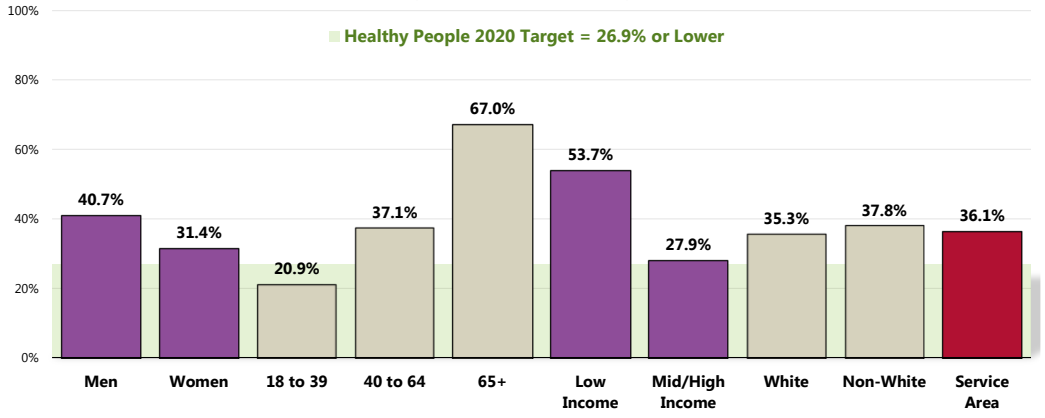
Notes:
- Asked of all respondents.

Hypertension diagnoses are higher among:

- Men.
- Adults age 40 and older, and especially those age 65+.
- Low-income residents.

Prevalence of High Blood Pressure

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 142]
- 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.
- Hispanics can be of any race; "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.

Hypertension Management

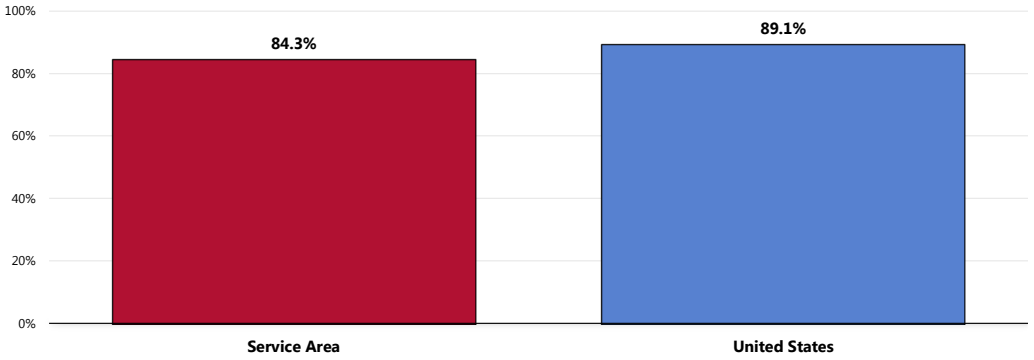
Respondents reporting high blood pressure were further asked:

"Are you currently taking any action to help control your high blood pressure, such as taking medication, changing your diet, or exercising?"

Among respondents who have been told that their blood pressure was high, 84.3% report that they are currently taking actions to control their condition.

- Statistically similar to national findings.

Taking Action to Control Hypertension
(Among Adults With High Blood Pressure)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 48]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents who have been diagnosed with high blood pressure.
- In this case, the term "action" refers to medication, change in diet, and/or exercise.

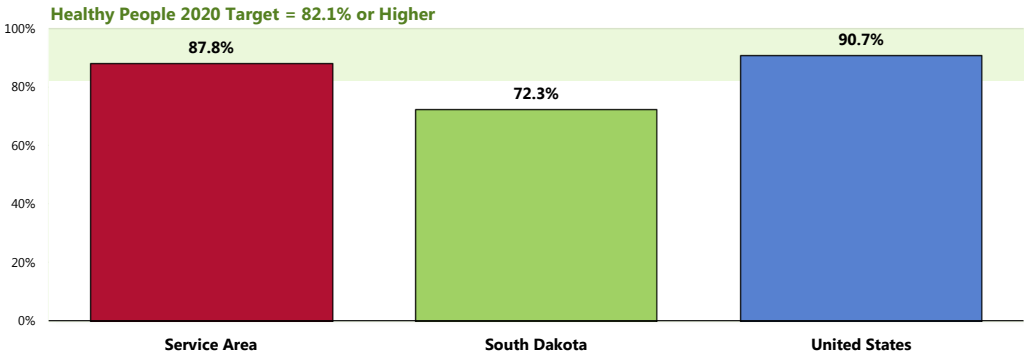
High Blood Cholesterol

Blood Cholesterol Testing

A total of 87.8% of Service Area adults have had their blood cholesterol checked within the past five years.

- More favorable than South Dakota findings.
- Comparable to the national findings.
- Satisfies the Healthy People 2020 target (82.1% or higher).

Have Had Blood Cholesterol Levels Checked in the Past Five Years



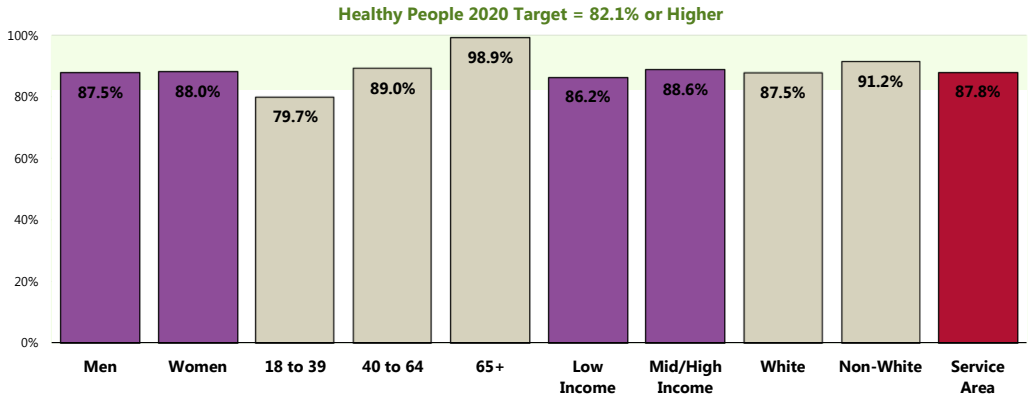
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.
- 2011 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-6]

Notes:
- Asked of all respondents.

Young adults report lower screening levels (positive correlation with age).

Have Had Blood Cholesterol Levels Checked in the Past Five Years

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-6]

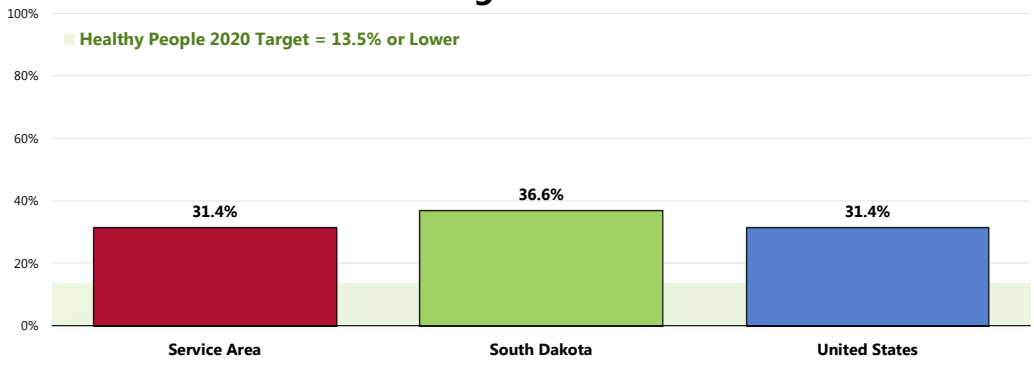
Notes:
- Asked of all respondents.
- Hispanics can be of any race; "White" reflects non-Hispanic White respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200%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

Self-Reported High Blood Cholesterol

A total of 31.4% of adults have been told by a health professional that their cholesterol level was high.

- More favorable than the South Dakota findings.
- Identical to the national prevalence.
- More than twice the Healthy People 2020 target (13.5% or lower).

Prevalence of High Blood Cholesterol



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 143]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.
- 2011 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.
- *The South Dakota data reflects those adults who have been tested for high cholesterol and who have been diagnosed with it.

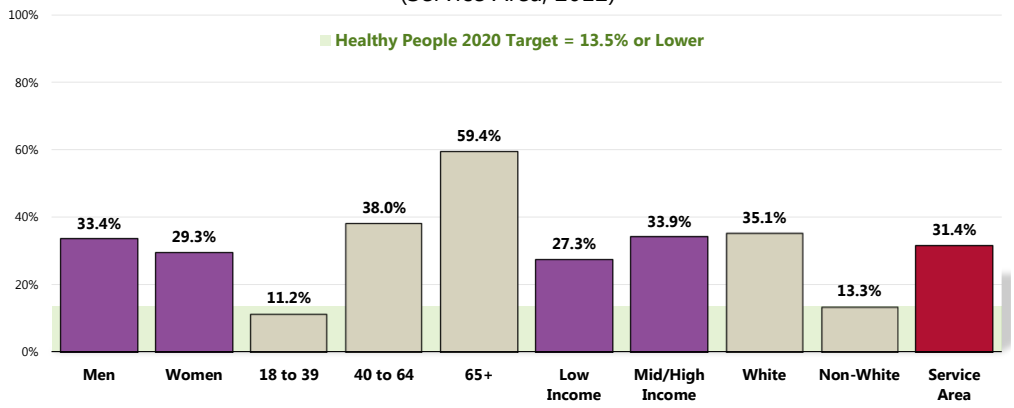
Note that 18.2% of Service Area adults report not having high blood cholesterol, but: 1) have never had their blood cholesterol levels tested; 2) have not been screened in the past 5 years; or 3) do not recall when their last screening was. For these individuals, current prevalence is unknown.

Note the strong correlation between age and high blood cholesterol.

- Whites report a higher prevalence than Non-Whites.
- "Unknowns" are relatively high in young adults and low-income residents.

Prevalence of High Blood Cholesterol

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 143]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-7]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.

High Cholesterol Management

Respondents reporting high cholesterol were further asked:

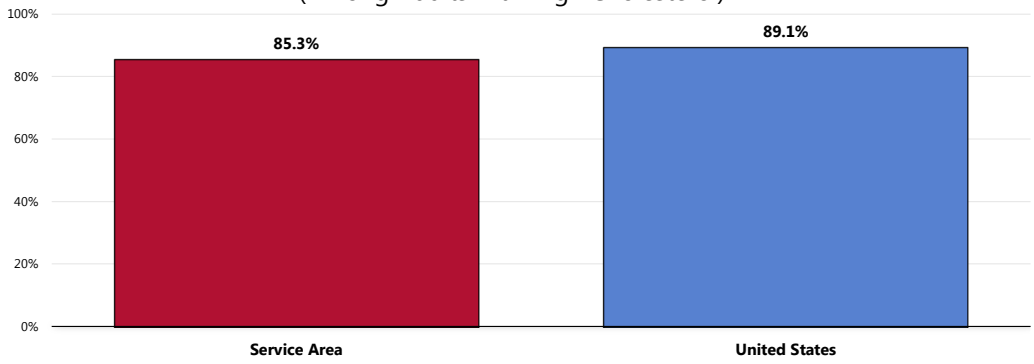
"Are you currently taking any action to help control your high cholesterol, such as taking medication, changing your diet, or exercising?"

Among adults who have been told that their blood cholesterol was high, 85.3% report that they are currently taking actions to control their cholesterol levels.

- Comparable to what is found nationwide.

Taking Action to Control High Blood Cholesterol Levels

(Among Adults with High Cholesterol)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 51]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents who have been diagnosed with high blood cholesterol levels.
- In this case, the term "action" refers to medication, change in diet, and/or exercise.

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.

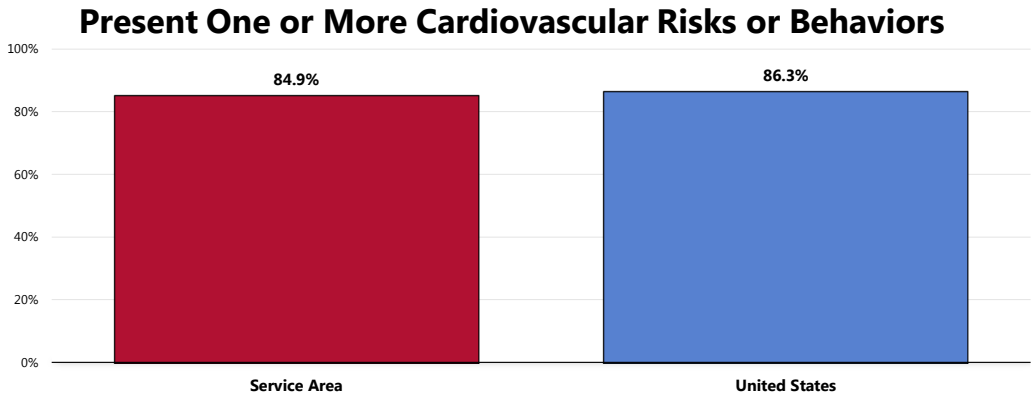
– National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Total Cardiovascular Risk

RELATED ISSUE: See also *Nutrition & Overweight, Physical Activity & Fitness* and *Tobacco Use* in the **Modifiable Health Risk** section of this report.

A total of 84.9% of Service Area adults report one or more cardiovascular risk factors, such as being overweight, smoking cigarettes, being physically inactive, or having high blood pressure or cholesterol.

- Similar to national findings.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 144]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

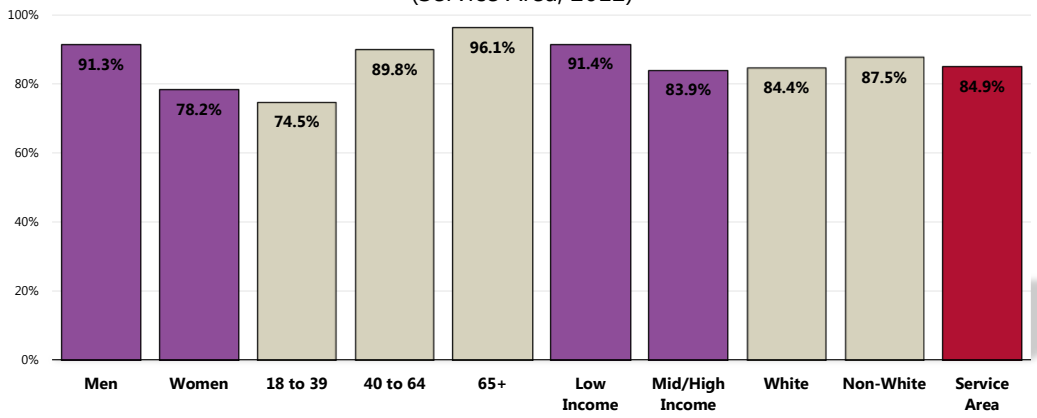
Notes:
- Asked of all respondents.
- Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) hypertension; 4) high blood cholesterol; and/or 5) being overweight/obese.

Adults more likely to exhibit cardiovascular risk factors include:

- Men.
- Adults aged 40 and older, and especially seniors.
- Residents in low-income households.

Present One or More Cardiovascular Risks or Behaviors

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 144]

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; "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.

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)

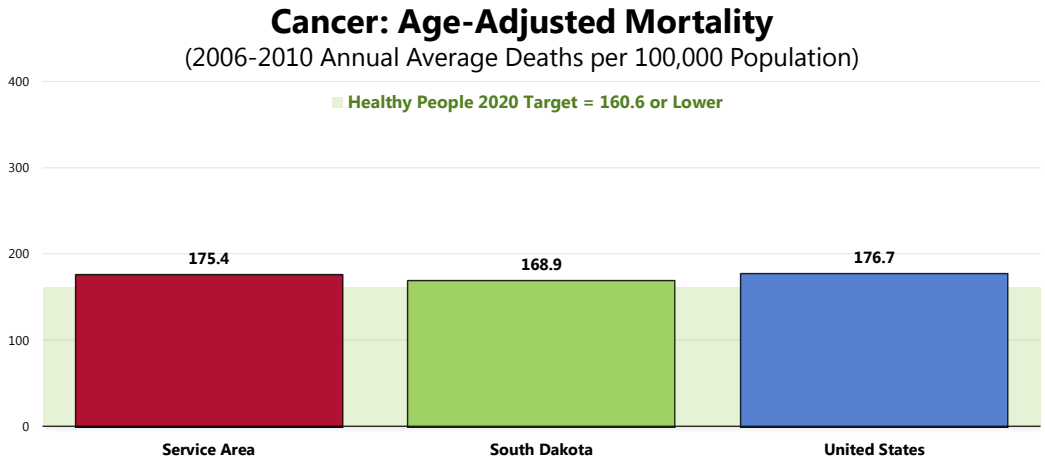
– Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Cancer Deaths

All Cancer Deaths

Between 2006 and 2010, there was an annual average age-adjusted cancer mortality rate of 175.4 deaths per 100,000 population in the Service Area.

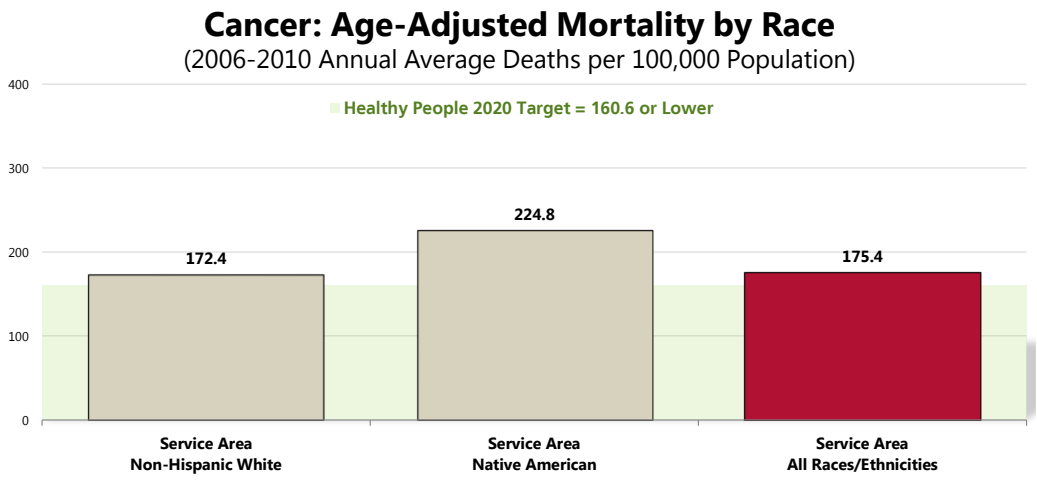
- Comparable to the statewide rate.
- Comparable to the national rate.
- Fails to satisfy the Healthy People 2020 target of 160.6 or lower.



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- 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 U.S. Standard Population.

The cancer mortality rate is higher among Native Americans.



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- 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 U.S. Standard Population.

Cancer Deaths by Site

Lung cancer is by far the leading cause of cancer deaths in the Service Area.

Other leading sites include prostate cancer among men, breast cancer among women, and colorectal cancer (both genders).

As can be seen in the following chart (referencing 2007-2009 annual average age-adjusted death rates):

- The Service Area **lung cancer** death rate is similar to both the state and national rates.
- The Service Area **prostate cancer** death rate is higher than both the state and national rates.
- The Service Area **female breast cancer** death rate is higher than both the South Dakota and US rates.
- The Service Area **colorectal cancer** death rate is lower than both the state and national rates.

Note that while the Service Area colorectal cancer death rate is comparable to the related Healthy People 2020 target, the remaining cancer rates fail to meet their related 2020 targets.

Age-Adjusted Cancer Death Rates by Site

(2007-2009 Annual Average Deaths per 100,000 Population)

	Service Area	South Dakota	United States	HP2020
Lung Cancer	**48.1**	**45.9**	**49.5**	**45.5**
Prostate Cancer	**25.5**	**23.6**	**23.0**	**21.2**
Female Breast Cancer	**24.0**	**20.4**	**22.7**	**20.6**
Colorectal Cancer	**15.1**	**16.8**	**16.6**	**14.5**

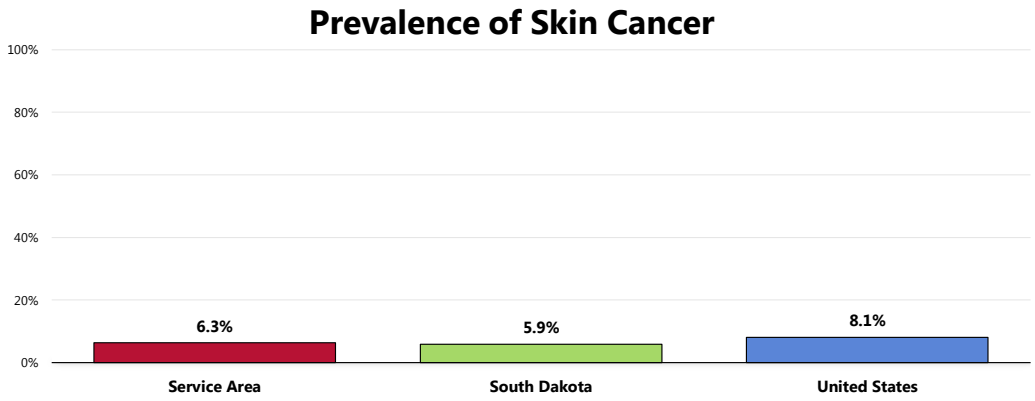
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov

Prevalence of Cancer

Skin Cancer

A total of 6.3% of surveyed Service Area adults report having been diagnosed with skin cancer.

- Similar to the South Dakota percentage.
- Similar to the national average.



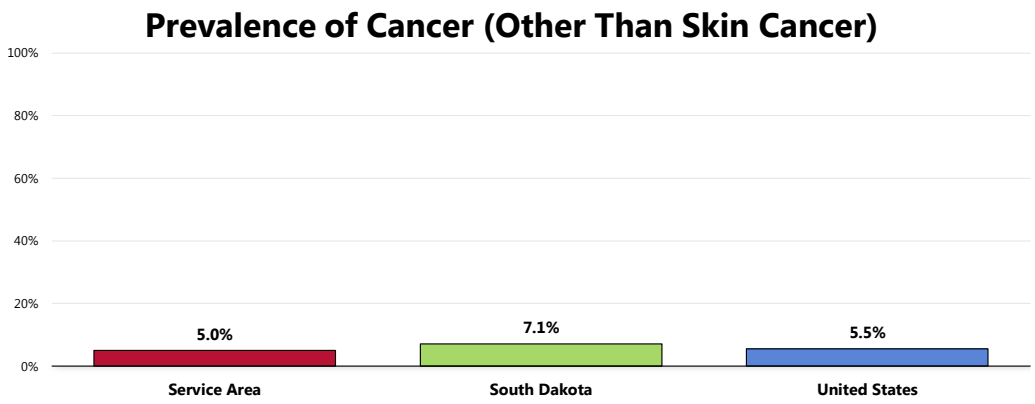
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 31]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.

Notes:
- Asked of all respondents.

Other Cancer

A total of 5.0% of respondents have been diagnosed with some type of (non-skin) cancer.

- More favorable than the statewide prevalence.
- Similar to the national prevalence.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 30]
- 2011 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): 2011 South Dakota data.

Notes:
- Asked of all respondents.

Cancer Risk

RELATED ISSUE: See also *Nutrition & Overweight, Physical Activity & Fitness* and *Tobacco Use* in the **Modifiable Health Risk** section of this report.

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 four cancer sites: prostate cancer (prostate-specific antigen testing and digital rectal examination); female breast cancer (mammography); cervical cancer (Pap smear testing); and colorectal cancer (sigmoidoscopy and fecal occult blood testing).

Prostate Cancer Screenings

The US Preventive Services Task Force (USPSTF) concludes that the current evidence is insufficient to assess the balance of benefits and harms of prostate cancer screening in men younger than age 75 years.

Rationale: Prostate cancer is the most common nonskin cancer and the second-leading cause of cancer death in men in the United States. The USPSTF found convincing evidence that prostate-specific antigen (PSA) screening can detect some cases of prostate cancer.

In men younger than age 75 years, the USPSTF found inadequate evidence to determine whether treatment for prostate cancer detected by screening improves health outcomes compared with treatment after clinical detection.

The USPSTF found convincing evidence that treatment for prostate cancer detected by screening causes moderate-to-substantial harms, such as erectile dysfunction, urinary incontinence, bowel dysfunction, and death. These harms are especially important because some men with prostate cancer who are treated would never have developed symptoms related to cancer during their lifetime.

There is also adequate evidence that the screening process produces at least small harms, including pain and discomfort associated with prostate biopsy and psychological effects of false-positive test results.

The USPSTF recommends against screening for prostate cancer in men age 75 years or older.

Rationale: In men age 75 years or older, the USPSTF found adequate evidence that the incremental benefits of treatment for prostate cancer detected by screening are small to none.

Given the uncertainties and controversy surrounding prostate cancer screening in men younger than age 75 years, a clinician should not order the PSA test without first discussing with the patient the potential but uncertain benefits and the known harms of prostate cancer screening and treatment. Men should be informed of the gaps in the evidence and should be assisted in considering their personal preferences before deciding whether to be tested.

– 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.

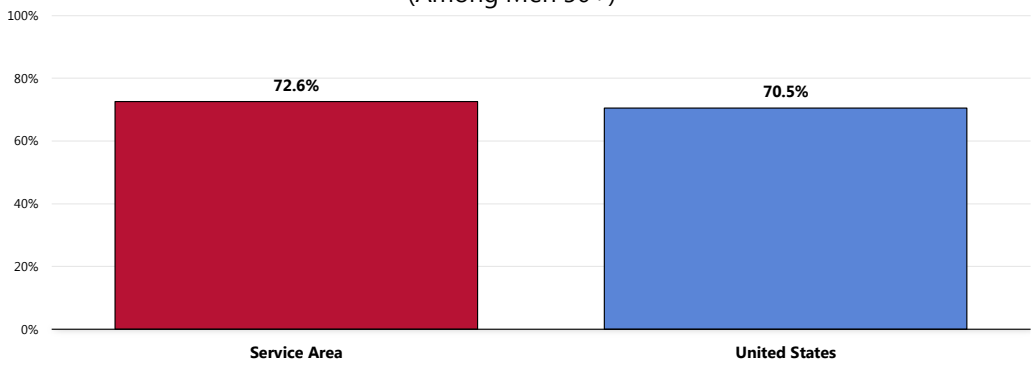
Note: Due to recent (2008) changes in clinical recommendations against routine PSA testing, it is anticipated that testing levels will begin to decline.

PSA Testing and/or Digital Rectal Examination

Among men age 50 and older, 72.6% have had a PSA (prostate-specific antigen) test and/or a digital rectal examination for prostate problems within the past two years.

- Similar to national findings.

Have Had a Prostate Screening in the Past Two Years
(Among Men 50+)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all male respondents 50 and older.

Female Breast Cancer Screening

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.

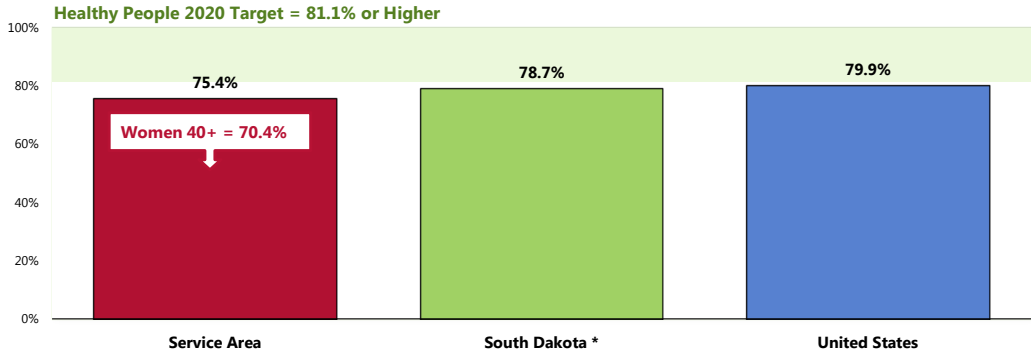
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

Mammography

Among women age 50-74, 75.4% had a mammogram within the past two years.

- Similar to statewide findings (which represent all women 50+).
- Similar to national findings.
- Similar to the Healthy People 2020 target (81.1% or higher).
- Among women 40+, 70.4% had a mammogram in the past two years.

Have Had a Mammogram in the Past Two Years
(Among Women 50-74)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 145-146]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 South Dakota data.
- 2011 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 to 74.
- *Note that state data reflects all women 50 and older (vs. women 50-74 in local, US and Healthy People data).

Cervical Cancer Screenings

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.

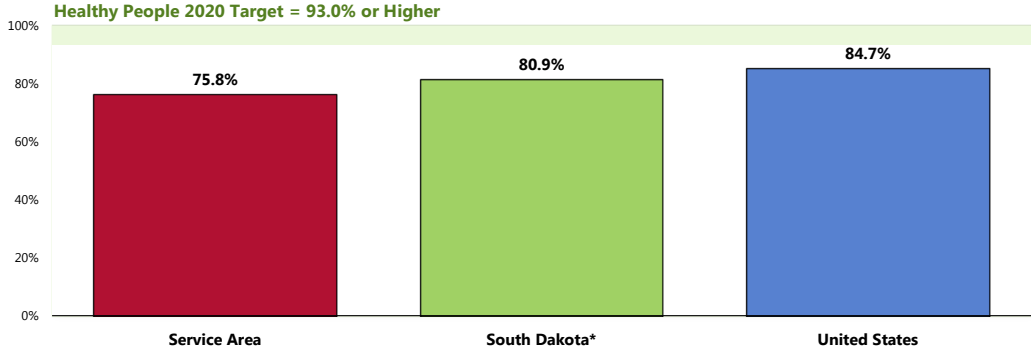
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

Pap Smear Testing

Among women age 21 to 65, 75.8% had a Pap smear within the past three years.

- Comparable to South Dakota findings (which represents all women 18+).
- Lower than the national figure.
- Fails to satisfy the Healthy People 2020 target (93% or higher).

Have Had a Pap Smear in the Past Three Years
(Among Women 21-65)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 147]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 South Dakota data.
- 2011 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 21-65.
- *Note that the South Dakota percentage represents all women 18 and older.

Colorectal Cancer Screenings

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 (FOBT, 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.

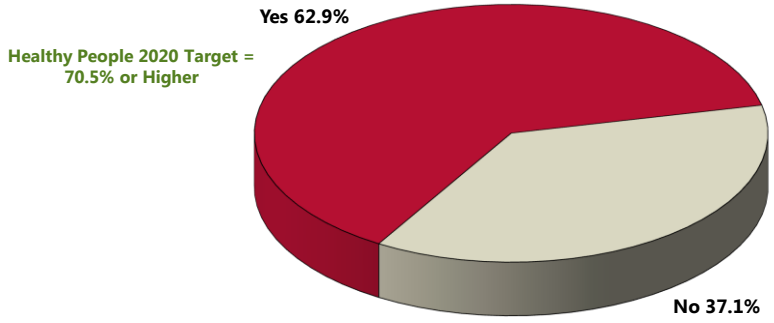
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

Colorectal Cancer Screening

Among adults age 50-75, 62.9% have had an appropriate colorectal cancer screening (fecal occult blood testing within the past year and/or sigmoidoscopy/colonoscopy [lower endoscopy] within the past 10 years).

- Fails to satisfy the Healthy People 2020 target (70.5% or higher).

Have Had a Colorectal Cancer Screening
(Among Service Area Adults 50-75, 2011)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 151]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-16]

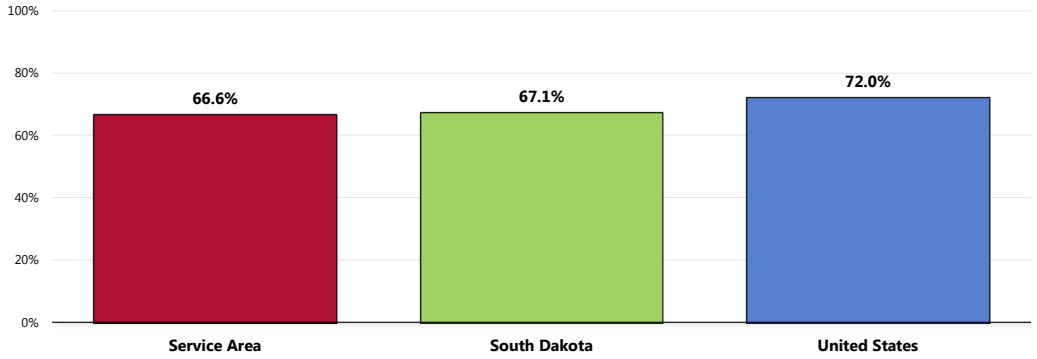
Notes:
- Asked of all respondents age 50 through 75.
- In this case, the term "colorectal screening" refers to adults age 50-75 receiving a FOBT (fecal occult blood test) in the past year and/or a lower endoscopy (sigmoidoscopy/colonoscopy) in the past 10 years.

Lower Endoscopy

Among adults age 50 and older, two-thirds (66.6%) have had a lower endoscopy (sigmoidoscopy or colonoscopy) at some point in their lives.

- Comparable to South Dakota findings.
- Comparable to national findings.

Have Ever Had a Lower Endoscopy Exam
(Among Adults 50+)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 149]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 South Dakota data.
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

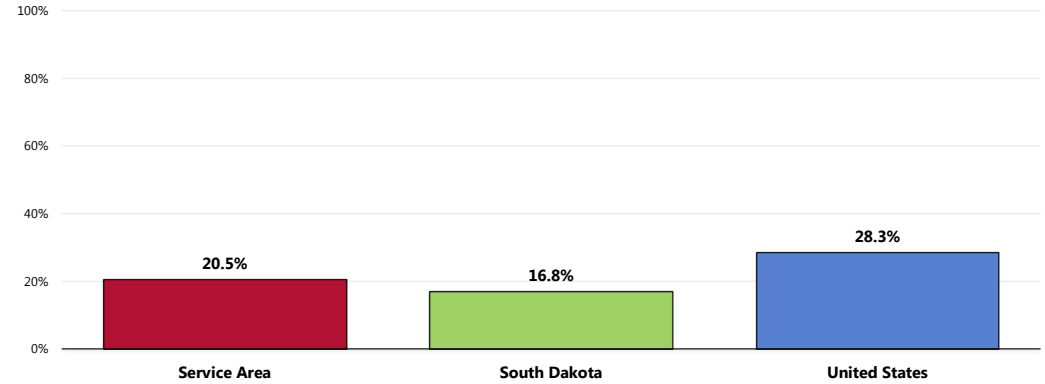
Notes:
- Asked of all respondents 50+.
- Lower endoscopy includes either sigmoidoscopy or colonoscopy.

Blood Stool Testing

Among adults age 50 and older, 20.5% have had a blood stool test (aka "fecal occult blood test") within the past two years.

- Comparable to South Dakota findings.
- Lower than national findings.

Have Had a Blood Stool Test in the Past Two Years
(Among Adults 50+)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 150]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 South Dakota data.
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents 50+.

Respiratory Disease

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.

Several additional respiratory conditions and respiratory hazards, including infectious agents and occupational and environmental exposures, are covered in other areas of Healthy People 2020. Examples include tuberculosis, lung cancer, acquired immunodeficiency syndrome (AIDS), pneumonia, occupational lung disease, and smoking. Sleep Health is now a separate topic area of Healthy People 2020.

Currently in the United States, more than 23 million people have asthma. Approximately 13.6 million adults have been diagnosed with COPD, and an approximately equal number have not yet been diagnosed. 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

Note: COPD was changed to chronic lower respiratory disease (CLRD) in 1999 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.

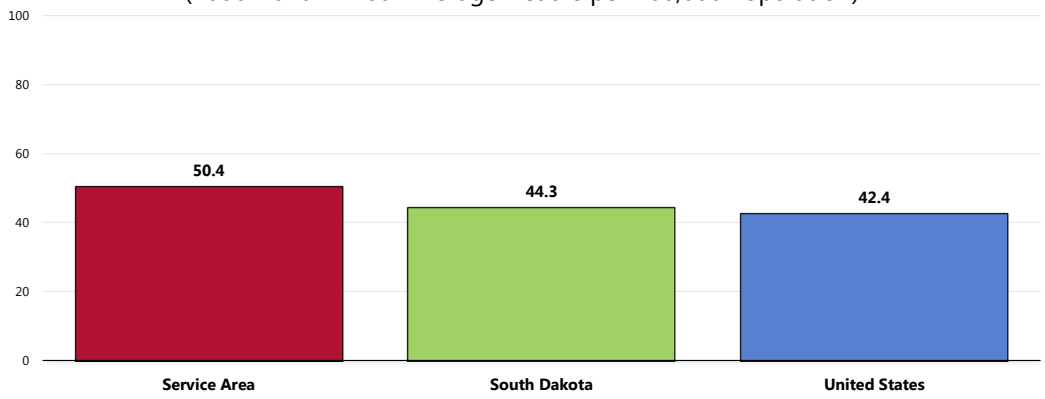
Chronic Lower Respiratory Disease Deaths (CLRD)

Between 2006 and 2010, there was an annual average age-adjusted CLRD mortality rate of 50.4 deaths per 100,000 population in the Service Area.

- Higher than found statewide.
- Higher than the national rate.

CLRD: Age-Adjusted Mortality

(2006-2010 Annual Average Deaths per 100,000 Population)



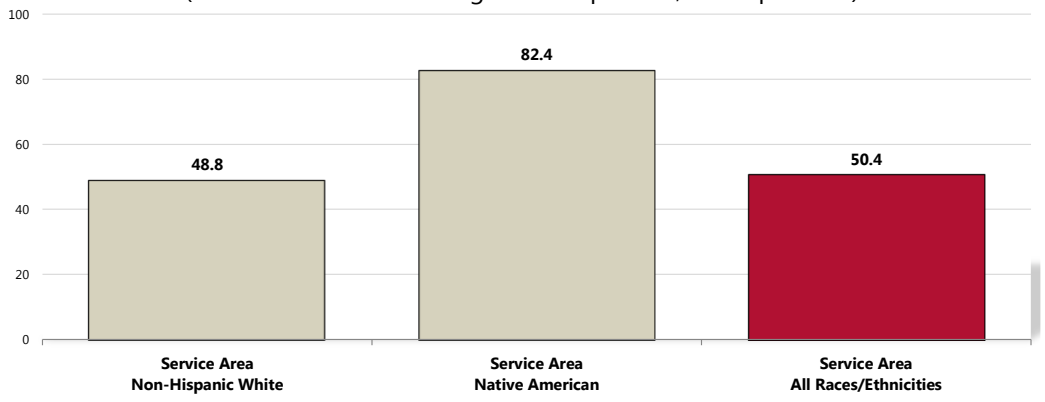
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.

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 U.S. Standard Population.
- CLRD is chronic lower respiratory disease.

CLRD mortality is notably higher among Native Americans when compared with Whites in the Service Area.

CLRD: Age-Adjusted Mortality by Race

(2006-2010 Annual Average Deaths per 100,000 Population)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.

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 U.S. Standard Population.
- CLRD is chronic lower respiratory disease.

Pneumonia/Influenza Deaths

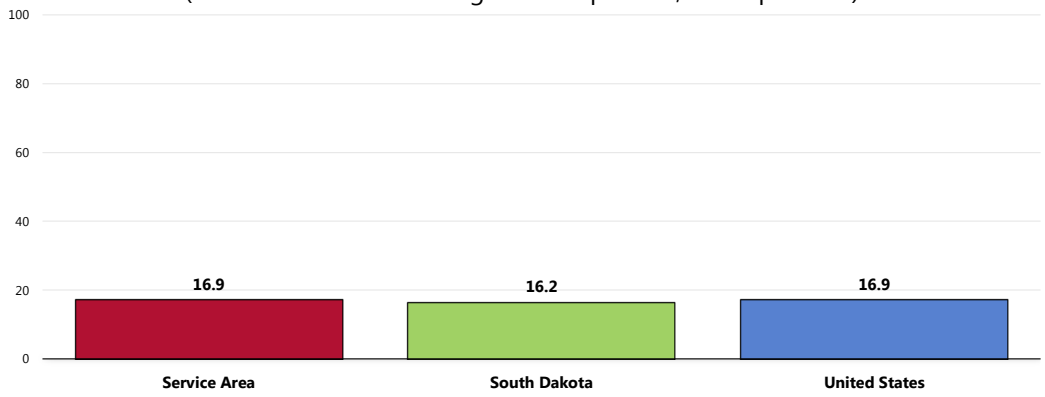
For prevalence of vaccinations for pneumonia and influenza, see also "Immunization & Infectious Disease."

Between 2006 and 2010, there was an annual average age-adjusted pneumonia influenza mortality rate of 16.9 deaths per 100,000 population in the Service Area.

- Similar to that found statewide.
- Identical to the national rate.

Pneumonia/Influenza: Age-Adjusted Mortality

(2006-2010 Annual Average Deaths per 100,000 Population)

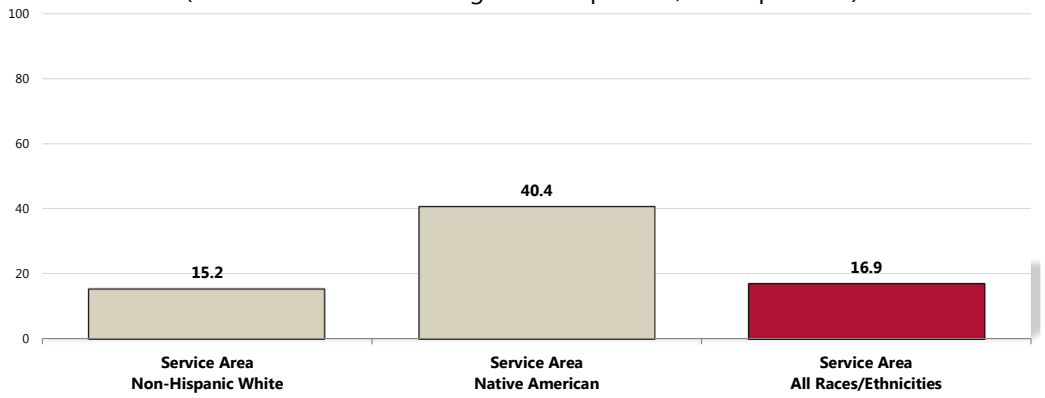


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
• Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.

- The Service Area pneumonia/influenza mortality rate is more than twice as high in the Native American population as among Whites.

Pneumonia/Influenza: Age-Adjusted Mortality by Race

(2006-2010 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
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 U.S. Standard Population.

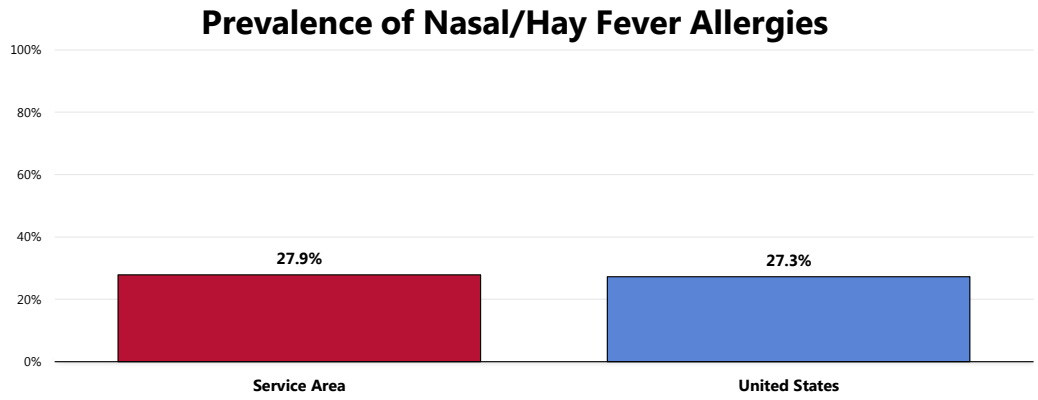
Prevalence of Respiratory Conditions

Nasal/Hay Fever Allergies

Survey respondents were next asked to indicate whether they suffer from or have been diagnosed with various respiratory conditions, including asthma, nasal/hay fever allergies, sinusitis, and/ or chronic lung disease.

More than one-fourth (27.9%) of Service Area adults currently suffer from or have been diagnosed with nasal/hay fever allergies.

- Similar to the national prevalence.

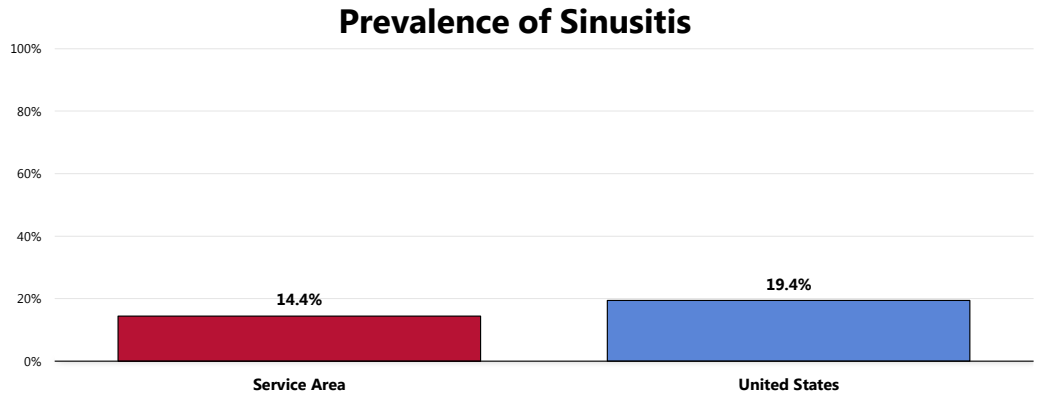


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 35]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Sinusitis

A total of 14.4% of Service Area adults suffer from sinusitis.

- More favorable than the national prevalence.

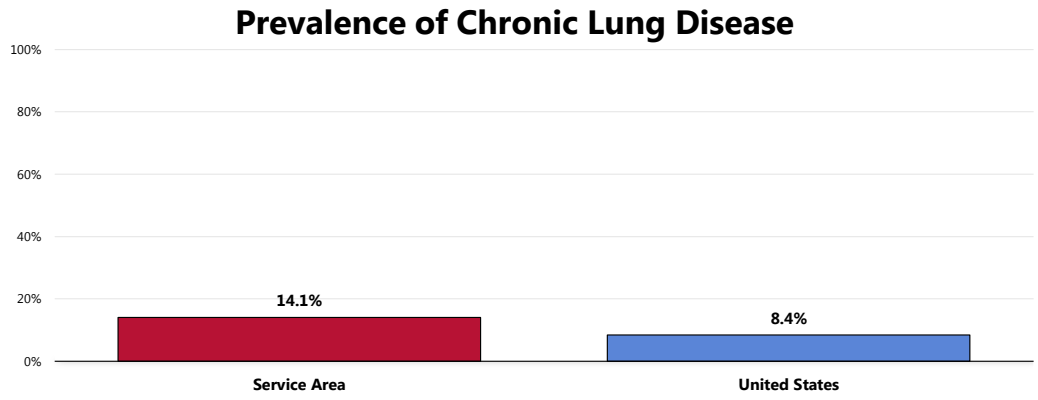


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 34]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Chronic Lung Disease

A total of 14.1% of Service Area adults suffer from chronic lung disease.

- Less favorable than the national prevalence.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 25]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

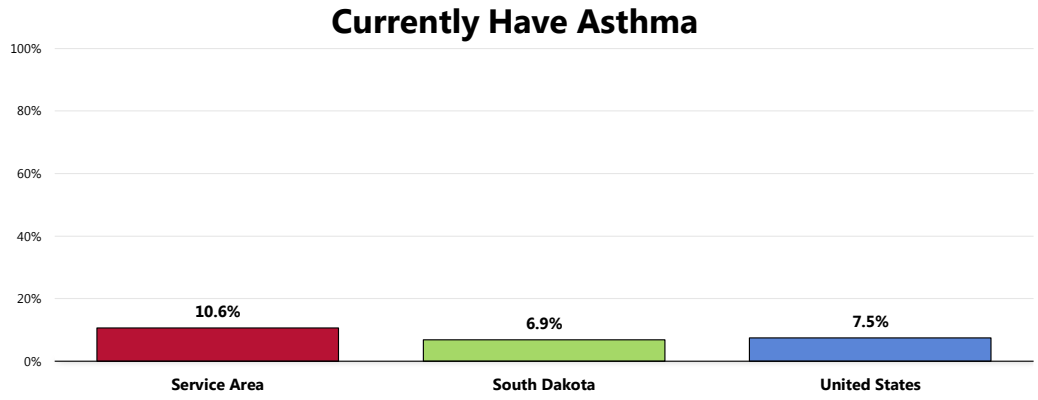
Notes:
- Asked of all respondents.

Asthma

Adults

A total of 10.6% of Service Area adults currently suffer from asthma.

- Less favorable than the statewide prevalence.
- Similar to the national prevalence.

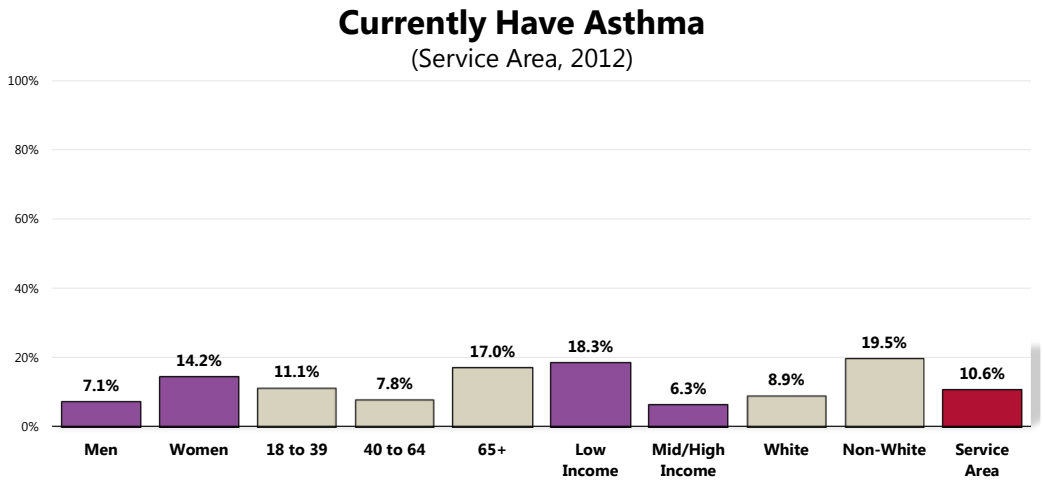


Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.

Notes:
- Asked of all respondents.

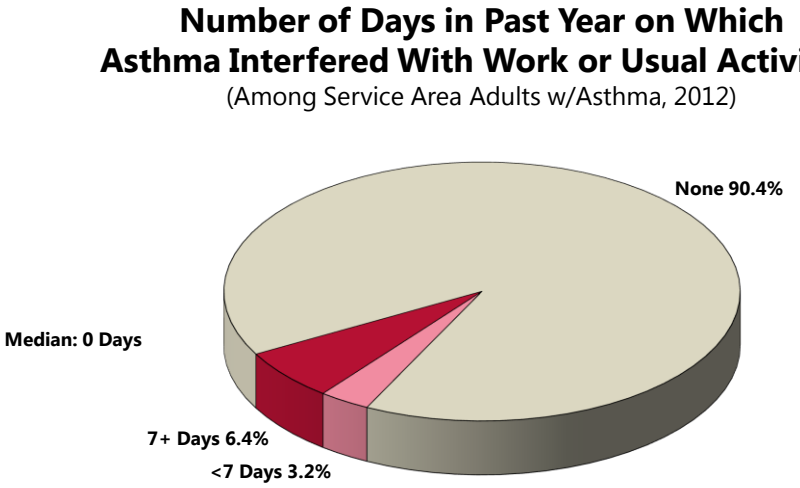
The following adults are more likely to suffer from asthma:

- Women.
- Seniors.
- Low-income residents.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "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 total of 6.4% of respondents with asthma report seven or more days in the past year on which they were unable to work or carry out their usual activities because of their asthma.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 43]
Notes: • Asked of all respondents with asthma.

Children

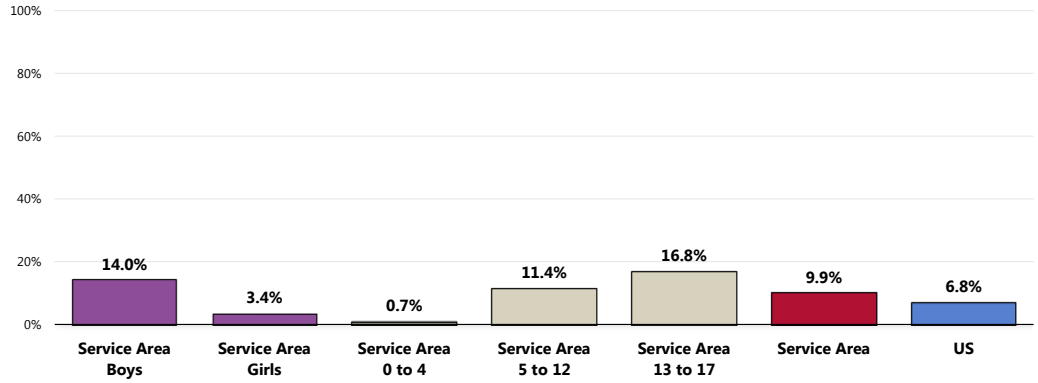
Among Service Area children under age 18, 9.9% currently have asthma.

- Statistically similar to national findings.

Statistically high among boys in the Service Area; also note the positive correlation with age.

Child Currently Has Asthma

(Among Parents of Children Age 0-17)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 153]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents with children 0 to 17 in the household.

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

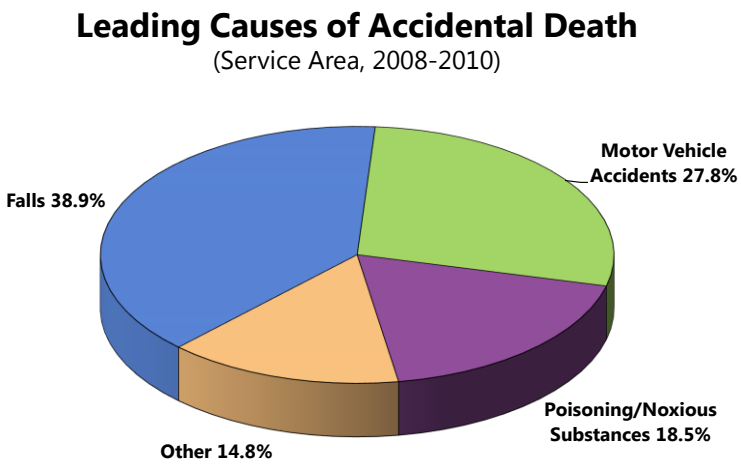
Efforts to prevent violence may focus on:

- 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

Falls, motor vehicle accidents, and poisoning accounted for more than 8 in 10 accidental deaths in the Service Area between 2008 and 2010.



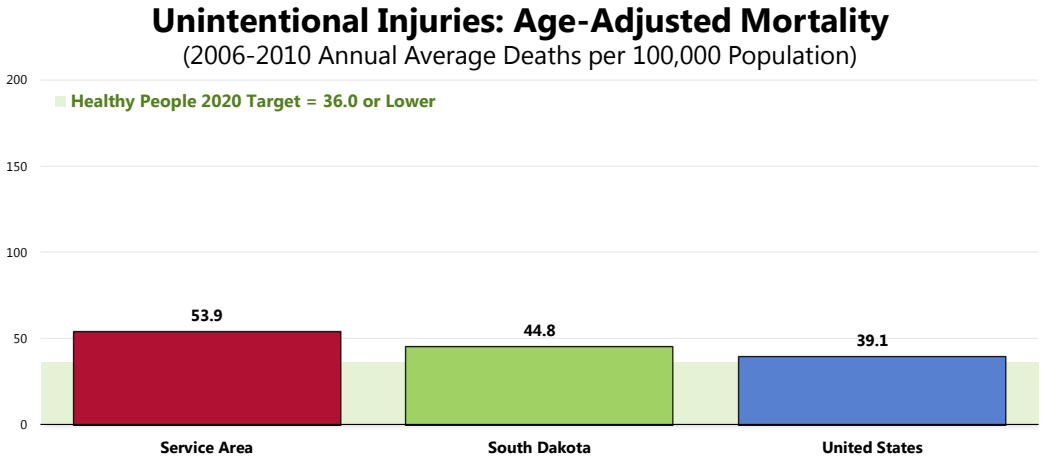
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Unintentional Injury

Age-Adjusted Unintentional Injury Deaths

Between 2006 and 2010, there was an annual average age-adjusted unintentional injury mortality rate of 53.9 deaths per 100,000 population in the Service Area.

- Less favorable than the South Dakota rate.
- Less favorable than the national rate.
- Fails to satisfy the Healthy People 2020 target (36.0 or lower).

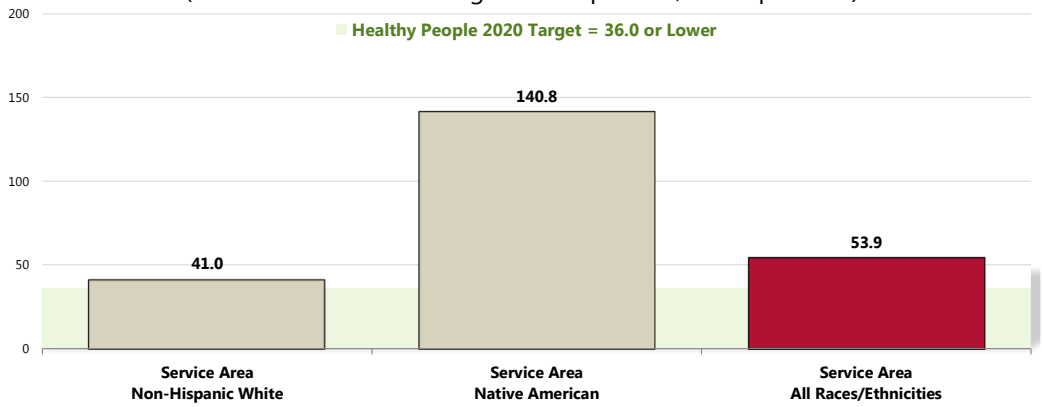


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
• US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [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 U.S. Standard Population.

The mortality rate is more than three times as high among Native Americans than among Whites in the Service Area.

Unintentional Injuries: Age-Adjusted Mortality by Race

(2006-2010 Annual Average Deaths per 100,000 Population)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- 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 U.S. Standard Population.

Motor Vehicle Safety

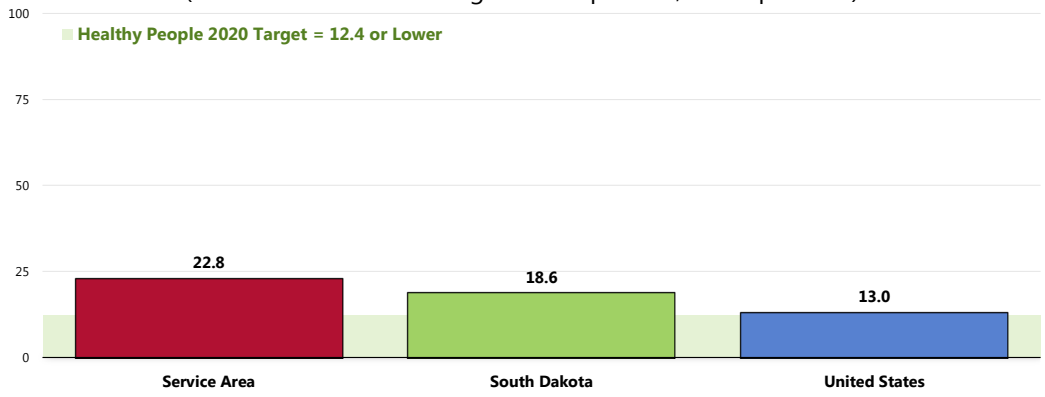
Age-Adjusted Motor-Vehicle Related Deaths

Between 2006 and 2010, there was an annual average age-adjusted motor vehicle crash mortality rate of 22.8 deaths per 100,000 population in the Service Area.

- Worse than found statewide.
- Worse than found nationally.
- Fails to satisfy the Healthy People 2020 target (12.4 or lower).

Motor Vehicle Crashes: Age-Adjusted Mortality

(2006-2010 Annual Average Deaths per 100,000 Population)



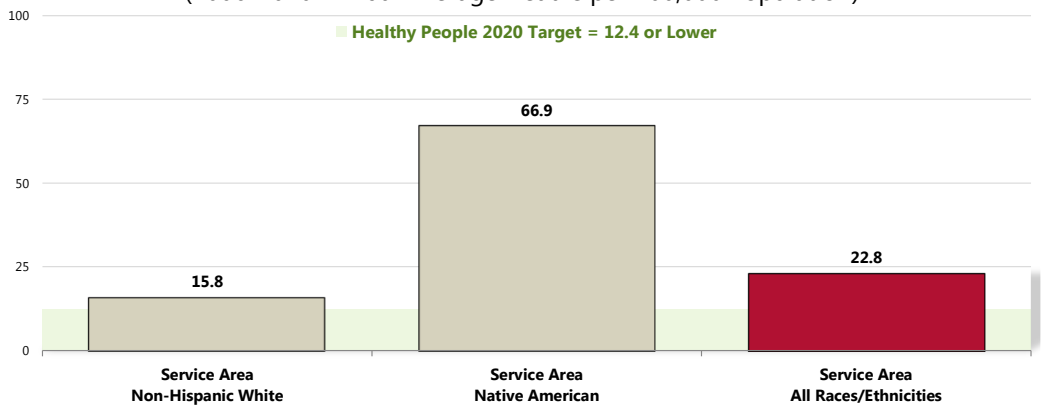
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-13.1]

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 U.S. Standard Population.

The Service Area motor vehicle crash mortality rate is dramatically higher among Native Americans than among Whites.

Motor Vehicle Crashes: Age-Adjusted Mortality by Race

(2006-2010 Annual Average Deaths per 100,000 Population)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-13.1]

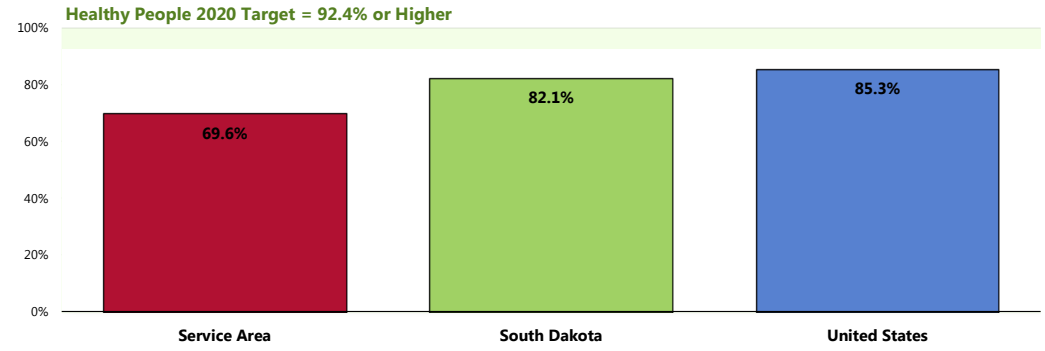
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.

Seat Belt Usage - Adults

Most Service Area adults (69.6%) report "always" wearing a seat belt when driving or riding in a vehicle.

- Lower than the statewide finding.
- Lower than the percentage found nationally.
- Fails to satisfy the Healthy People 2020 target of 92.4% or higher.

"Always" Wear a Seat Belt When Driving or Riding in a Vehicle



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 53]
- 2011 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): 2011 South Dakota data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IPV-15]

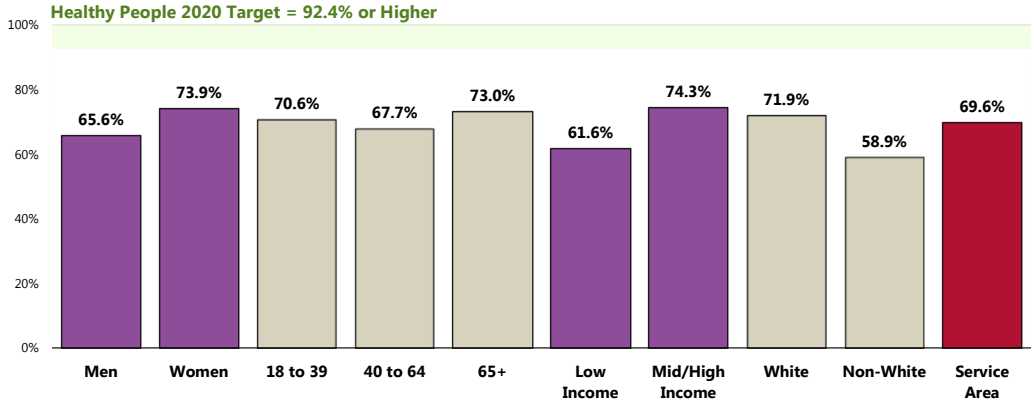
Notes:
- Asked of all respondents.

These population segments are less likely to report consistent seat belt usage:

- Men.
- Residents living on lower incomes.

"Always" Wear a Seat Belt When Driving or Riding in a Vehicle

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 53]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IPV-15]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.

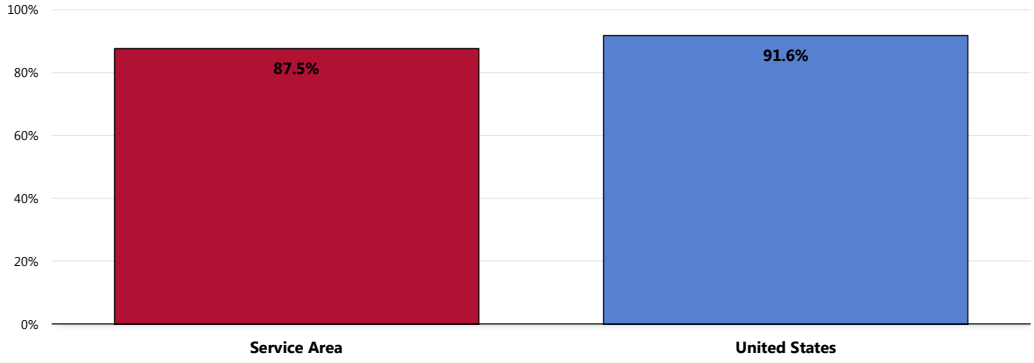
Seat Belt Usage - Children

A full 87.5% of Service Area parents report that their child (age 0 to 17) "always" wears a seat belt (or appropriate car seat for younger children) when riding in a vehicle.

- Statistically similar to what is found nationally.

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

(Among Parents of Children Age 0-17)



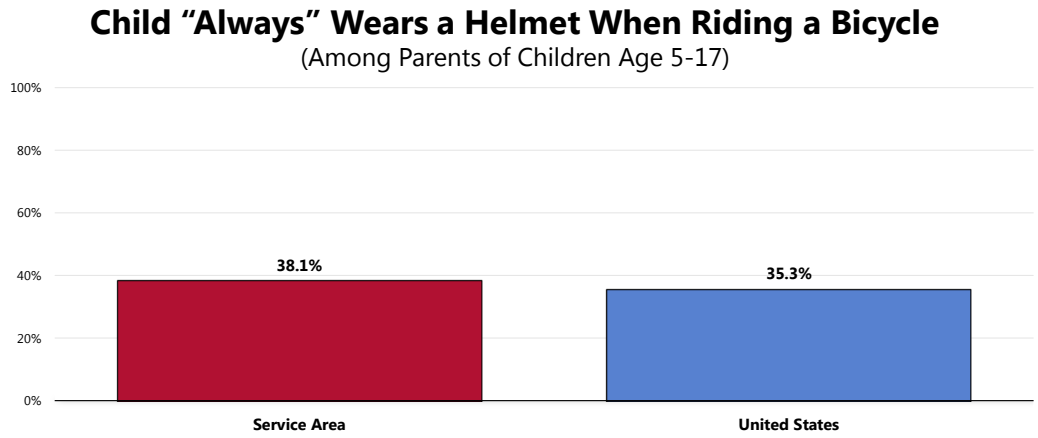
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 132]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents with children 0 to 17 in the household.

Bicycle Safety

More than one in three Service Area children age 5 to 17 (38.1%) is reported to "always" wear a helmet when riding a bicycle.

- Comparable to the national prevalence.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 137]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

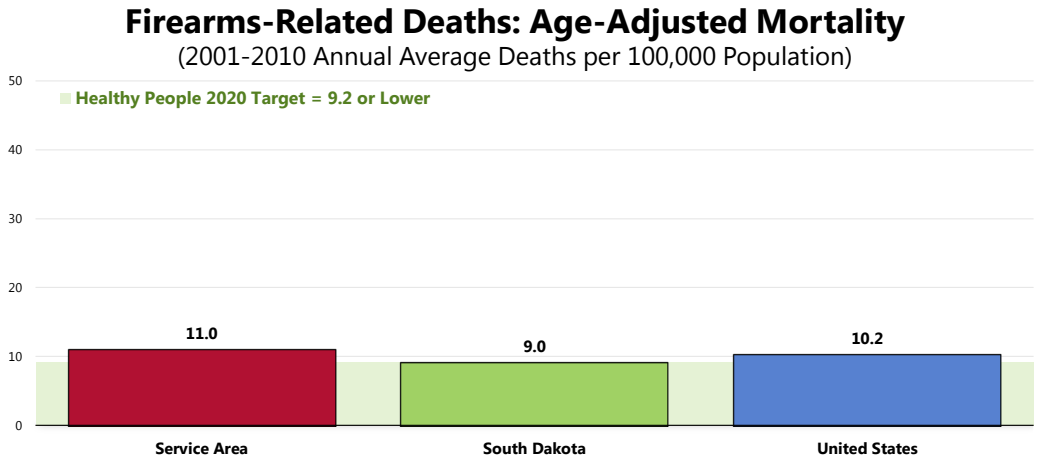
Notes:
- Asked of all respondents with children age 5 to 17 at home.

Firearm Safety

Age-Adjusted Firearm-Related Deaths

Between 2001 and 2010, the Service Area reported an annual average age-adjusted rate of 11.0 deaths per 100,000 population due to firearms.

- Higher than found statewide.
- Higher than found nationally.
- Fails to satisfy the Healthy People 2020 objective (9.2 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 February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-30]

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.

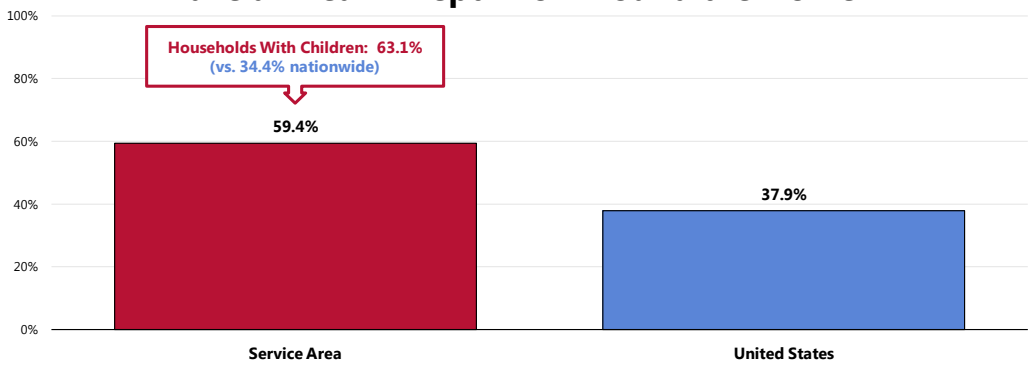
Survey respondents were further asked about the presence of weapons in the home:

"Are there any firearms now kept in or around your home, including those kept in a garage, outdoor storage area, truck, or car? For the purposes of this inquiry, 'firearms' include pistols, shotguns, rifles, and other types of guns, but do NOT include starter pistols, BB guns, or guns that cannot fire."

Overall, 6 in 10 (59.4%) Service Area adults have a firearm kept in or around their home.

- Much higher than the national prevalence.
- Among Service Area households with children, 63.1% have a firearm kept in or around the house (nearly twice that reported nationally).

Have a Firearm Kept in or Around the Home



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 57, 154]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

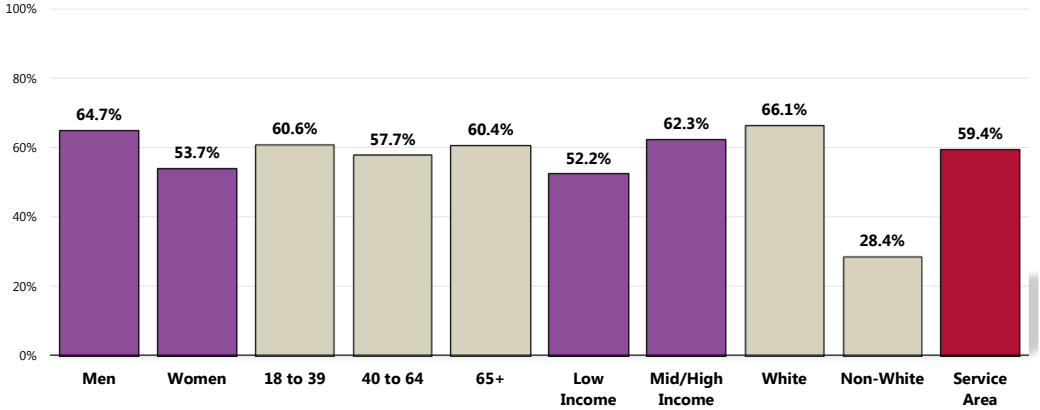
Notes:
- Asked of all respondents.
- In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.

Reports of firearms in or around the home are more prevalent among the following respondent groups:

- Men.
- White respondents.

Have a Firearm Kept in or Around the House

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 57]

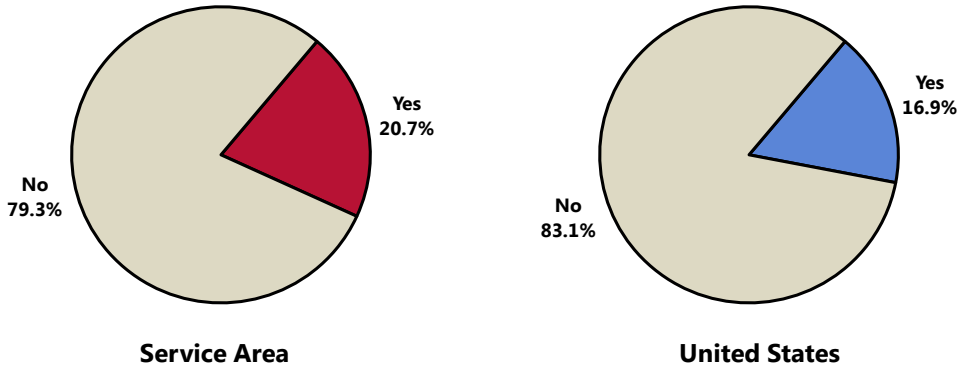
Notes:
- Asked of all respondents.
- In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.
- Hispanics can be of any race; "White" reflects non-Hispanic White respondents.
- Income categories reflect 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.

Among Service Area households with firearms, 20.7% report that there is at least one weapon that is kept unlocked and loaded.

- Statistically similar to that found nationally.

Household Has An Unlocked, Loaded Firearm

(Among Respondents Reporting a Firearm in or Around the Home)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 155]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents with a firearm in or around the home.
- In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.

Intentional Injury (Violence)

Age-Adjusted Homicide Deaths

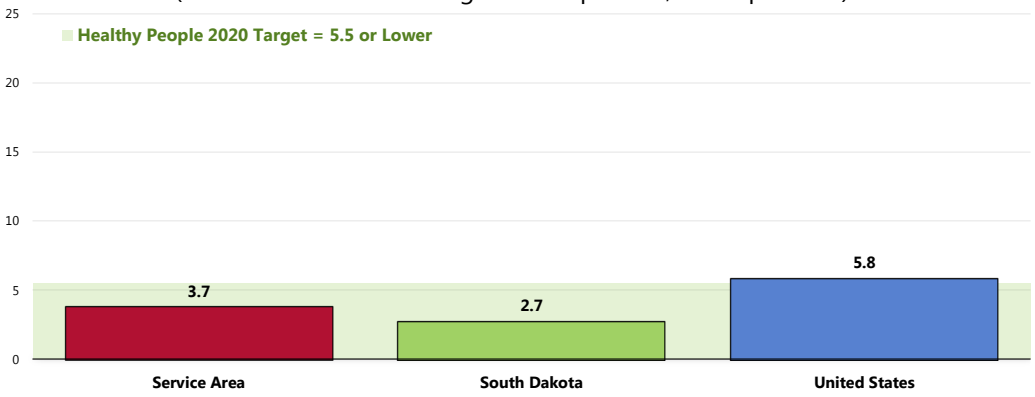
RELATED ISSUE:
See also *Suicide* in the **Mental Health & Mental Disorders** section of this report.

Between 2001 and 2010, there was an annual average age-adjusted homicide rate of 3.7 deaths per 100,000 population in the Service Area.

- Less favorable than the rate found statewide.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target of 5.5 or lower.

Homicide: Age-Adjusted Mortality

(2001-2010 Annual Average Deaths per 100,000 Population)



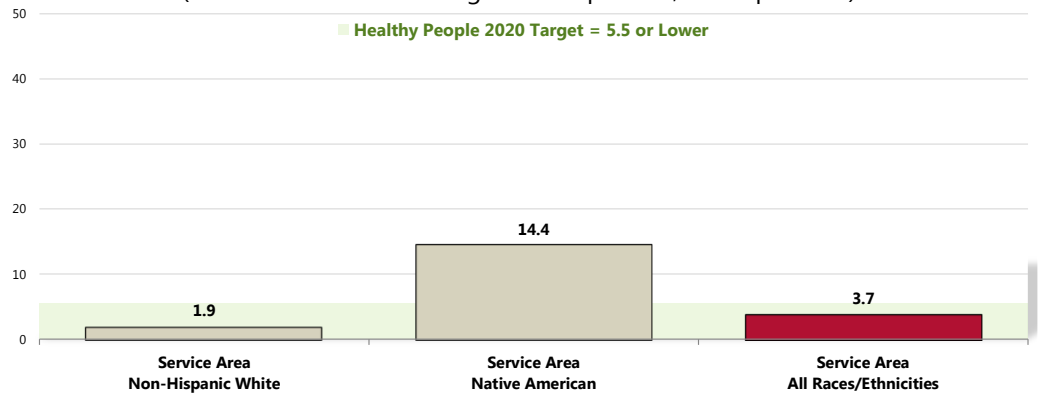
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IPV-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 U.S. Standard Population.

- The homicide rate among Whites is a fraction of that reported in the Native American population.

Homicide: Age-Adjusted Mortality by Race

(2001-2010 Annual Average Deaths per 100,000 Population)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IPV-29]

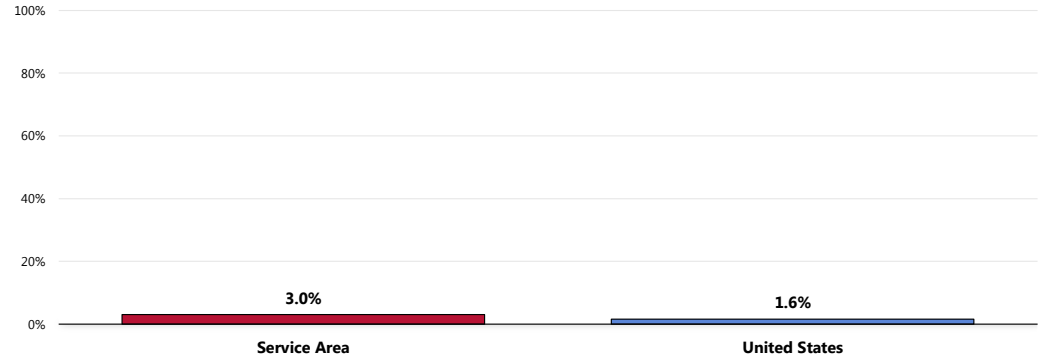
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.

Self-Reported Violence

A total of 3.0% of Service Area adults acknowledge being the victim of a violent crime in the past five years.

- Statistically similar to national findings.

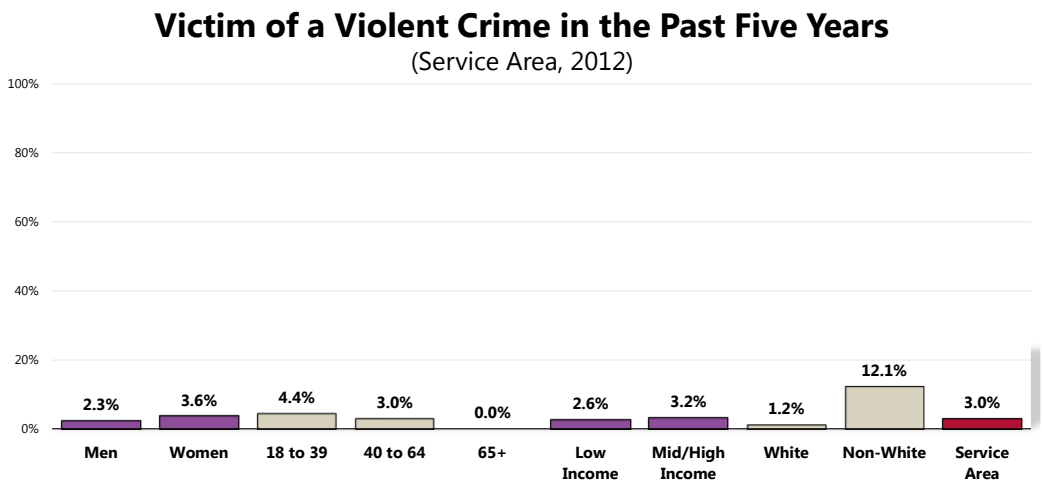
Victim of a Violent Crime in the Past Five Years



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 54]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Reports of violence are statistically high among Non-White residents.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 54]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "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.

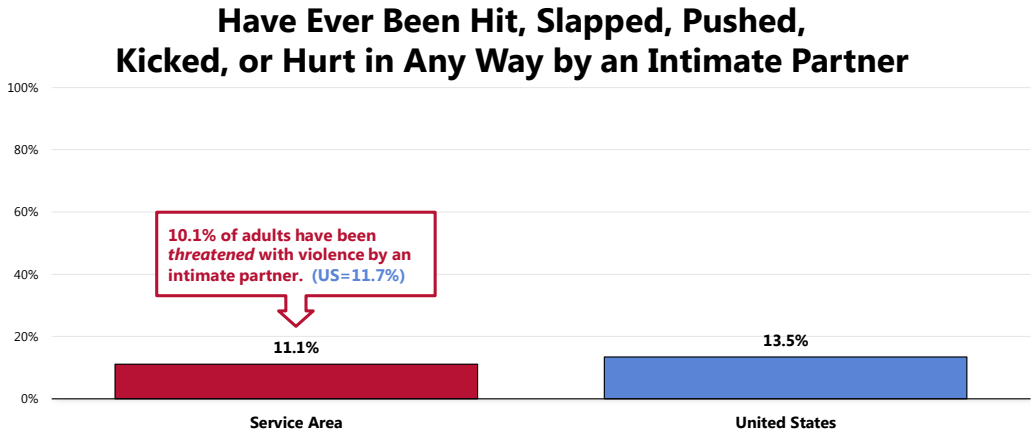
Self-Reported Family Violence

A total of 10.1% of Service Area adults report that they have ever been threatened with physical violence by an intimate partner.

- Similar to that reported nationally.

A total of 11.1% of respondents acknowledge that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.

- Similar to national findings.



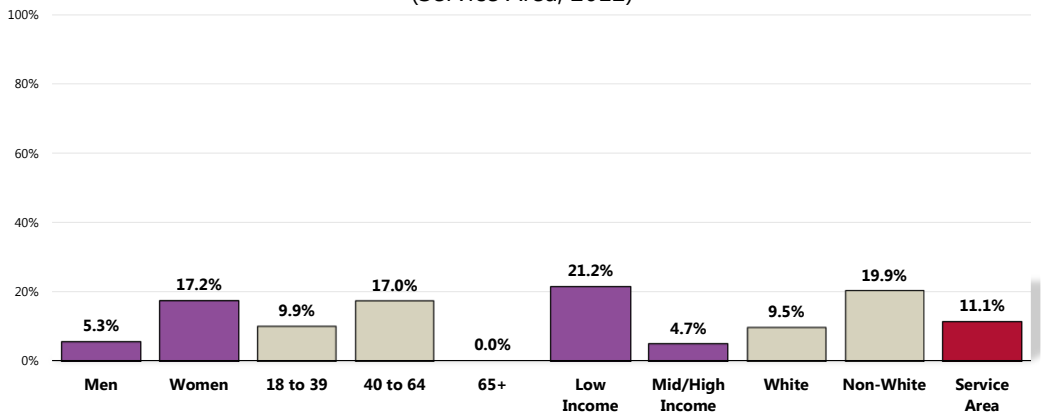
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 55-56]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Reports of domestic violence are also notably higher among:

- Women.
- Adults between the ages of 40 and 64.
- Those with lower incomes.

Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 56]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.

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. However, almost 25% of Americans with diabetes mellitus are undiagnosed, and another 57 million Americans have blood glucose levels that greatly increase their risk of developing diabetes mellitus in the next several years. Few people receive effective preventative care, which makes diabetes mellitus an immense and complex public health challenge.

Diabetes mellitus affects an estimated 23.6 million people in the United States and is the 7th leading cause of death. 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.

In addition to these human costs, the estimated total financial cost of diabetes mellitus in the US in 2007 was $174 billion, which includes the costs of medical care, disability, and premature death.

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)

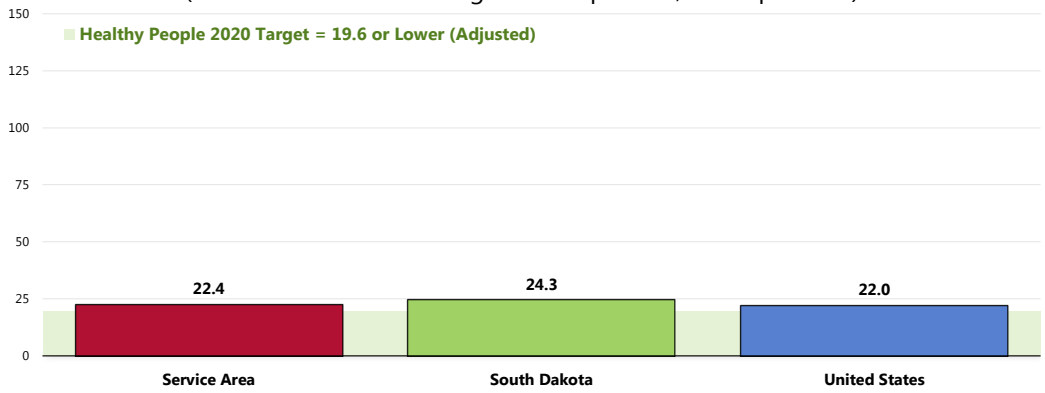
Age-Adjusted Diabetes Deaths

Between 2006 and 2010, the Service Area experienced an annual average age-adjusted diabetes mortality rate of 22.4 deaths per 100,000 population.

- More favorable than that found statewide.
- Comparable to the national rate.
- Fails to satisfy the Healthy People 2020 target (19.6 or lower).

Diabetes: Age-Adjusted Mortality

(2006-2010 Annual Average Deaths per 100,000 Population)



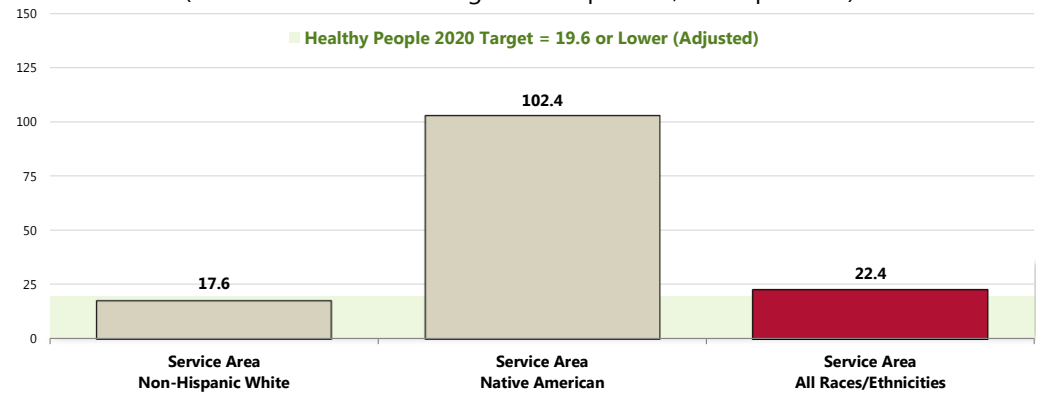
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [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 U.S. Standard Population.
- The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

The diabetes mortality rate in the Service Area is nearly six times as high among Native Americans as among Whites.

Diabetes: Age-Adjusted Mortality by Race

(2006-2010 Annual Average Deaths per 100,000 Population)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective D-3]

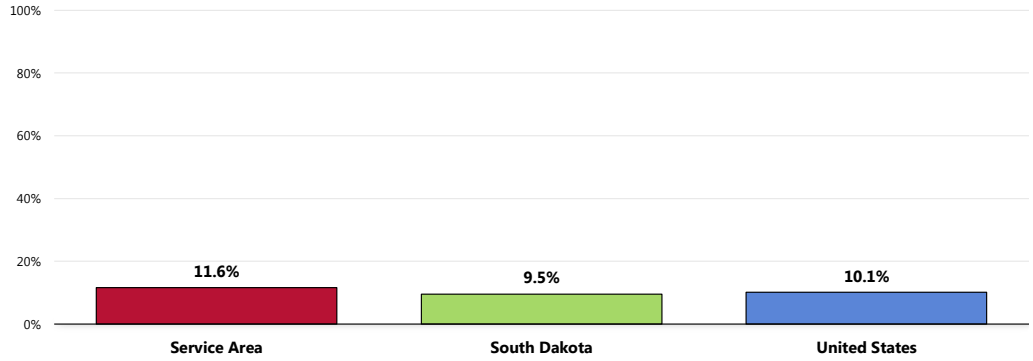
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
- The Healthy People 2020 target for Diabetes is adjusted to account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

Prevalence of Diabetes

A total of 11.6% of Service Area adults report having been diagnosed with diabetes.

- Similar to the proportion statewide.
- Similar to the national proportion.

Prevalence of Diabetes



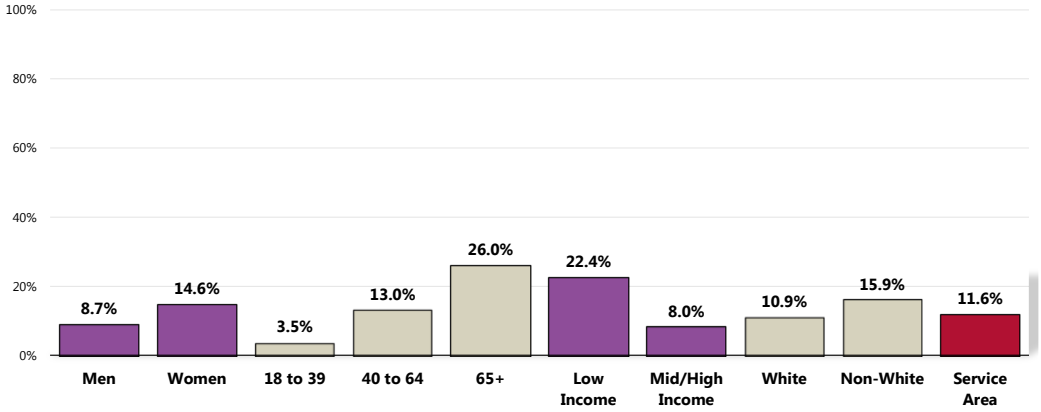
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 44]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.

Notes:
- Asked of all respondents.
- Local and national data exclude gestation diabetes (occurring only during pregnancy).

- A higher prevalence of diabetes is reported among women in the Service Area.
- Note also the positive correlation between diabetes and age (with 26.0% of seniors with diabetes).
- The prevalence of diabetes is statistically high among residents in low-income households as well.

Prevalence of Diabetes

(Service Area, 2012)



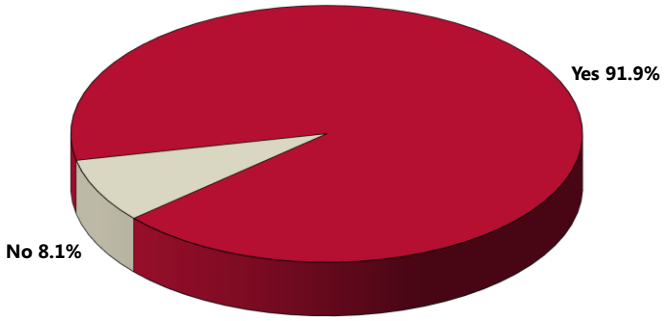
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 44]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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 gestation diabetes (occurring only during pregnancy).

Among adults with diabetes, most (91.9%) are currently taking insulin or some type of medication to manage their condition.

Taking Insulin or Other Medication for Diabetes

(Among Service Area Diabetics)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 45]
Notes: • Asked of all diabetic respondents.

Alzheimer's Disease

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.

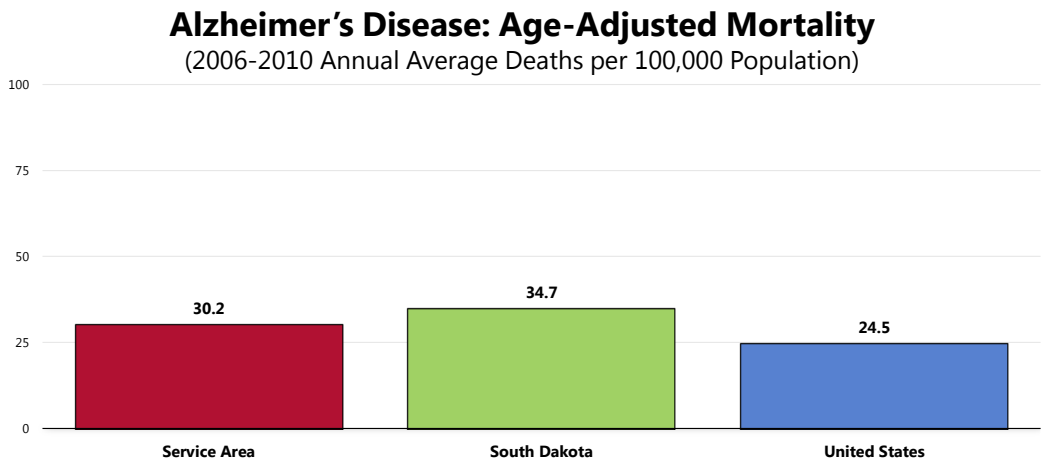
Alzheimer's disease is the 6th leading cause of death among adults age 18 years and older. Estimates vary, but experts suggest that up to 5.1 million Americans age 65 years and older have Alzheimer's disease. These numbers are predicted to more than double by 2050 unless more effective ways to treat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

– Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Alzheimer's Disease Deaths

Between 2006 and 2010, there was an annual average age-adjusted Alzheimer's disease mortality rate of 30.2 deaths per 100,000 population in the Service Area.

- More favorable than the statewide rate.
- Less favorable than the national rate.



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
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 U.S. Standard Population.

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.

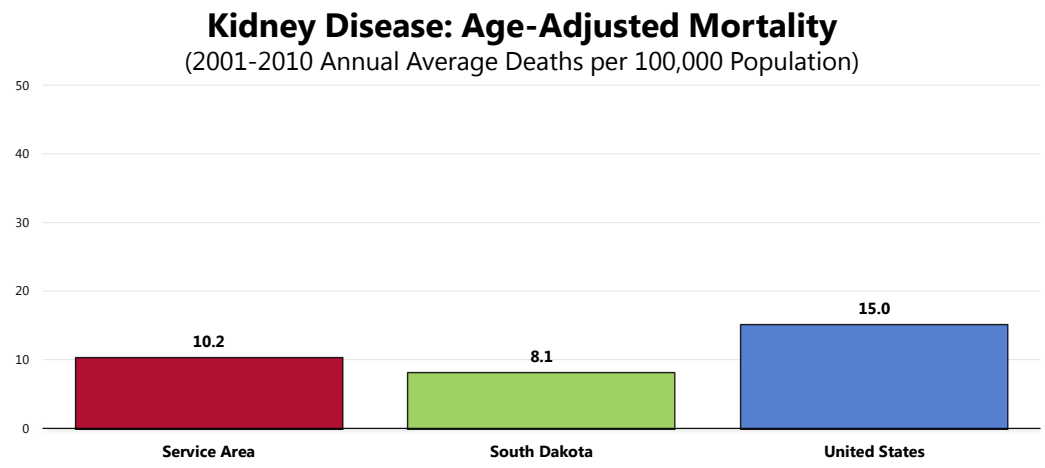
Diabetes is the most common cause of kidney failure. The results of the Diabetes Prevention Program (DPP) funded by the national Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) show that moderate exercise, a healthier diet, and weight reduction can prevent development of type 2 diabetes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

– Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Kidney Disease Deaths

Between 2001 and 2010 there was an annual average age-adjusted kidney disease mortality rate of 10.2 deaths per 100,000 population in the Service Area.

- Higher than the rate found statewide.
- Lower than the national rate.

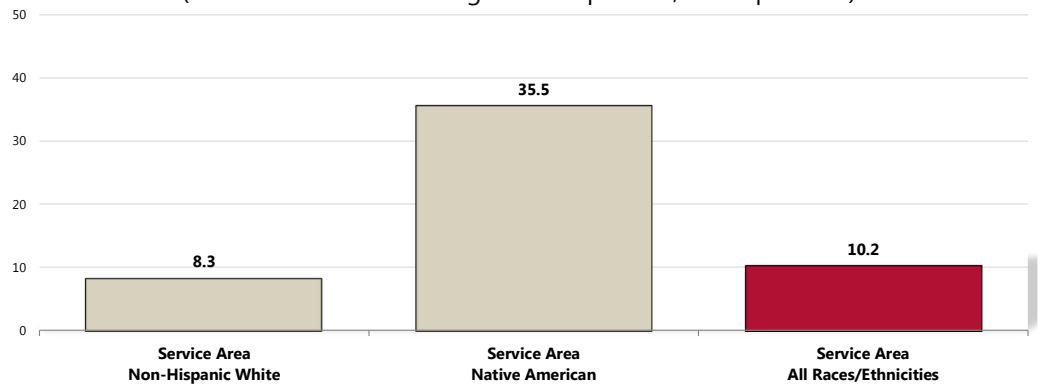


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
• Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.

- The kidney disease mortality rate in the Service Area is unfavorably high in the Native American population.

Kidney Disease: Age-Adjusted Mortality by Race

(2001-2010 Annual Average Deaths per 100,000 Population)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.

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 U.S. Standard Population.

Potentially Disabling 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.

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

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)

Arthritis, Osteoporosis, & Chronic Pain

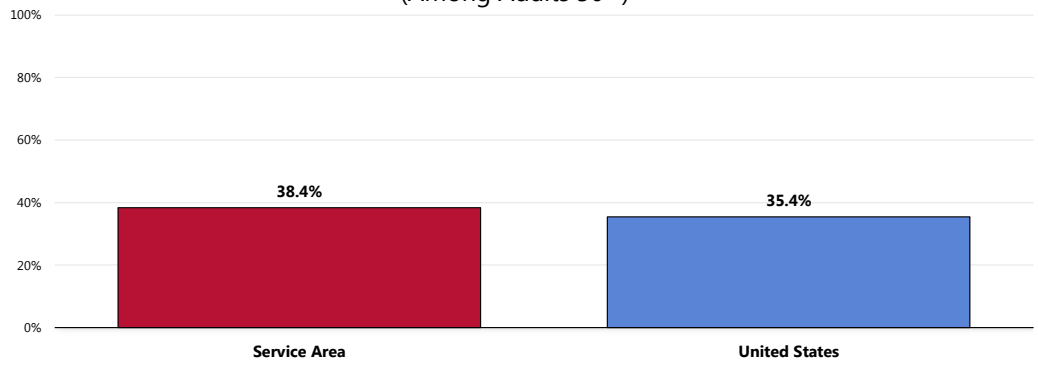
Prevalence of Arthritis/Rheumatism

A total of 38.4% of Service Area adults age 50 and older report suffering from arthritis or rheumatism.

- Similar to that found nationwide.

Prevalence of Arthritis/Rheumatism

(Among Adults 50+)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 158]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Reflects respondents 50 and older.

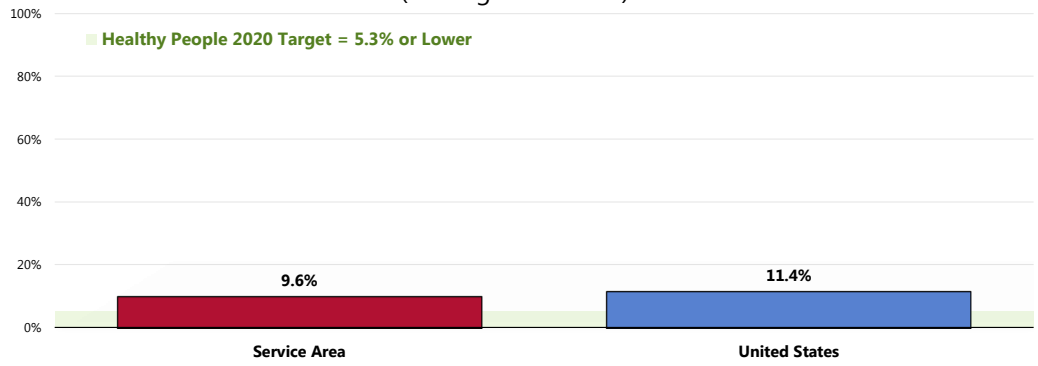
Prevalence of Osteoporosis

A total of 9.6% of survey respondents age 50 and older have osteoporosis.

- Similar to that found nationwide.
- Fails to satisfy the Healthy People 2020 target of 5.3% or lower.

Prevalence of Osteoporosis

(Among Adults 50+)



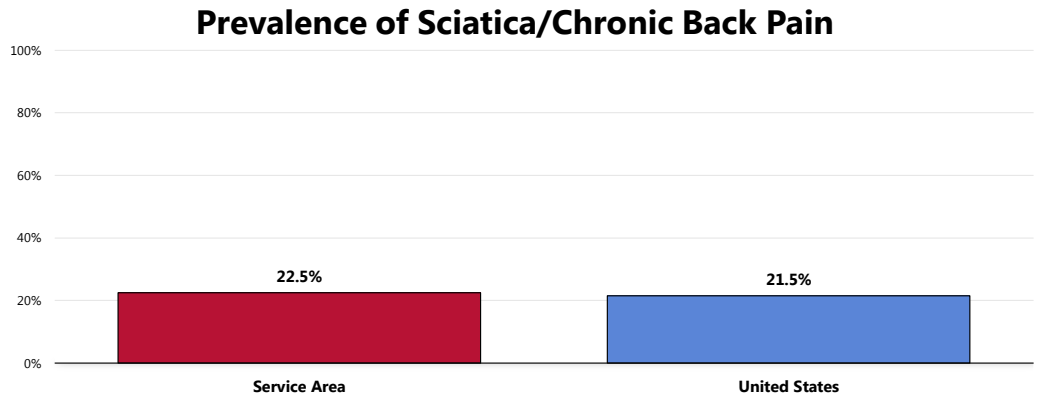
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 159]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AOCBC-10]

Notes:
- Reflects respondents 50 and older.

Prevalence of Sciatica/Chronic Back Pain

A total of 22.5% of survey respondents suffer from chronic back pain or sciatica.

- Similar to the national figure.



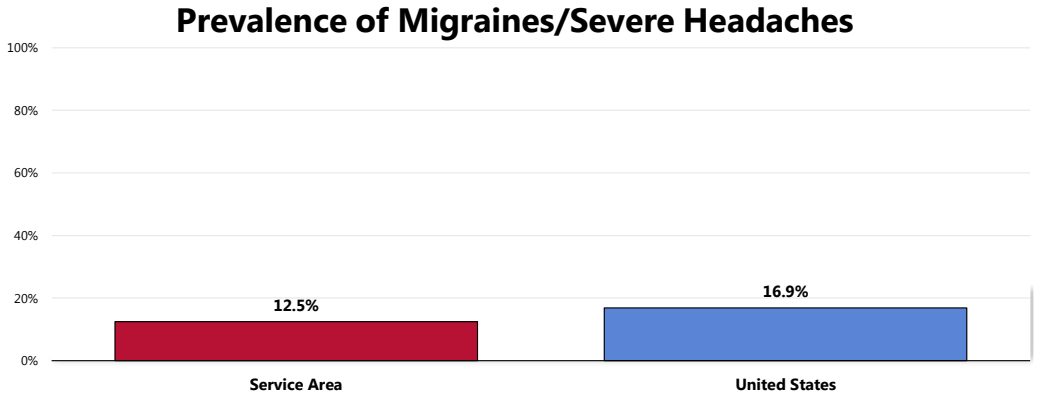
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 29]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Prevalence of Migraines/Severe Headaches

A total of 12.5% of survey respondents report suffering from migraines or severe headaches.

- Better than that found nationwide.



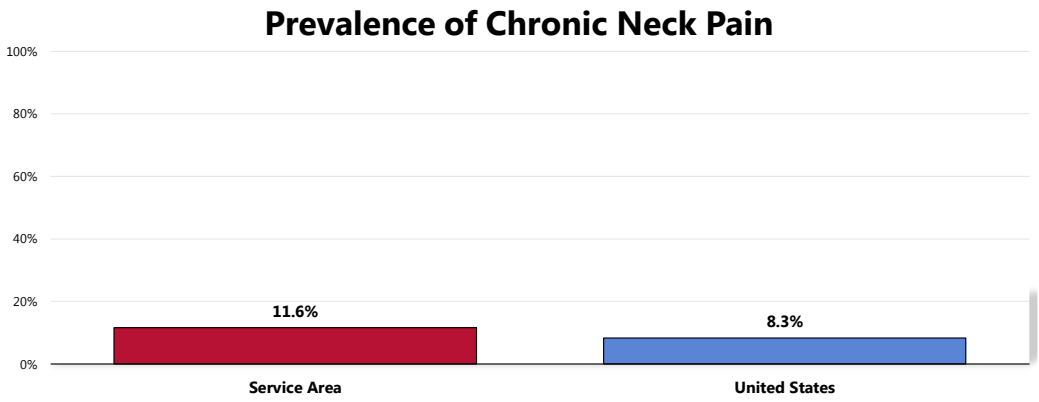
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 36]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Prevalence of Chronic Neck Pain

A total of 11.6% of survey respondents currently suffer from chronic neck pain.

- Higher than that found nationwide.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 37]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Vision & Hearing Impairment

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)

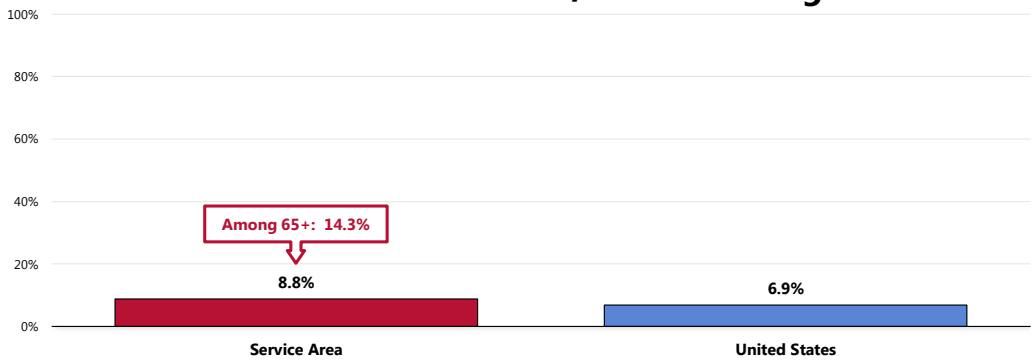
Vision Trouble

RELATED ISSUE: See also *Vision Care* in the **Access to Health Services** section of this report.

A total of 8.8% of Service Area adults are blind, or have trouble seeing even when wearing corrective lenses.

- Comparable to that found nationwide.
- Among Service Area adults age 65 and older, 14.3% have vision trouble.

Prevalence of Blindness/Trouble Seeing



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 26]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Hearing Trouble

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.

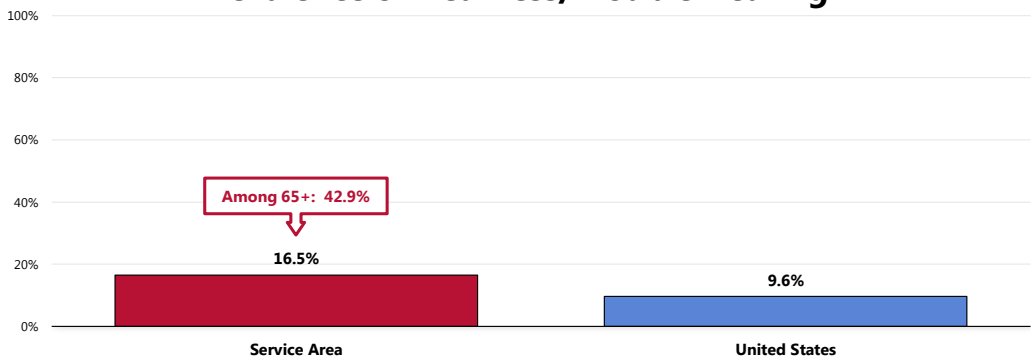
As the nation's population ages and survival rates for medically fragile infants and for people with severe injuries and acquired diseases improve, the prevalence of sensory and communication disorders is expected to rise.

– Healthy People 2020 (www.healthypeople.gov)

In all, 16.5% of Service Area adults report being deaf or having difficulty hearing.

- Higher than that found nationwide.
- Among Service Area seniors, 42.9% have partial or complete hearing loss.

Prevalence of Deafness/Trouble Hearing



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 27]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

INFECTIOUS DISEASE

Influenza & Pneumonia Vaccination

Acute respiratory infections, including pneumonia and influenza, are the 8th leading cause of death in the nation, accounting for 56,000 deaths annually. Pneumonia mortality in children fell by 97% in the last century, but respiratory infectious diseases continue to be leading causes of pediatric hospitalization and outpatient visits in the US. On average, influenza leads to more than 200,000 hospitalizations and 36,000 deaths each year. The 2009 H1N1 influenza pandemic caused an estimated 270,000 hospitalizations and 12,270 deaths (1,270 of which were of people younger than age 18) between April 2009 and March 2010.

– Healthy People 2020 (www.healthypeople.gov)

Flu Vaccinations

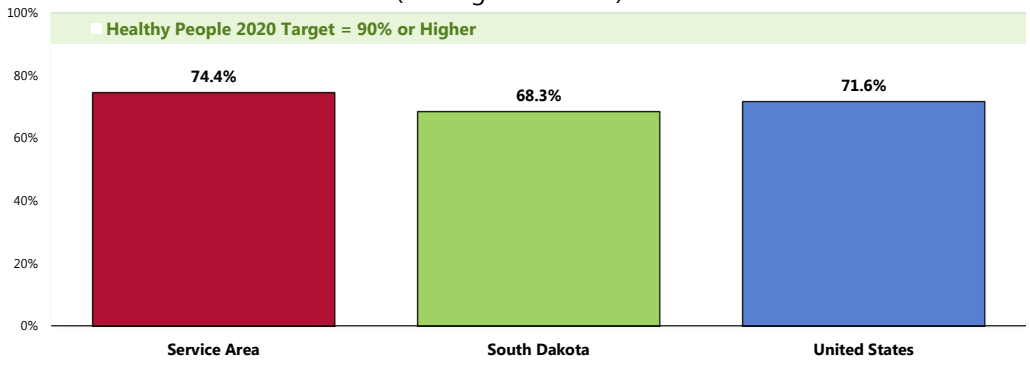
FluMist® is a vaccine that is sprayed into the nose to help protect against influenza; it is an alternative to traditional flu shots.

Among Service Area seniors, 74.4% received a flu shot (or FluMist®) within the past year.

- Statistically comparable to the South Dakota finding.
- Comparable to the national finding.
- Fails to satisfy the Healthy People 2020 target (90% or higher).

Have Had a Flu Vaccination in the Past Year

(Among Adults 65+)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 160]
- 2011 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): 2011 South Dakota data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IID-12.7]

Notes:
- Reflects respondents 65 and older.
- Includes FluMist as a form of vaccination.

High-Risk Adults

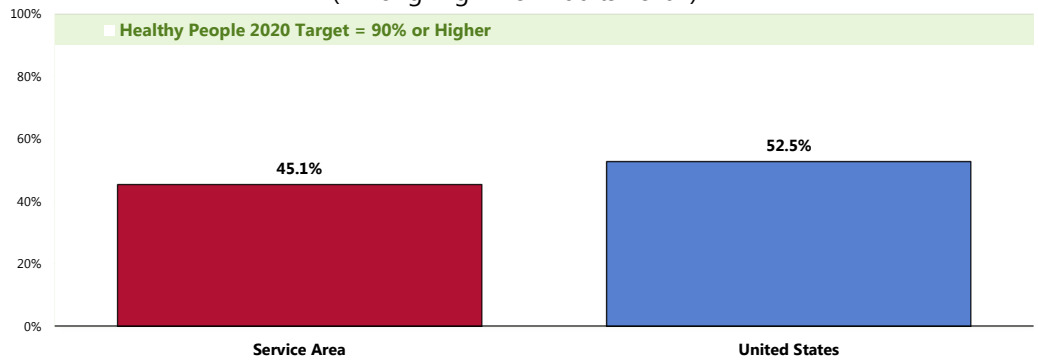
"High-risk" includes adults who report having been diagnosed with heart disease, diabetes or respiratory disease.

A total of 45.1% of high-risk adults age 18 to 64 received a flu vaccination (flu shot or FluMist®) within the past year.

- Similar to national findings.
- Fails to satisfy the Healthy People 2020 target (90% or higher).

Have Had a Flu Vaccination in the Past Year

(Among High-Risk Adults 18-64)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 161]
- 2011 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 IID-12.6]

Notes:
- Reflects high-risk respondents age 18-64.
- Includes FluMist as a form of vaccination.

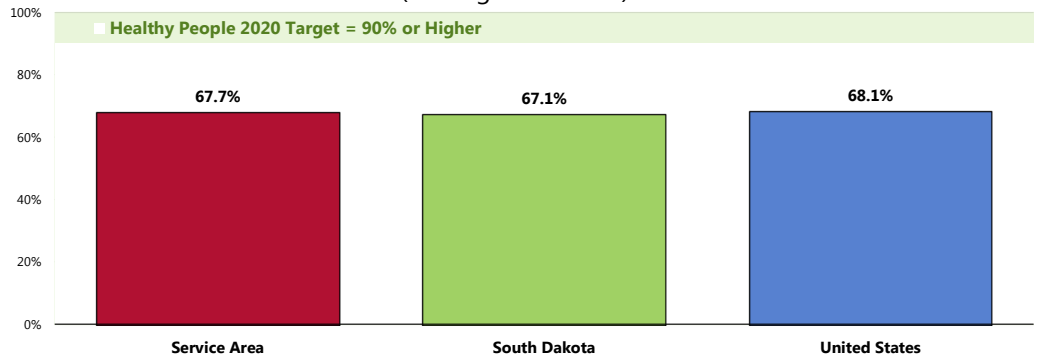
Pneumonia Vaccination

Among adults age 65 and older, 67.7% have received a pneumonia vaccination at some point in their lives.

- Nearly identical to the South Dakota finding.
- Similar to the national finding.
- Fails to satisfy the Healthy People 2020 target of 90% or higher.

Have Ever Had a Pneumonia Vaccine

(Among Adults 65+)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 162]
- 2011 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): 2011 South Dakota data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IID-13.1]

Notes:
- Reflects respondents 65 and older.

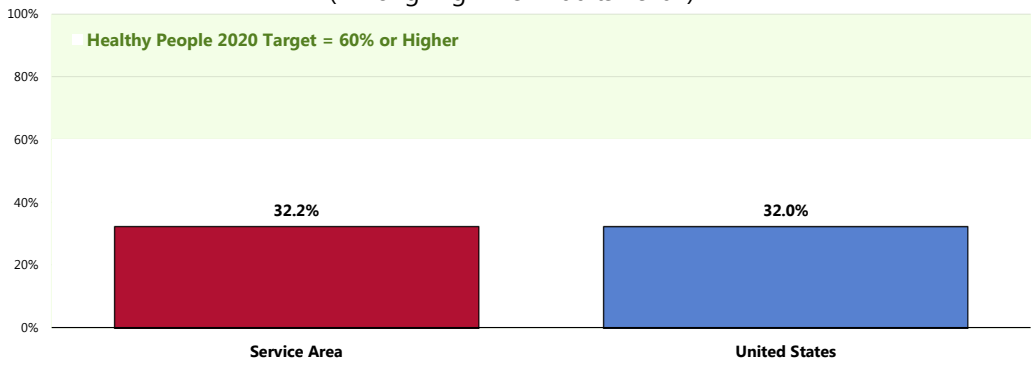
"High-risk" includes adults who report having been diagnosed with heart disease, diabetes or respiratory disease.

A total of 32.2% of high-risk adults age 18 to 64 have ever received a pneumonia vaccination.

- Almost identical to national findings.
- Fails to satisfy the Healthy People 2020 target (60% or higher).

Have Ever Had a Pneumonia Vaccine

(Among High-Risk Adults 18-64)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 163]
- 2011 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 IID-13.2]

Notes:
- Asked of all high-risk respondents under 65.
- "High-Risk" includes adults age 18 to 64 who have been diagnosed with heart disease, diabetes or respiratory disease.

Tuberculosis

Viral hepatitis and tuberculosis (TB) can be prevented, yet healthcare systems often do not make the best use of their available resources to support prevention efforts. Because the US healthcare system focuses on treatment of illnesses, rather than health promotion, patients do not always receive information about prevention and healthy lifestyles. This includes advancing effective and evidence-based viral hepatitis and TB prevention priorities and interventions.

– Healthy People 2020 (www.healthypeople.gov)

A total of nine cases of tuberculosis were reported in the Service Area between 2009 and 2011: one in Butte County and four each in Shannon and Pennington counties.

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)

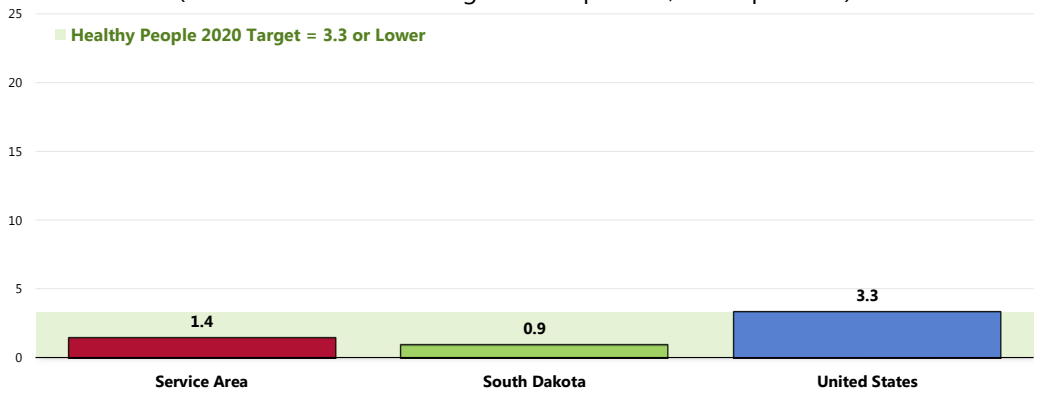
Age-Adjusted HIV/AIDS Deaths

Between 2001 and 2010, the Service Area reported an annual average age-adjusted HIV/AIDS mortality rate of 1.4 deaths per 100,000 population.

- Higher than found statewide.
- Lower than the rate reported nationally.
- Satisfies the Healthy People 2020 target (3.3 or lower).

HIV/AIDS: Age-Adjusted Mortality

(2001-2010 Annual Average Deaths per 100,000 Population)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HIV-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 U.S. Standard Population.

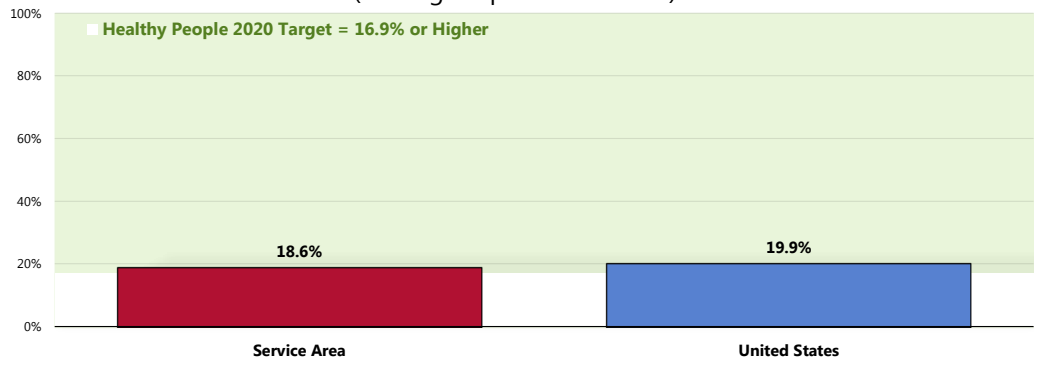
HIV Testing

Among Service Area adults age 18-44, 18.6% report that they have been tested for human immunodeficiency virus (HIV) in the past year.

- Comparable to the proportion found nationwide.
- Comparable to the Healthy People 2020 target of 16.9% or higher.

Tested for HIV in the Past Year

(Among Respondents 18-44)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 166]
- 2011 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 HIV-14.1]

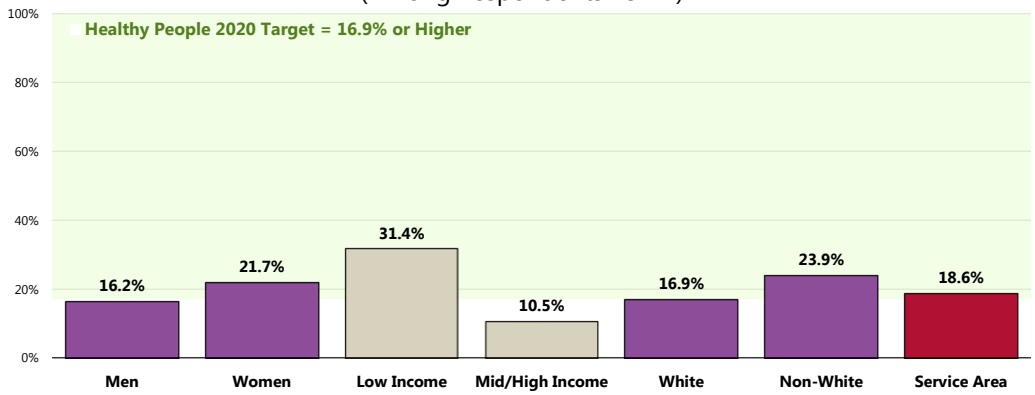
Notes:
- Reflects respondents age 18 to 44.
- Note that the Healthy People 2020 objective is for ages 15-44.

By demographic characteristics:

- Persons living in the lower income breakout more often report having been tested for HIV.

Tested for HIV in the Past Year

(Among Respondents 18-44)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 166]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HIV-14.1]

Notes:
- Reflects respondents age 18 to 44.
- Note that the Healthy People 2020 objective is for ages 15-44.
- Hispanics can be of any race; "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.

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.

The Centers for Disease Control and Prevention (CDC) estimates that there are approximately 19 million new STD infections each year—almost half of them among young people ages 15 to 24. 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. CDC estimates that undiagnosed and untreated STDs cause at least 24,000 women in the United States each year to become infertile. 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:

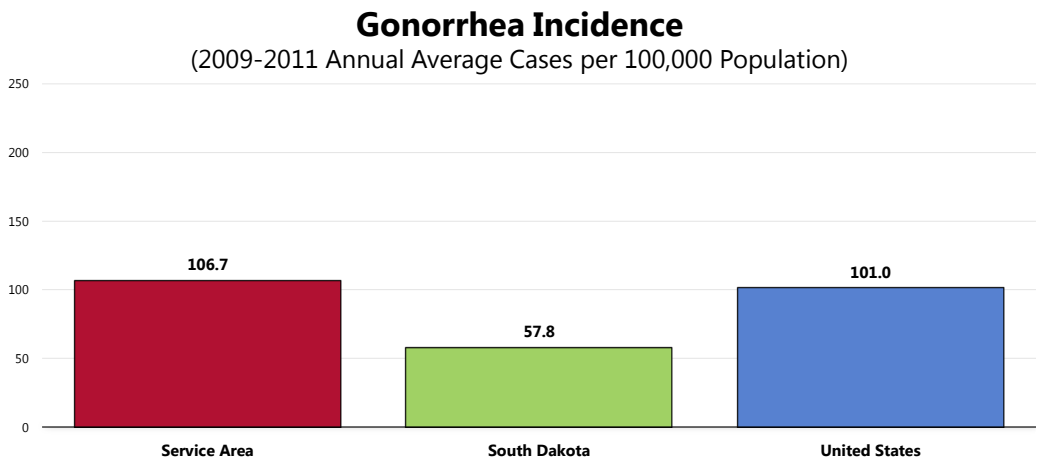
- **Racial and ethnic disparities**. Certain racial and ethnic groups (mainly African American, Hispanic, and American Indian/Alaska Native populations) have high rates of STDs, compared with rates for whites.
- **Poverty and marginalization**. STDs disproportionately affect disenfranchised people and people in social networks where high-risk sexual behavior is common, and access to care or health-seeking behavior is compromised.
- **Access to health care**. Access to high-quality health care is essential for early detection, treatment, and behavior-change counseling for STDs. Groups with the highest rates of STDs are often the same groups for whom access to or use of health services is most limited.
- **Substance abuse**. Many studies document the association of substance abuse with STDs. The introduction of new illicit substances into communities often can alter sexual behavior drastically in high-risk sexual networks, leading to the epidemic spread of STDs.
- **Sexuality and secrecy**. Perhaps the most important social factors contributing to the spread of STDs in the United States are the stigma associated with STDs and the general discomfort of discussing intimate aspects of life, especially those related to sex. These social factors separate the United States from industrialized countries with low rates of STDs.
- **Sexual networks**. Sexual networks refer to groups of people who can be considered "linked" by sequential or concurrent sexual partners. A person may have only 1 sex partner, but if that partner is a member of a risky sexual network, that person is at higher risk for STDs than an individual from a nonrisky network.

– Healthy People 2020 (www.healthypeople.gov)

Gonorrhea

Between 2009 and 2011, the annual average gonorrhea incidence rate was 106.7 cases per 100,000 population in the Service Area.

- Higher than the South Dakota incidence rate.
- Higher than the national incidence rate.

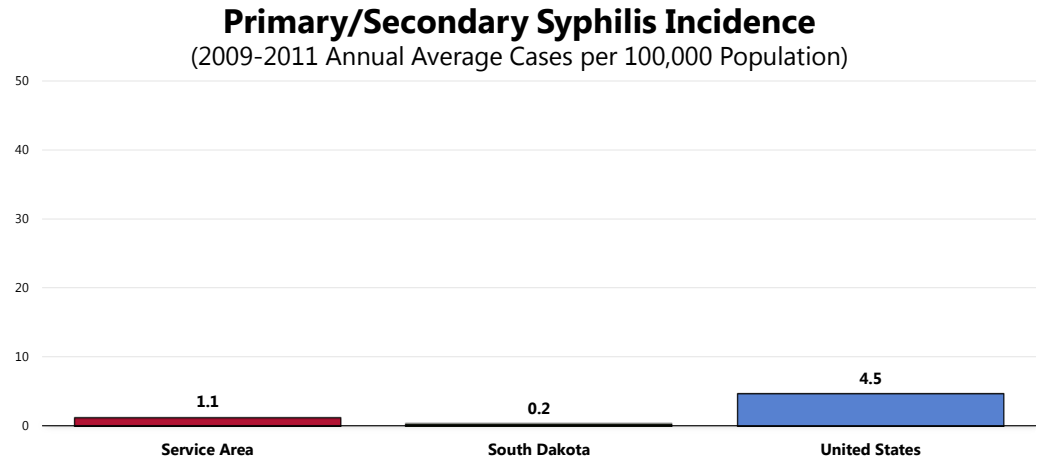


Sources: • South Dakota Department of Health.
• Centers for Disease Control and Prevention, National Center for Health Statistics.
Notes: • Rates are annual average new cases per 100,000 population.

Syphilis

Between 2009 and 2011, the Service Area reported an annual average primary/ secondary syphilis incidence rate of 1.1 cases per 100,000 population.

- Higher than the South Dakota incidence rate.
- Much lower than the national incidence rate.

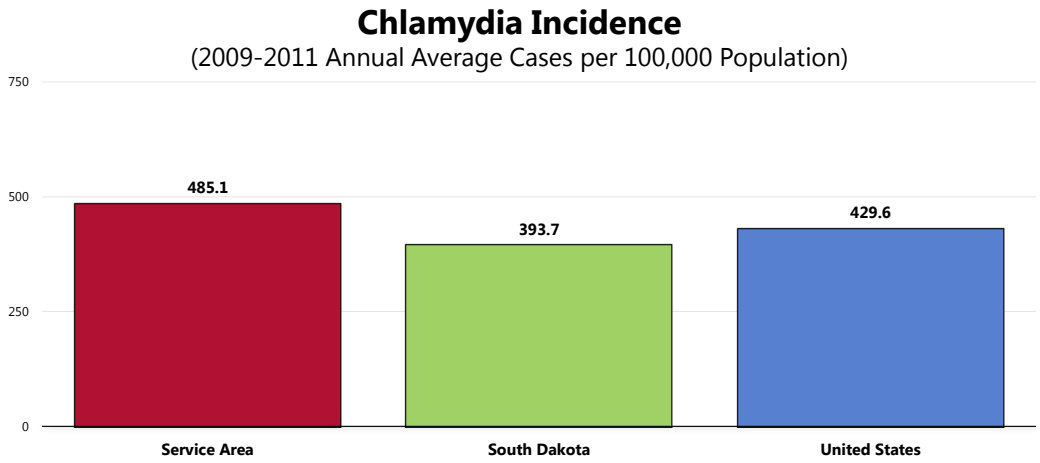


Sources: • South Dakota Department of Health.
• Centers for Disease Control and Prevention, National Center for Health Statistics.
Notes: • Rates are annual average new cases per 100,000 population.

Chlamydia

Between 2009 and 2011, the annual average chlamydia incidence rate was 485.1 cases per 100,000 population in the Service Area.

- Higher than the South Dakota incidence rate.
- Higher than the national incidence rate.

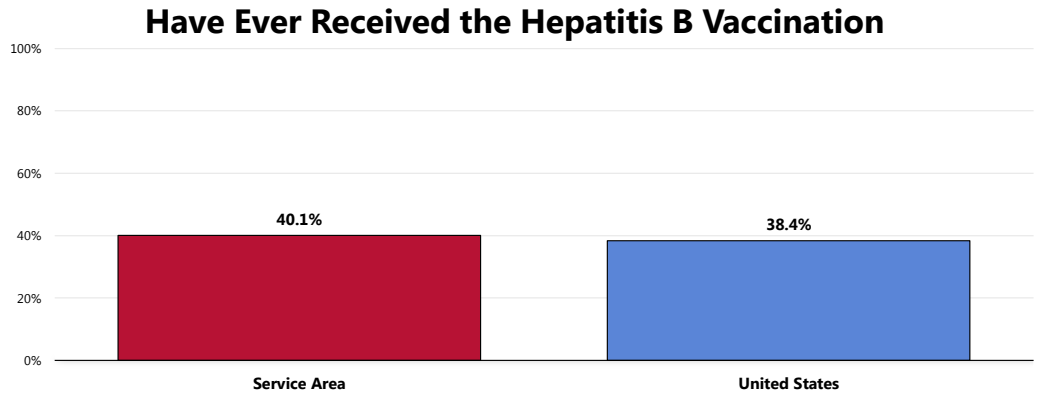


Sources: • South Dakota Department of Health.
• Centers for Disease Control and Prevention, National Center for Health Statistics.
Notes: • Rates are annual average new cases per 100,000 population.

Hepatitis B Vaccination

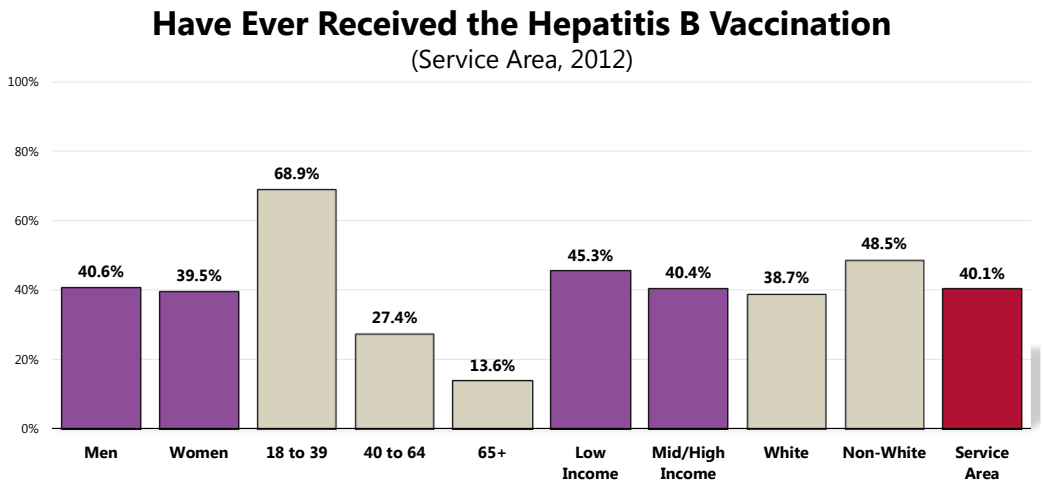
Based on survey data, 40.1% of residents report having received the hepatitis B vaccine.

- Similar to what is reported nationwide.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 77]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Note the negative correlation between age and hepatitis B vaccination.

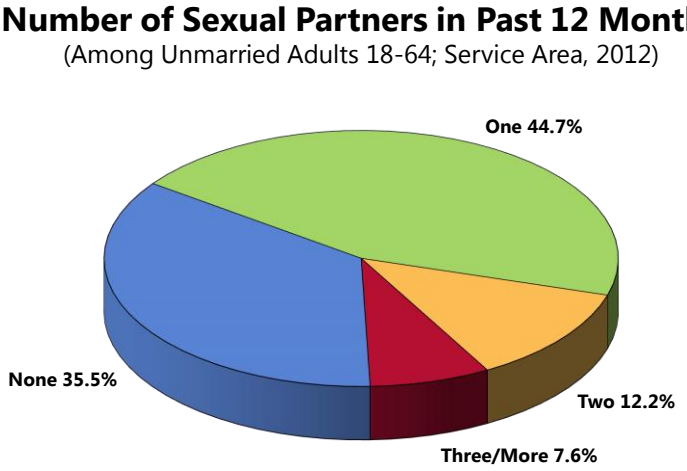


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 77]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "White" reflects non-Hispanic White respondents.
• Income categories reflect respondent's household income as a ratio to the federal poverty 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.

Safe Sexual Practices

Sexual Partners

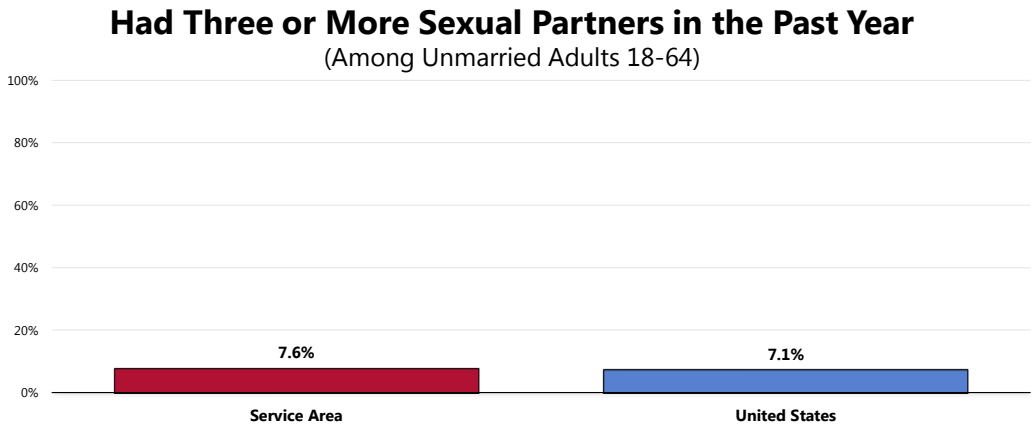
Among unmarried Service Area adults under 65, the vast majority cites having one (44.7%) or no (35.5%) sexual partners in the past 12 months.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 97]
Notes: • Asked of all unmarried respondents under the age of 65.

However, 7.6% report three or more sexual partners in the past year.

- Comparable to that reported nationally.



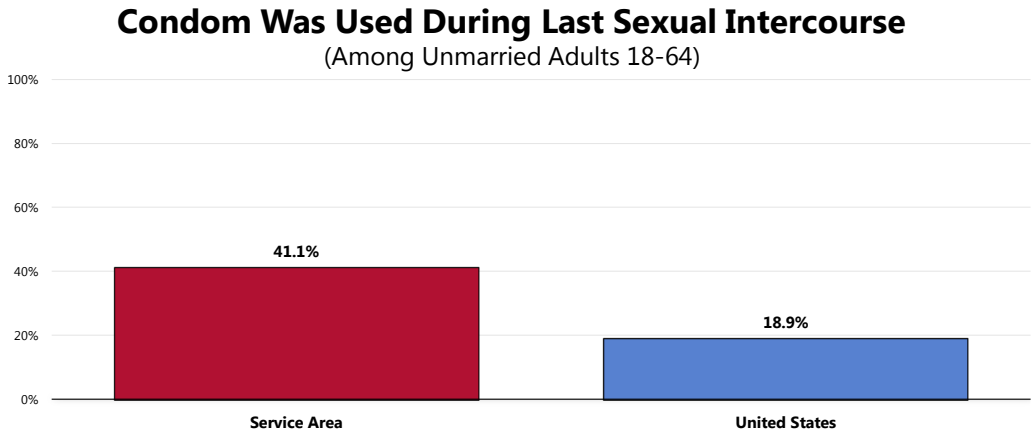
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 97]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all unmarried respondents under the age of 65.

Condom Use

Among Service Area adults who are under age 65 and unmarried, 41.1% report that a condom was used during their last sexual intercourse.

- Higher than the national prevalence.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 98]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all unmarried respondents under the age of 65.

BIRTHS

Prenatal Care

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)

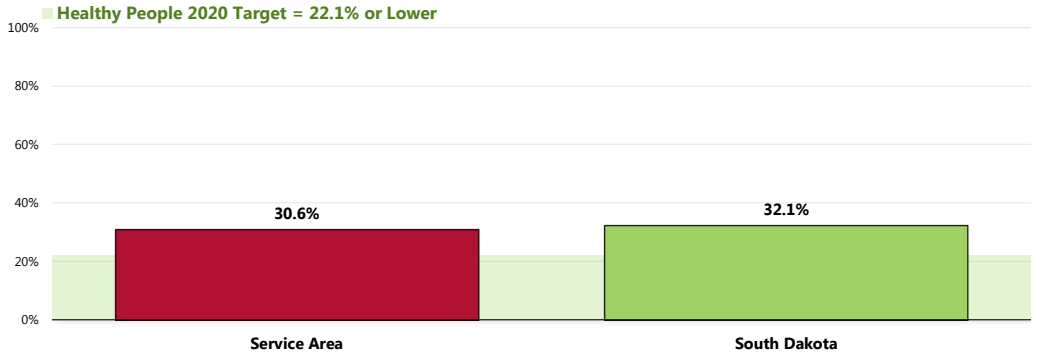
Early and continuous prenatal care is the best assurance of infant health.

Between 2009 and 2011, 30.6% of all Service Area births did not receive prenatal care in the first trimester of pregnancy.

- Close to the South Dakota proportion.
- Fails to satisfy the Healthy People 2020 target (22.1% or lower).

Lack of Prenatal Care in the First Trimester

(Percentage of Live Births, 2009-2011)



Sources:
- South Dakota Department of Health.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-10.1]

Note:
- Numbers are a percentage of all live births within each population.

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.

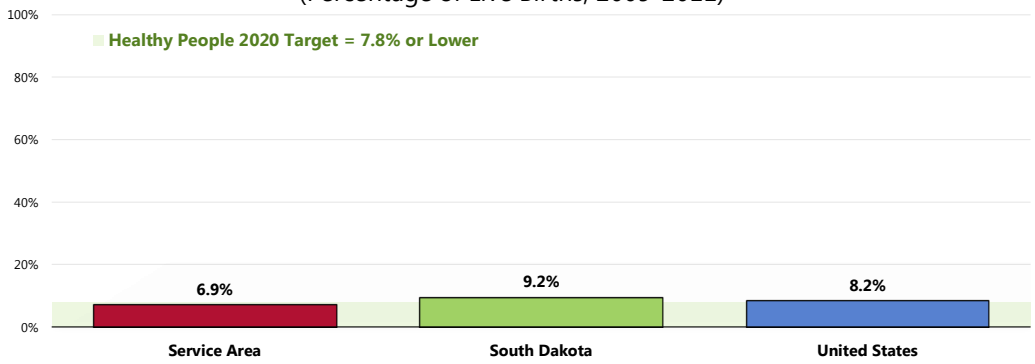
Largely a result of receiving poor or inadequate prenatal care, many low-weight births and the consequent health problems are preventable.

A total of 6.9% of 2009-2011 Service Area births were low-weight.

- Below the South Dakota proportion.
- Below the national proportion.
- Satisfies the Healthy People 2020 target (7.8% or lower).

Low-Weight Births

(Percentage of Live Births, 2009-2011)



Sources:
- South Dakota Department of Health.
- Centers for Disease Control and Prevention, National Vital Statistics System.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-8.1]

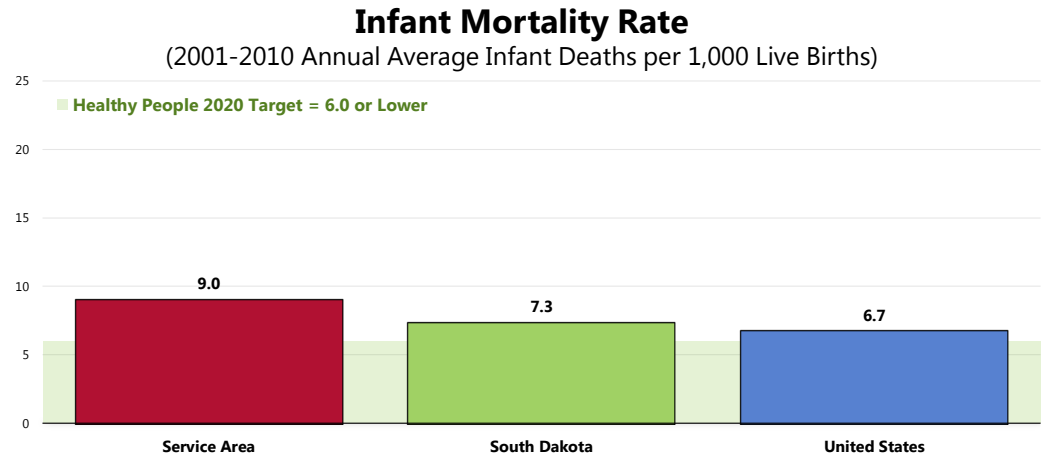
Note:
- Numbers are a percentage of all live births within each population.
- Defined as an infant born weighing less than 5.5 pounds (2,500 grams) regardless of gestational age.

Infant Mortality

Infant mortality rates reflect deaths of children less than one year old per 1,000 live births.

Between 2001 and 2010, there was an annual average of 9.0 infant deaths per 1,000 live births.

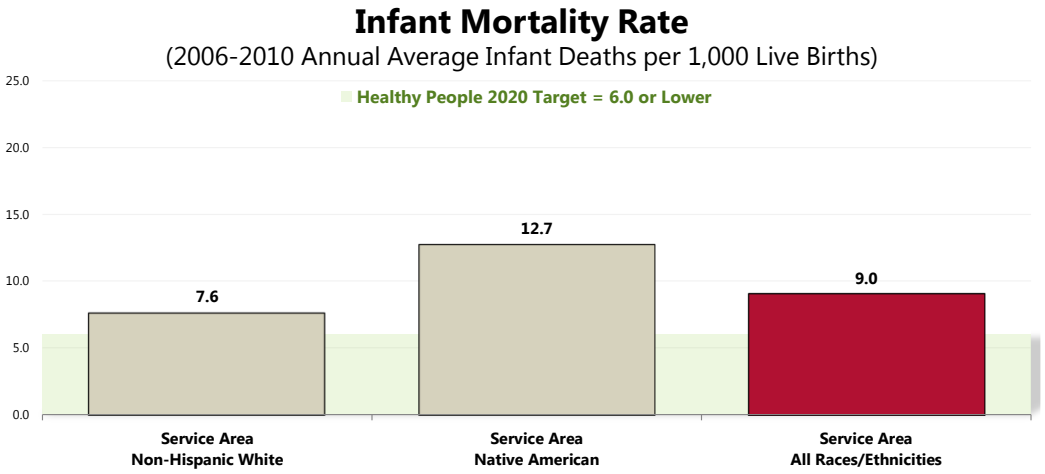
- Less favorable than the South Dakota rate.
- Less favorable than the national rate.
- Fails to satisfy the Healthy People 2020 target of 6.0 per 1,000 live births.



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- 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.

The infant mortality rate is higher among births to Native American mothers.



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- 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.

MODIFIABLE HEALTH RISKS

Actual Causes Of Death

A 1999 study (an update to a landmark 1993 study), estimated that as many as 40% of premature deaths in the United States are attributed to behavioral factors. This study found that behavior patterns represent the single-most prominent domain of influence over health prospects in the United States. The daily choices we make with respect to diet, physical activity, and sex; the substance abuse and addictions to which we fall prey; our approach to safety; and our coping strategies in confronting stress are all important determinants of health.

The most prominent contributors to mortality in the United States in 2000 were tobacco (an estimated 435,000 deaths), diet and activity patterns (400,000), alcohol (85,000), microbial agents (75,000), toxic agents (55,000), motor vehicles (43,000), firearms (29,000), sexual behavior (20,000), and illicit use of drugs (17,000). Socioeconomic status and access to medical care are also important contributors, but difficult to quantify independent of the other factors cited. Because the studies reviewed used different approaches to derive estimates, the stated numbers should be viewed as first approximations.

These analyses show that smoking remains the leading cause of mortality. However, poor diet and physical inactivity may soon overtake tobacco as the leading cause of death. These findings, along with escalating healthcare costs and aging population, argue persuasively that the need to establish a more preventive orientation in the US healthcare and public health systems has become more urgent.

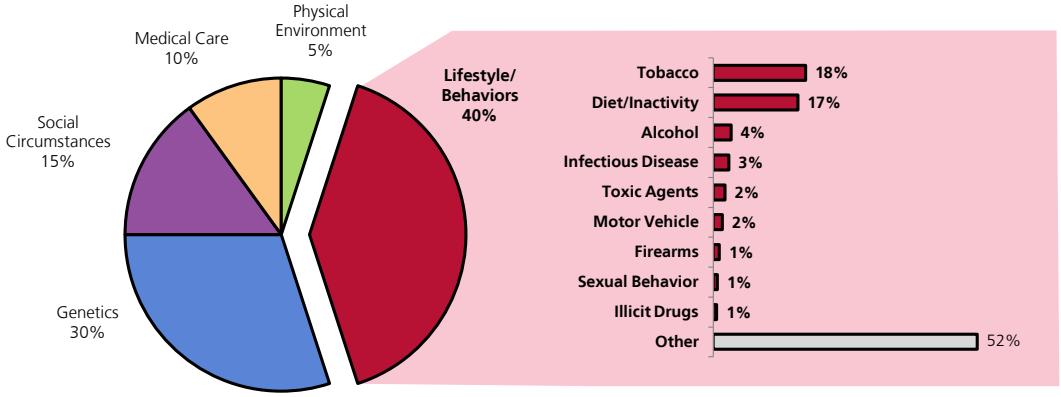
– Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, Phd, MSc; Julie L. Gerberding, MD, MPH. "Actual Causes of Death in the United States." JAMA, 291(2004):1238-1245.

Leading Causes of Death	Underlying Risk Factors (Actual Causes of Death)	
Cardiovascular disease	Tobacco use Elevated serum cholesterol High blood pressure	Obesity Diabetes Sedentary lifestyle
Cancer	Tobacco use Improper diet	Alcohol Occupational/environmental exposures
Cerebrovascular disease	High blood pressure Tobacco use	Elevated serum cholesterol
Accidental injuries	Safety belt noncompliance Alcohol/substance abuse Reckless driving	Occupational hazards Stress/fatigue
Chronic lung disease	Tobacco use	Occupational/environmental exposures

Source: National Center for Health Statistics/US Department of Health and Human Services, Health United States: 1987. DHHS Pub. No. (PHS) 88–1232.

While causes of death are typically described as the diseases or injuries immediately precipitating the end of life, a few important studies have shown that the actual causes of premature death (reflecting underlying risk factors) are often preventable.

Factors Contributing to Premature Deaths in the United States



Sources: "The Case For More Active Policy Attention to Health Promotion"; (McGinnis, Williams-Russo, Knickman) Health Affairs, Vol. 21, No. 2, March/April 2002. "Actual Causes of Death in the United States"; (Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, Phd, MSc; Julie L. Gerberding, MD, MPH) JAMA, 291(2000):1238-1245.

Nutrition

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)

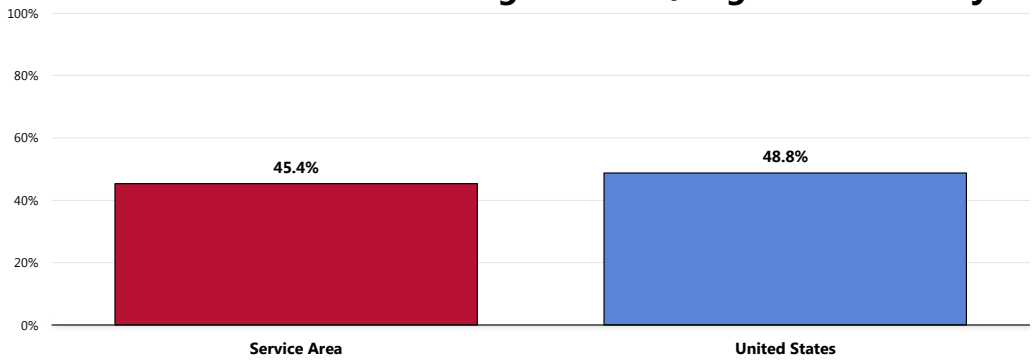
Daily Recommendation of Fruits/Vegetables

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.

A total of 45.4% of Service Area adults report eating five or more servings of fruits and/or vegetables per day.

- Similar to national findings.

Consume Five or More Servings of Fruits/Vegetables Per Day



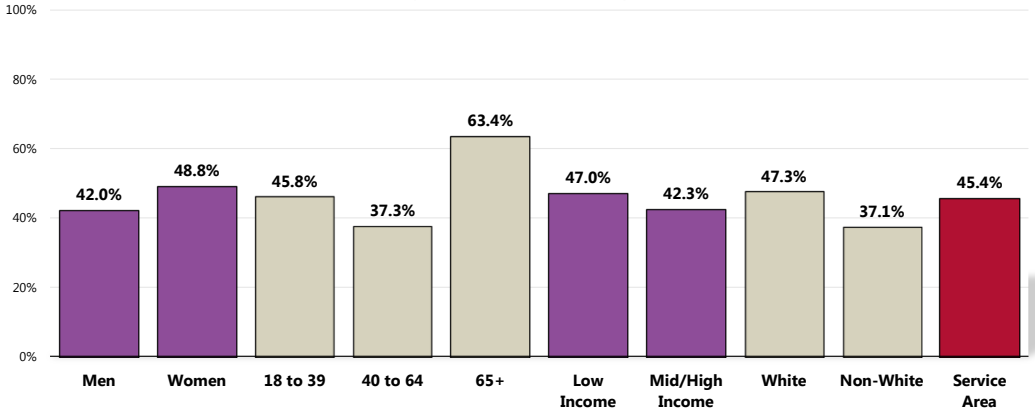
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- For this issue, respondents were asked to recall their food intake on the previous day.

Area adults under 65 are less likely to get the recommended servings of daily fruits/ vegetables.

Consume Five or More Servings of Fruits/Vegetables Per Day

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]

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.

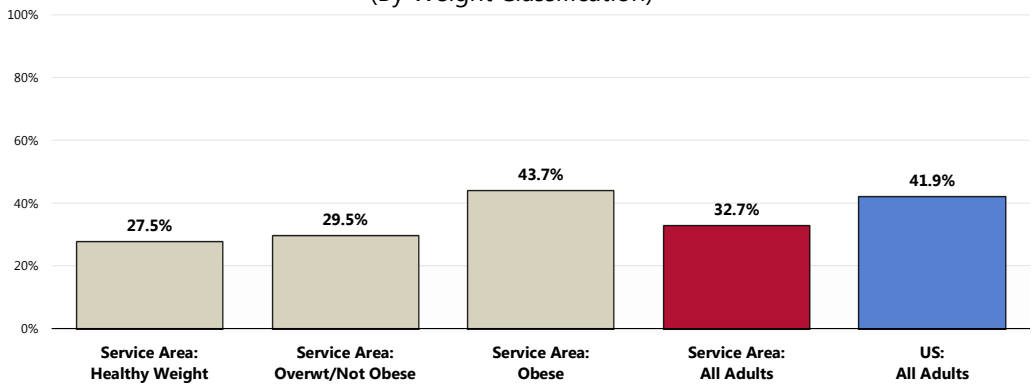
Health Advice About Diet & Nutrition

A total of 32.7% of survey respondents acknowledge that a physician counseled them about diet and nutrition in the past year.

- Lower than national findings.
- Note: Among obese respondents, 43.7% report receiving diet/nutrition advice (meaning that over one-half did not).

Have Received Advice About Diet and Nutrition in the Past Year From a Physician, Nurse, or Other Health Professional

(By Weight Classification)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Related Focus Group Findings: Nutrition

Many group participants discussed poor nutrition in the Black Hills region, with the primary focus including:

- Hunger
- Nutrition education

Participants believe that Black Hills region residents have poor nutrition because of limited access to nutritious food options. Attendees have specific concern about the **level of hunger** in the community: participants worry about the ability of low-income residents to provide healthy options for themselves and their families due to the high cost of fresh produce. Some residents are even without kitchen tables, cooking utensils, or ovens in their homes. For some community members, their primary residence is a hotel room; these people do not have access to any kitchen items. Other contributors to the poor eating habits of community members include the convenience and inexpensive nature of bulk, processed foods. An attendee describes:

> *"If you have a hungry teen you just cannot beat ramen noodles. You have free water, you cook it up, and you've got a couple of pounds of food as opposed to buying apples. The reality is you can't feed that teen. So some of the drivers of meals and nutrition, fresh fruits and things are great, but when you've got hungry bellies to feed and limited time, you're going to have to count on the bulk kinds of stuff that tends to be the cheap white products, cheese and those kinds of things."*

Another attendee describes how the food distributed by the Food Bank does not complement the message about healthy eating and instead perpetuates the high prevalence of chronic diseases:

> *"We're serving a population with a lot of chronic diseases foods that are only leading to those chronic diseases. So if we are going to be spending money to help people with their health and to feed them and to feed their hunger, I think they should be nutritious choices, and I also feel like for example the Y, the Y will buy their snack food items from the food bank and they get it in bulk, and it's really hard to compete with 16 cents for a pound of Doritos, but at some point somebody has to say what we're doing is creating a nation of obese kids who become obese adults."*

Focus group attendees believe **nutrition education** needs to occur more frequently in the community because many households lack basic knowledge on preparing nutritious meals and/or making healthy food choices. Utilizing a multi-pronged approach may prove the most successful, and attendees describe the South Dakota Discovery Program as an organization with a captive young audience who would welcome an outside agency to conduct nutrition education.

Currently, the Community Health Center offers cooking classes, but these classes do not enjoy a large attendance. Rapid City Area Schools also offers nutrition education and cooking classes to the elementary and middle school students, but some attendees believe the school system can do more to promote nutrition:

> *"I don't think there's enough going on in the schools to promote cooking and to promote that as a value. I think a generation ago when we were growing up that was such a value as a role for a woman or even for a man, shopping and cooking is really good use of your time."*

Indian Health Services also has several nutrition programs scheduled this year, as one representative explains:

> *"We are launching in October celebrating our culinary heritage. We're doing cooking classes at the Center, which just got remodeled or revamped, and that's at the Lakota Homes. It's focusing initially on traditional foods and I'm going to do something different in the springtime."*

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 and older 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)
- 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)
- 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.

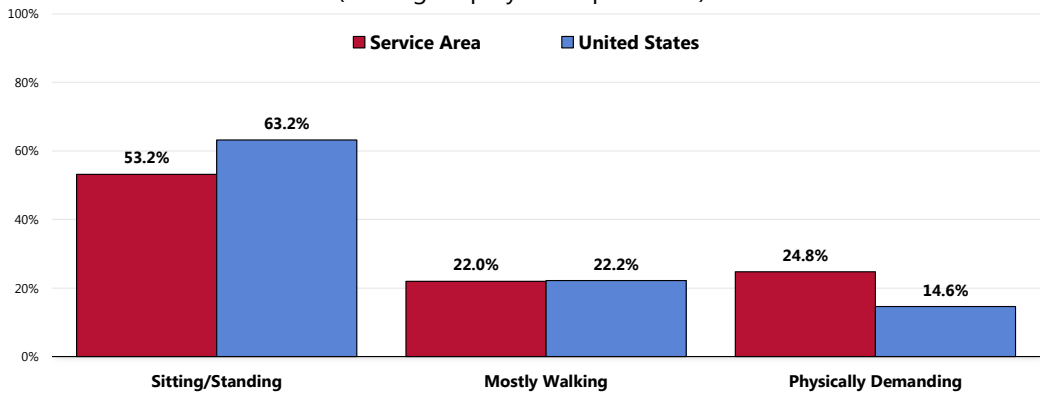
– Healthy People 2020 (www.healthypeople.gov)

Level of Activity at Work

A majority of employed respondents reports low levels of physical activity at work.

- Just over one in two employed respondents (53.2%) reports that their job entails mostly sitting or standing, lower than the US figure.
- 22.0% report that their job entails mostly walking (similar to that reported nationally).
- 24.8% report that their work is physically demanding (higher than reported nationally).

Primary Level of Physical Activity At Work
(Among Employed Respondents)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 103]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of those respondents who are employed for wages.

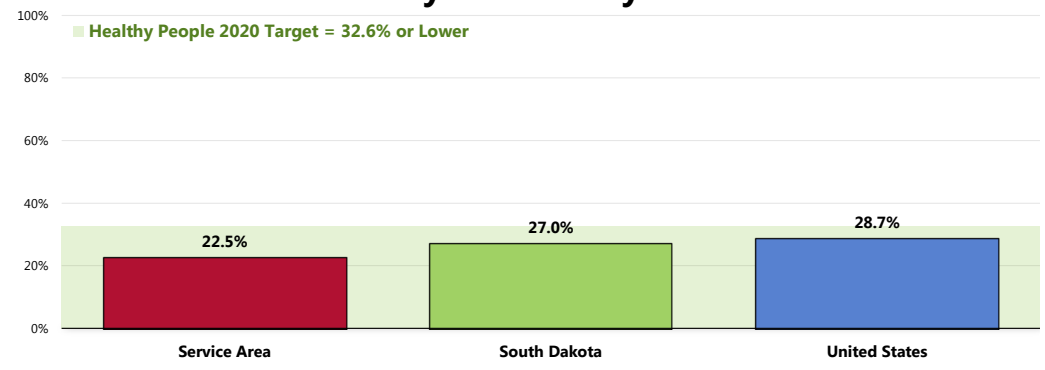
Leisure-Time Physical Activity

A total of 22.5% of adults report no leisure-time physical activity in the past month.

- More favorable than statewide findings.
- More favorable than national findings.
- Satisfies the Healthy People 2020 target (32.6% or lower).

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.

No Leisure-Time Physical Activity in the Past Month

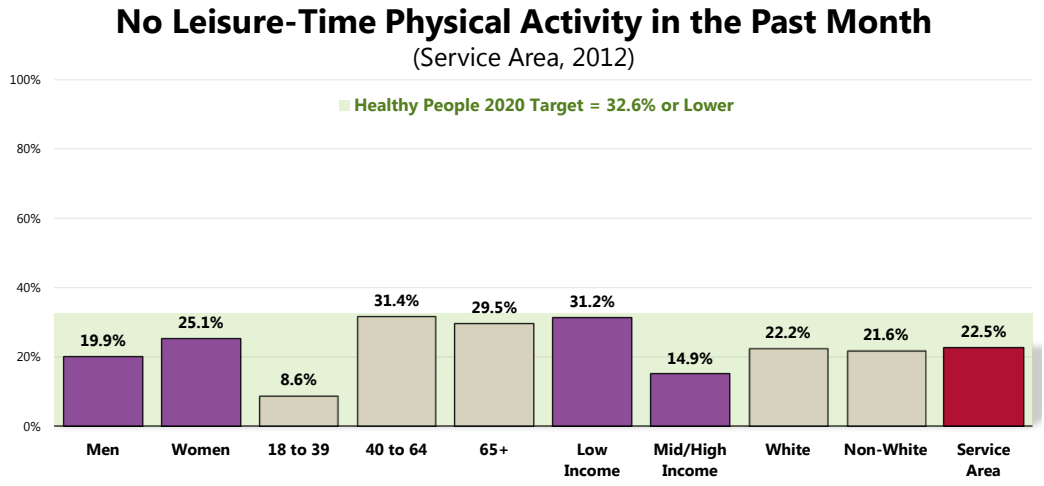


Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 104]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.
- 2011 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.

Lack of leisure-time physical activity in the area is higher among:

- Adults aged 40 and older.
- Lower-income residents.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 104]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-1]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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 Levels

Adults (age 18–64) should do 2 hours and 30 minutes a week of moderate-intensity, or 1 hour and 15 minutes (75 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity. Aerobic activity should be performed in episodes of at least 10 minutes, preferably spread throughout the week.

Additional health benefits are provided by increasing to 5 hours (300 minutes) a week of moderate-intensity aerobic physical activity, or 2 hours and 30 minutes a week of vigorous-intensity physical activity, or an equivalent combination of both.

Older adults (age 65 and older) should follow the adult guidelines. If this is not possible due to limiting chronic conditions, older adults should be as physically active as their abilities allow. They should avoid inactivity. Older adults should do exercises that maintain or improve balance if they are at risk of falling.

For all individuals, some activity is better than none. Physical activity is safe for almost everyone, and the health benefits of physical activity far outweigh the risks.

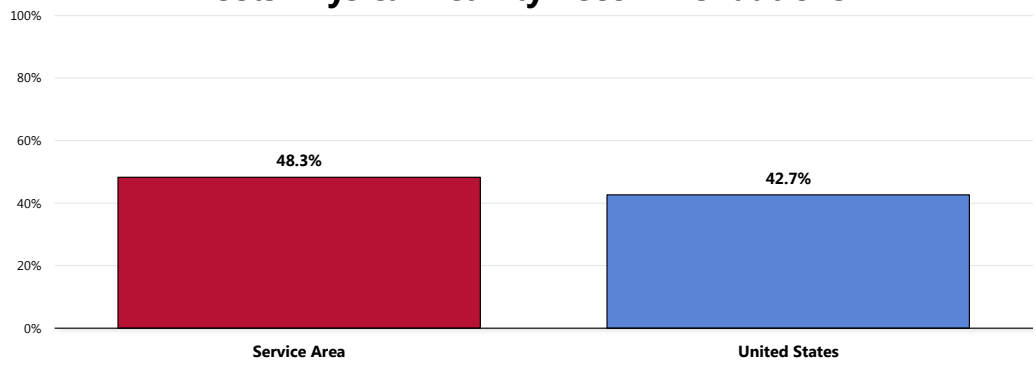
– 2008 Physical Activity Guidelines for Americans, U.S. Department of Health and Human Services. www.health.gov/PAGuidelines

Recommended Levels of Physical Activity

A total of 48.3% of Service Area adults participate in regular, sustained moderate or vigorous physical activity (meeting physical activity recommendations).

- More favorable than national findings.

Meets Physical Activity Recommendations



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 171]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

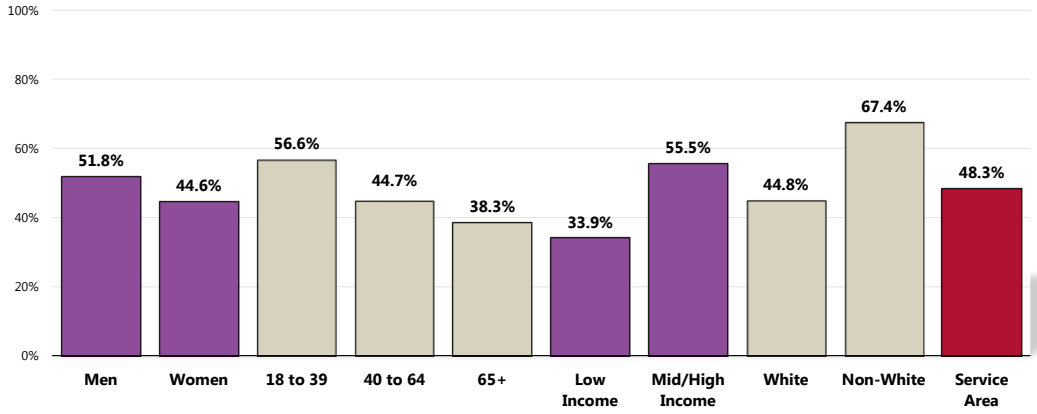
Notes:
- Asked of all respondents.
- In this case the term "meets physical activity recommendations" refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least 5 times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least 3 times a week for 20 minutes at a time.

Those <u>less likely</u> to meet physical activity requirements include:

- Whites and low-income residents.
- Note also the negative correlation with age.

Meets Physical Activity Recommendations

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 171]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.
- In this case the term "meets physical activity recommendations" refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least 5 times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least 3 times a week for 20 minutes at a time.

Moderate & Vigorous Physical Activity

The individual indicators of moderate and vigorous physical activity are shown here.

In the past month:

A total of 29.1% of adults participated in moderate physical activity (5 times a week, 30 minutes at a time).

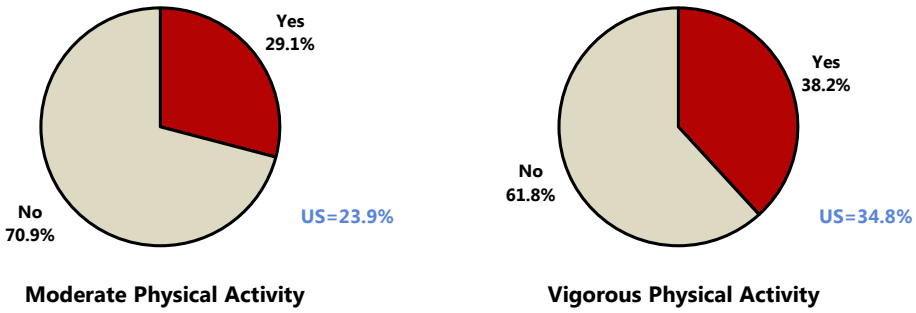
- More favorable than the national level.

A total of 38.2% participated in vigorous physical activity (3 times a week, 20 minutes at a time).

- Comparable to the nationwide figure.

Moderate & Vigorous Physical Activity

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 173-174]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Moderate Physical Activity: Takes part in exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate at least 5 times per week for at least 30 minutes per time.
- Vigorous Physical Activity: Takes part in activities that cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes per time.

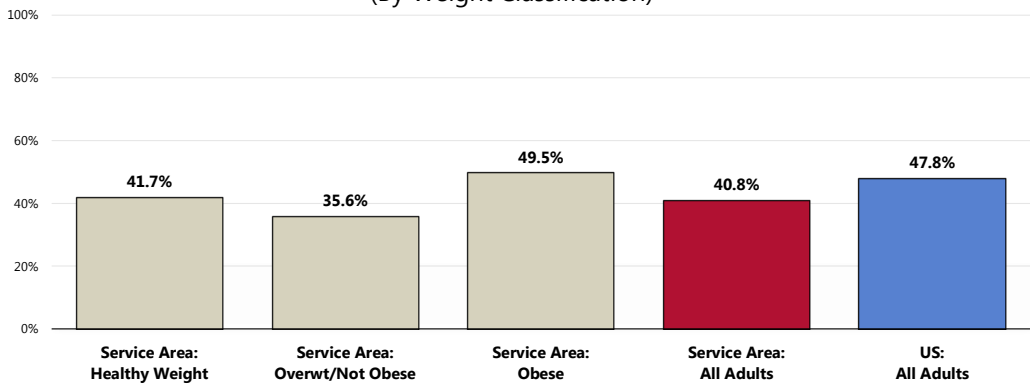
Health Advice About Physical Activity & Exercise

A total of 40.8% of Service Area adults report that their physician has asked about or given advice to them about physical activity in the past year.

- Less favorable than the national average.
- Note: 49.5% of **obese** Service Area respondents say that they have talked with their doctor about physical activity/exercise in the past year.

Have Received Advice About Exercise in the Past Year From a Physician, Nurse, or Other Health Professional

(By Weight Classification)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 19]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Children's Screen Time

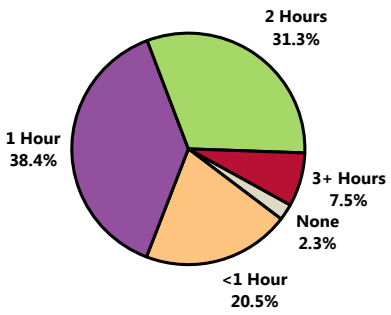
Television Watching & Other Screen Time

Among children aged 5 through 17, 7.5% are reported to watch three or more hours of television per day; 8.3% are reported to spend three or more hours on other types of screen time for entertainment (video games, Internet, etc.).

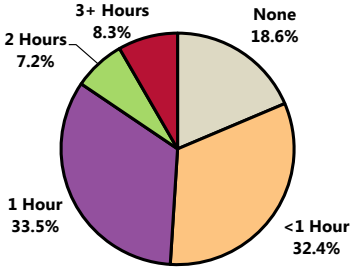
- Television viewing is much lower among Service Area children when compared with national findings; the prevalence of other screen use is comparable.

Children's Screen Time

(Among Parents of Children Ages 5-17; Service Area, 2012)



Hours per Day of Television



Hours per Day of Other Screen Time
(i.e., video games, computer/Internet entertainment)

Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 138-139, 175-176]
Notes: • Asked of respondents with a child aged 5 to 17 in the household.

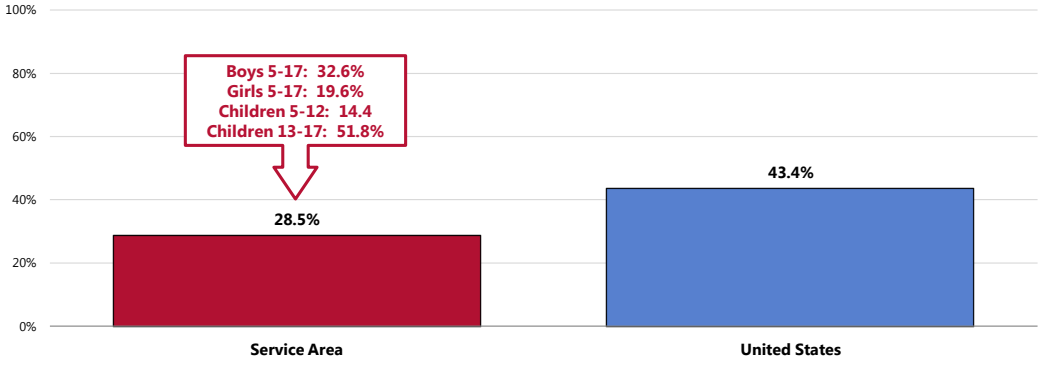
Total Screen Time

When combined, 28.5% of Service Area children aged 5 to 17 spend three or more hours on screen time (whether television or computer, Internet, video games, etc.) per day.

- More favorable than found nationally.
- Statistically high among Service Area boys and teens.

Children With Three or More Hours per School Day of Total Screen Time [TV, Computer, Video Games, Etc. for Entertainment]

(Among Parents of Children 5-17)



Sources: • 2012 Professional Research Consultants, Inc. PRC Community Health Survey. [Item 177]
Notes: • Asked of all respondents with children 5-17 at home.
• For this issue, respondents with children who are not in school were asked about "weekdays," while parents of children in school were asked about typical "school days."
• "Three or more hours" includes reported screen time of 180 minutes or more per day.

Related Focus Group Findings: Physical Activity

Many focus group participants discussed physical activity in the community, with discussion centered on:

- Sedentary lifestyle
- Safety concerns on Native American reservations

Focus group attendees believe that the Black Hills region offers many opportunities for residents to participate in physical activity, but the number of residents who do not exercise remains high. The amount of time spent in front of the television, computer, or video games may contribute to many residents leading **sedentary lifestyles**. While respondents agree that the Black Hills region contains many safe spaces for physical activity, participants did note that additional street lighting would enhance the walking trails experience.

However, the infrastructure for physical activity remains poor on the **Native American reservations**. Limited bike paths and **safety concerns** make it difficult for outdoor activity. Outside of the reservations, the opportunities to exercise include a wonderful park system, city recreation, YMCA, Rapid City sports, and school programs. The Deadwood School District's gym class involves a variety of seasonal outdoor activities:

> *"In the Deadwood schools for gym class during the spring and the fall the students bring their bicycles to the school. If they don't have a bicycle there are bicycles provided for them through different programs, but for gym class they ride bikes. Then during the wintertime they go snowshoeing, skiing, and the entire communities get involved with those programs, providing equipment, providing shuttle service. They also hold a triathlon every spring for those students. That's a community that's doing really well in getting that captive audience and getting children engaged in those types of activities."*

Weight Status

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
Normal	18.5 – 24.9
Overweight	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.

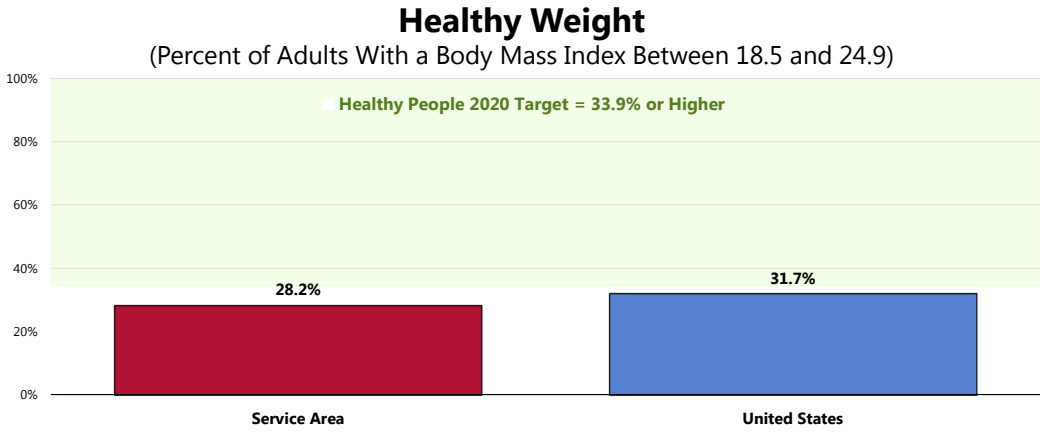
Adult Weight Status

Healthy Weight

"Healthy weight "means neither underweight, nor overweight (BMI = 18.5-24.9).

Based on self-reported heights and weights, only 28.2% of Service Area adults are at a healthy weight.

- Similar to national findings.
- Fails to satisfy the Healthy People 2020 target (33.9% or higher).



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 179]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

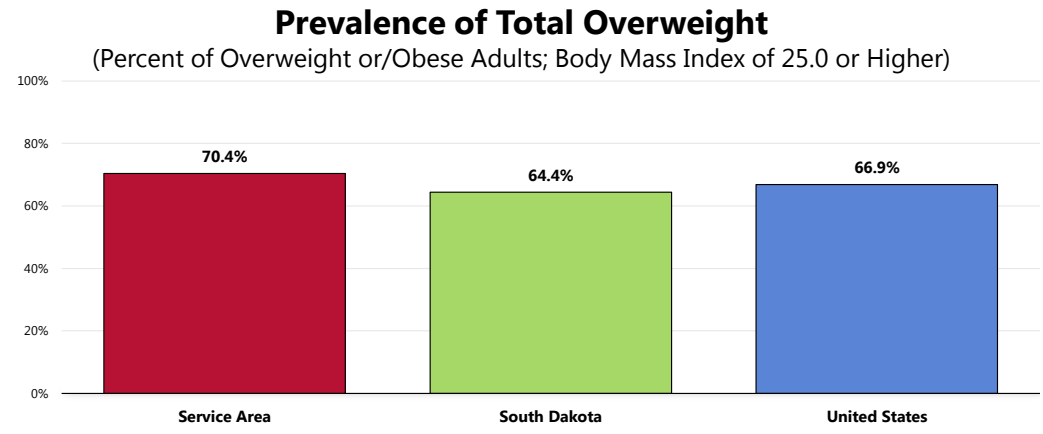
Notes:
- Based on reported heights and weights, asked of all respondents.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-8]
- The definition of healthy weight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), between 18.5 and 24.9.

Overweight Status

Here, "overweight" includes those respondents with a BMI value ≥25.

A total of 7 in 10 Service Area adults (70.4%) are overweight.

- Higher than the South Dakota prevalence.
- Statistically similar to the US overweight prevalence.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 179]
- 2011 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): 2011 South Dakota 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.

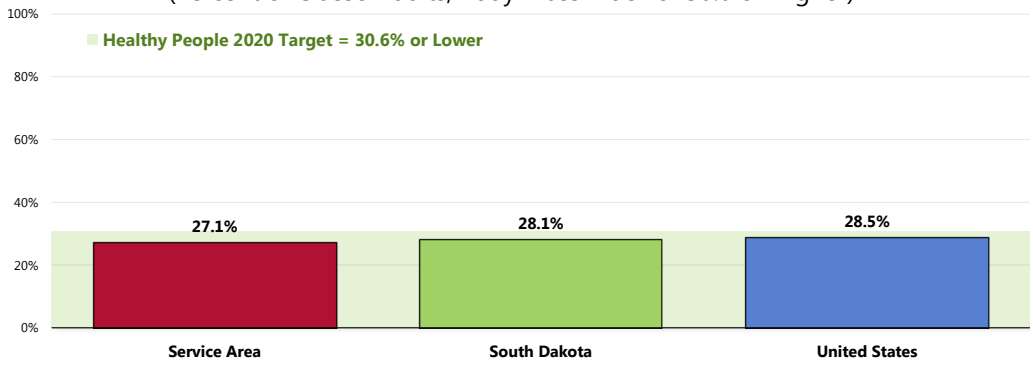
"Obese" (also included in overweight prevalence discussed previously) includes respondents with a BMI value ≥30.

Further, 27.1% of Service Area adults are obese.

- Similar to South Dakota findings.
- Similar to US findings.
- Similar to the Healthy People 2020 target (30.6% or lower).

Prevalence of Obesity

(Percent of Obese Adults; Body Mass Index of 30.0 or Higher)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 179]
- 2011 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): 2011 South Dakota data.

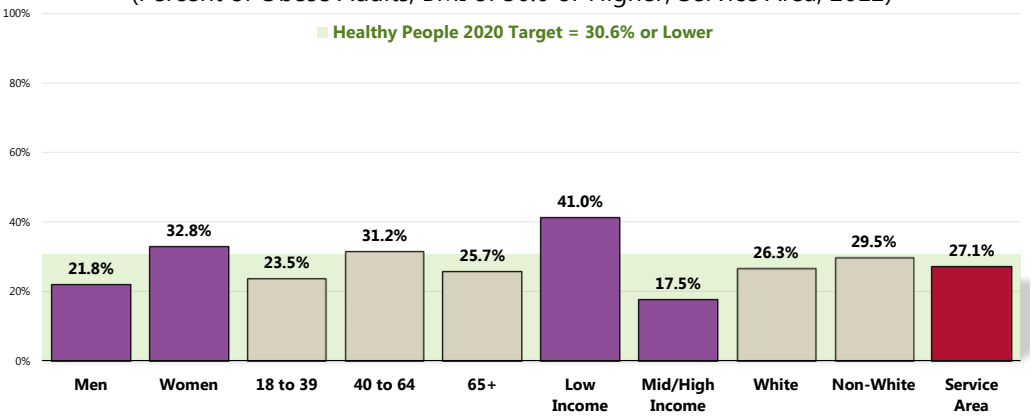
Notes:
- Based on reported heights and weights, asked of all respondents.
- The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

Obesity is notably more prevalent among:

- Women.
- Respondents with lower incomes.

Prevalence of Obesity

(Percent of Obese Adults; BMI of 30.0 or Higher; Service Area, 2012)



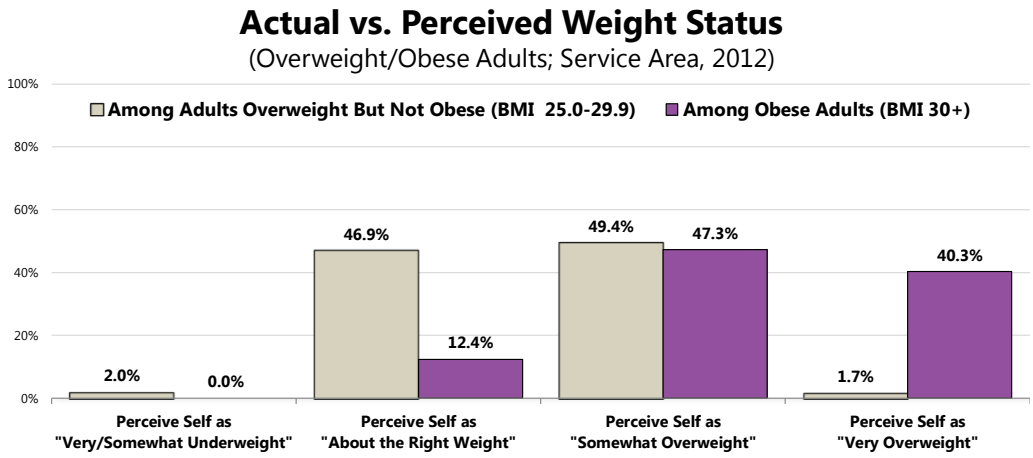
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 179]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]

Notes:
- Based on reported heights and weights, asked of all respondents.
- Hispanics can be of any race; "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.
- 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.

Actual vs. Perceived Body Weight

A total of 12.4% of obese adults and 46.9% of overweight (but not obese) adults feel that their current weight is "about right."

- 49.4% of overweight (but not obese) adults see themselves as "somewhat overweight."
- 40.3% of obese adults see themselves as "very overweight."



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 111]

Notes:
- BMI is 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.

Relationship of Overweight With Other Health Issues

The correlation between overweight and various health issues cannot be disputed.

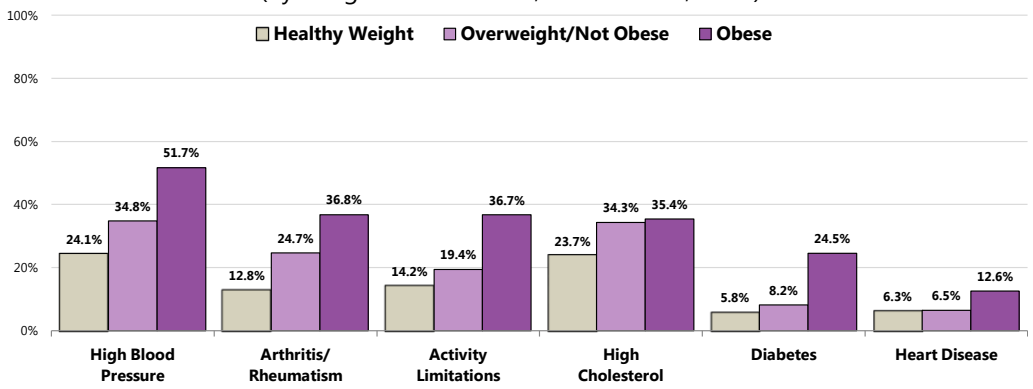
Obese (and often overweight) adults are more likely to report a number of adverse health conditions.

Among these are:

- Hypertension (high blood pressure).
- Arthritis/rheumatism.
- Activity limitations.
- High blood cholesterol.
- Diabetes.
- Heart disease.

Relationship of Overweight With Other Health Issues

(By Weight Classification; Service Area, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 28, 30, 44, 116, 141-143]
Notes: • Based on reported heights and weights, asked of all respondents.

Weight Management

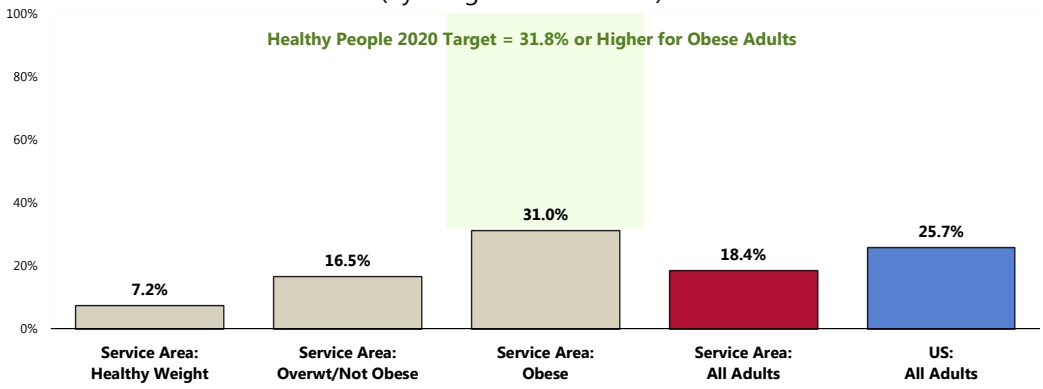
Health Advice

A total of 18.4% of adults have been given advice about their weight by a doctor, nurse or other health professional in the past year.

- Lower than the national findings.
- Note that 31.0% of <u>obese</u> adults have been given advice about their weight by a health professional in the past year (while nearly 7 in 10 have not).
  - This is similar to the Healthy People 2020 target of 31.8% or higher.

Have Received Advice About Weight in the Past Year From a Physician, Nurse, or Other Health Professional

(By Weight Classification)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 110, 182]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Weight Control

Individuals who are at a healthy weight are less likely to:

- Develop chronic disease risk factors, such as high blood pressure and dyslipidemia.
- Develop chronic diseases, such as type 2 diabetes, heart disease, osteoarthritis, and some cancers.
- Experience complications during pregnancy.
- Die at an earlier age.

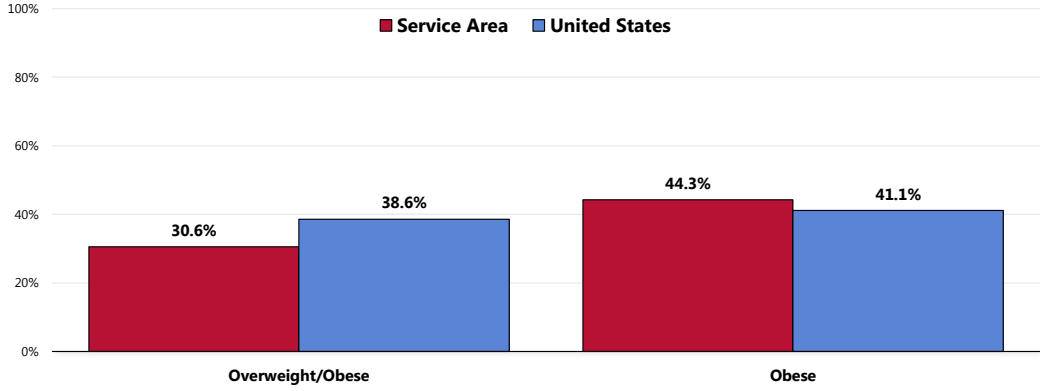
All Americans should avoid unhealthy weight gain, and those whose weight is too high may also need to lose weight.

– Healthy People 2020 (www.healthypeople.gov)

A total of 30.6% of Service Area adults who are overweight say that they are both modifying their diet and increasing their physical activity to try to lose weight.

- Lower than national findings.
- Note: 44.3% of obese Service Area adults report that they are trying to lose weight through a combination of diet and exercise, similar to what is found nationally.

Trying to Lose Weight by Both Modifying Diet and Increasing Physical Activity
(By Weight Classification)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 180]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Based on reported heights and weights, asked of all respondents.

Childhood Overweight & Obesity

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

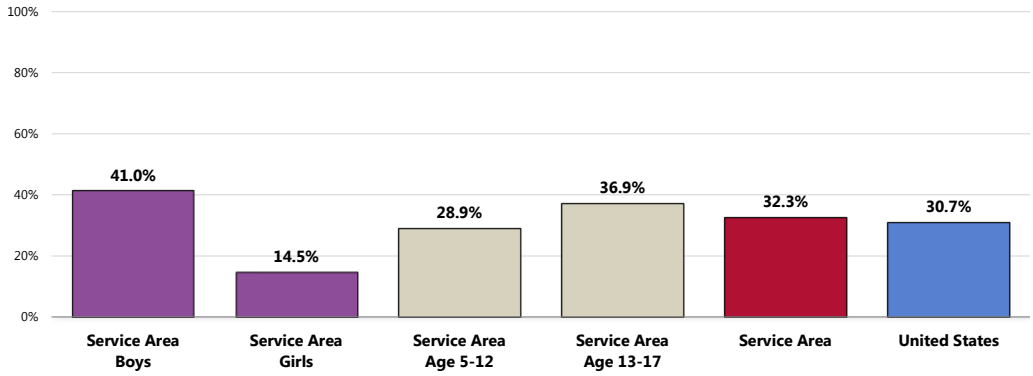
– Centers for Disease Control and Prevention.

Based on the heights/weights reported by surveyed parents, 32.3% of Service Area children age 5 to 17 are overweight or obese (≥85th percentile).

- Comparable to the national prevalence.
- Statistically high among Service Area boys age 5 to 17.

Child Total Overweight Prevalence

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



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 183]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

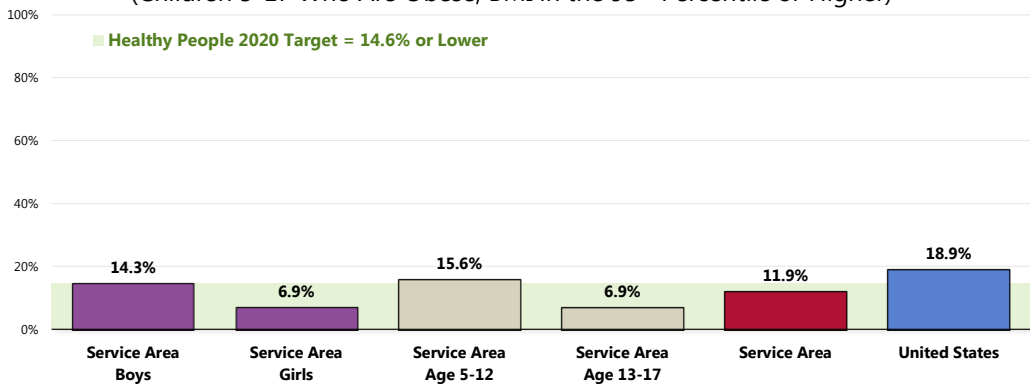
Notes:
- Asked of all respondents with children age 5-17 at home.
- Overweight among children is estimated based on children's Body Mass Index status at or above the 85th percentile of US growth charts by gender and age.

Further, 11.9% of Service Area children age 5 to 17 are obese (≥95th percentile).

- Comparable to the national percentage.
- Comparable to the Healthy People 2020 target (14.6% or lower for children age 2-19).
- Statistically similar by child's age and gender.

Child Obesity Prevalence

(Children 5-17 Who Are Obese; BMI in the 95th Percentile or Higher)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 183]
- 2011 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.

Substance Abuse

In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95% of people with substance use problems are considered unaware of their problem. Of those who recognize their problem, 273,000 have made an unsuccessful effort to obtain treatment. These estimates highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders.

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

The field has made progress in addressing substance abuse, particularly among youth. According to data from the national Institute of Drug Abuse (NIDA) Monitoring the Future (MTF) survey, which is an ongoing study of the behaviors and values of America's youth between 2004 and 2009, a drop in drug use (including amphetamines, methamphetamine, cocaine, hallucinogens, and LSD) was reported among students in 8th, 10th, and 12th grades. Note that, despite a decreasing trend in marijuana use which began in the mid-1990s, the trend has stalled in recent years among these youth. Use of alcohol among students in these three grades also decreased during this time.

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)

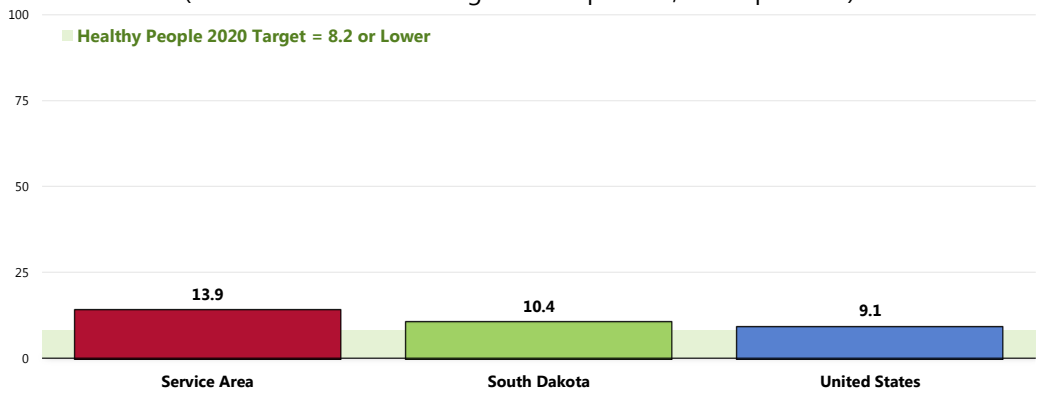
Age-Adjusted Cirrhosis/Liver Disease Deaths

Between 2006 and 2010, there was an annual average age-adjusted cirrhosis/liver disease mortality rate of 13.9 deaths per 100,000 population in the Service Area.

- Worse than the statewide rate.
- Worse than the national rate.
- Fails to satisfy the Healthy People 2020 target (8.2 or lower).

Cirrhosis/Liver Disease: Age-Adjusted Mortality

(2006-2010 Annual Average Deaths per 100,000 Population)



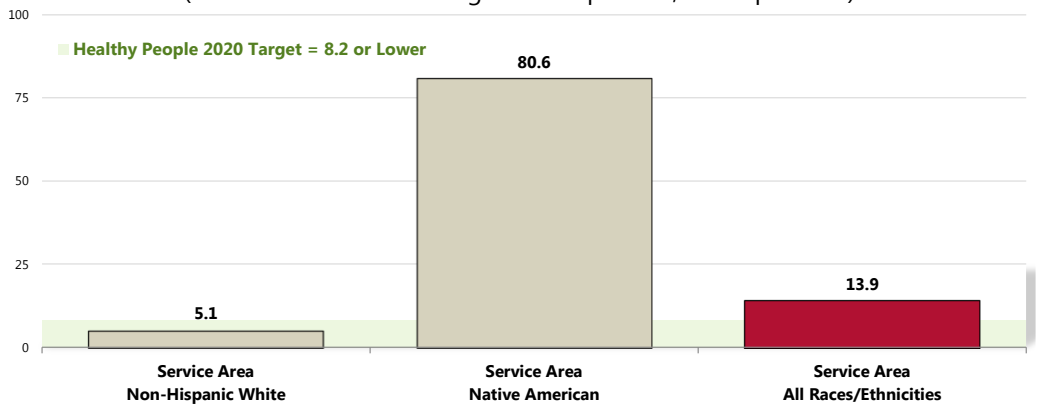
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [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 U.S. Standard Population.

The cirrhosis/liver disease mortality rate among Native Americans in the Service Area is extraordinarily high.

Cirrhosis/Liver Disease: Age-Adjusted Mortality by Race

(2006-2010 Annual Average Deaths per 100,000 Population)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- 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 U.S. Standard Population.

High-Risk Alcohol Use

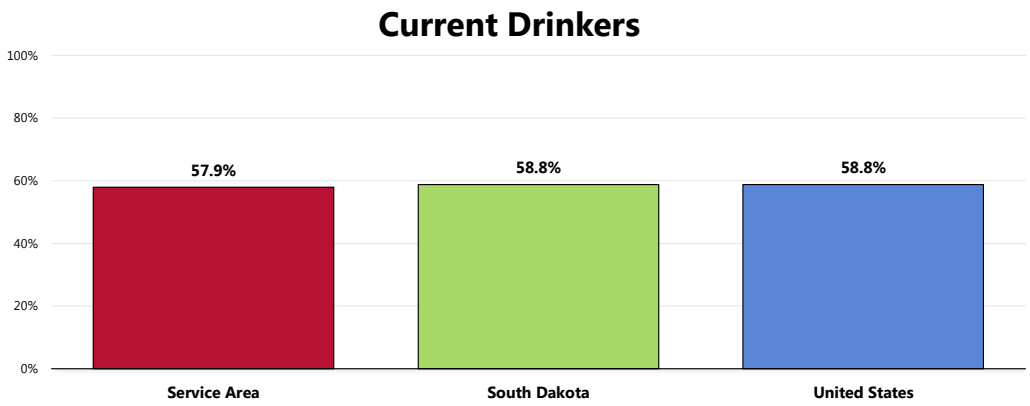
"Chronic drinkers" include survey respondents reporting 60 or more drinks of alcohol in the month preceding the interview.

"Current drinkers" include survey respondents who had at least one drink of alcohol in the month preceding the interview. For the purposes of this study, a "drink" is considered one can or bottle of beer, one glass of wine, one can or bottle of wine cooler, one cocktail, or one shot of liquor.

Current Drinking

A total of 57.9% of area adults had at least one drink of alcohol in the past month (current drinkers).

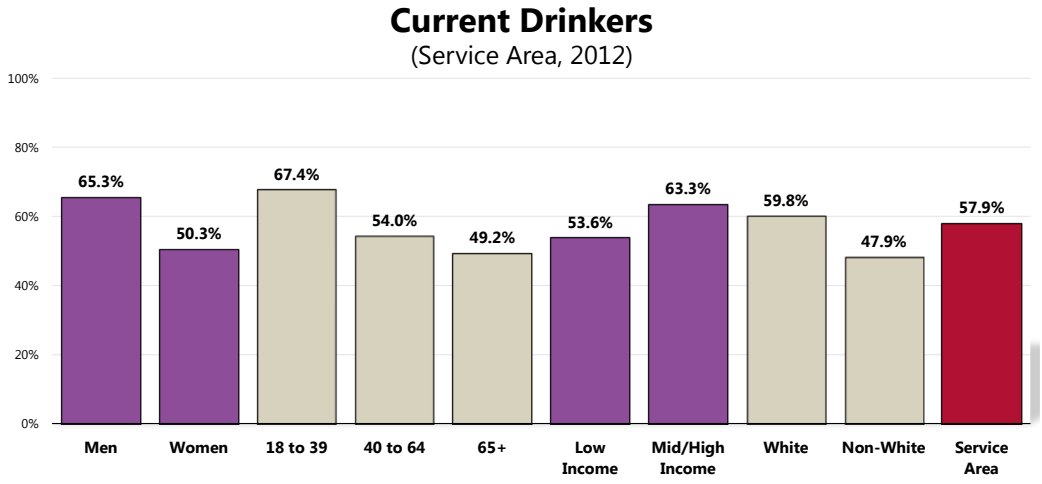
- Similar to the statewide proportion.
- Similar to the national proportion.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 188]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Current drinkers had at least one alcoholic drink in the past month.

Current drinking is more prevalent among men and young adults.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 188]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.
- Current drinkers had at least one alcoholic drink in the past month.

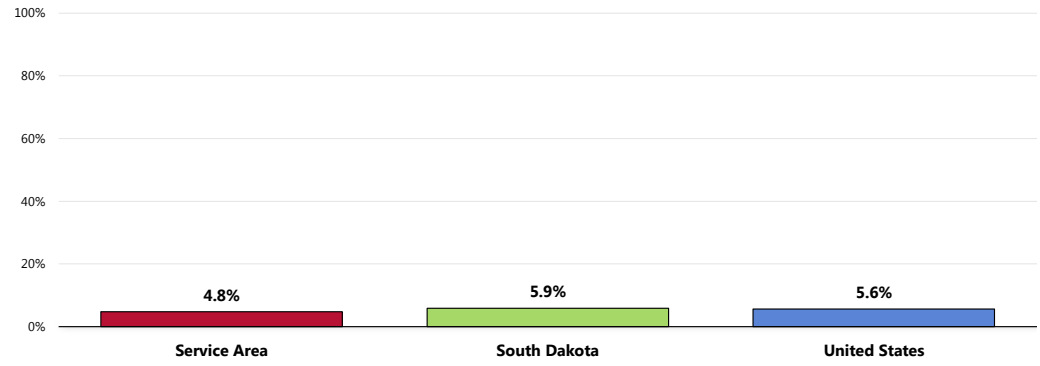
Chronic Drinking

A total of 4.8% of area adults averaged two or more drinks of alcohol per day in the past month (chronic drinkers).

- Similar to the statewide proportion.

- Similar to the national proportion.

Chronic Drinkers



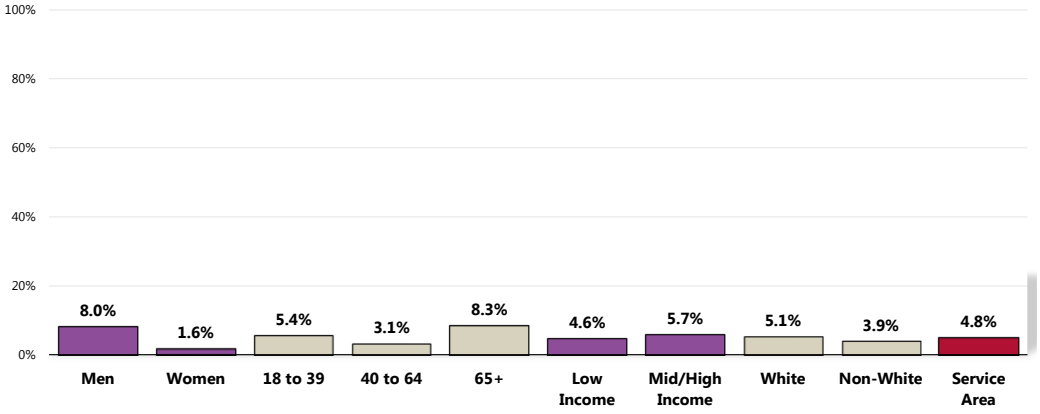
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 189]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Chronic drinkers are defined as having 60+ alcoholic drinks in the past month.
- *The state definition for chronic drinkers is males consuming 2+ drinks per day and females consuming 1+ drink per day.

RELATED ISSUE:
See also *Stress* in the **Mental Health & Mental Disorders** section of this report.

Chronic drinking is statistically high among Service Area men.

Chronic Drinkers
(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 189]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.
- Chronic drinkers are defined as those having 60+ alcoholic drinks in the past month.

Binge Drinking

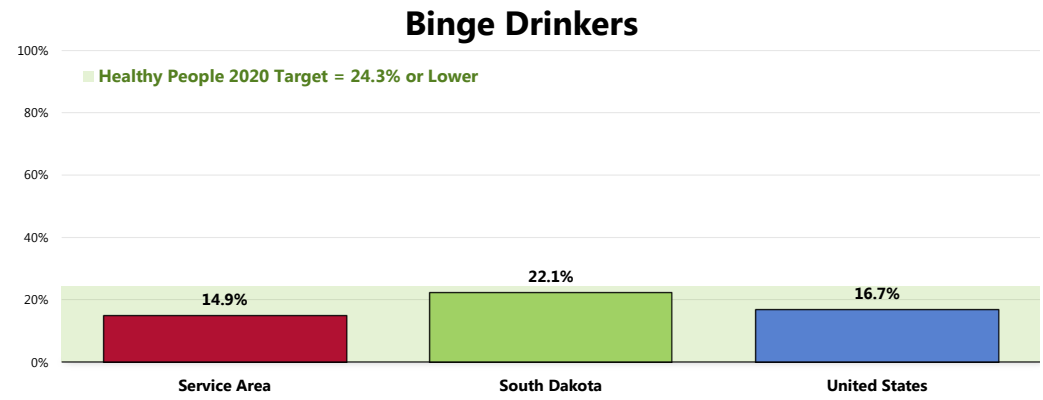
"Binge drinkers" include:

1) MEN who report drinking 5 or more alcoholic drinks on any single occasion during the past month; and

2) WOMEN who report drinking 4 or more alcoholic drinks on any single occasion during the past month.

A total of 14.9% of Service Area adults are binge drinkers.

- Lower than South Dakota findings.
- Similar to national findings.
- Satisfies the Healthy People 2020 target (24.3% or lower).

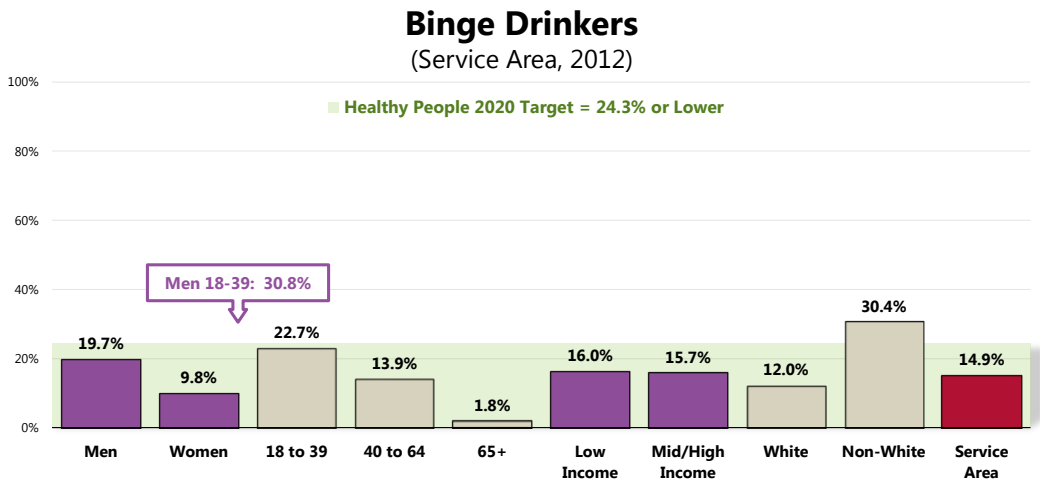


Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 190]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.
- 2011 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-14.3]

Notes:
- Asked of all respondents.
- Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion.

Binge drinking is more prevalent among:

- Men (especially those under age 40).
- Adults under age 40.
- Non-Whites.



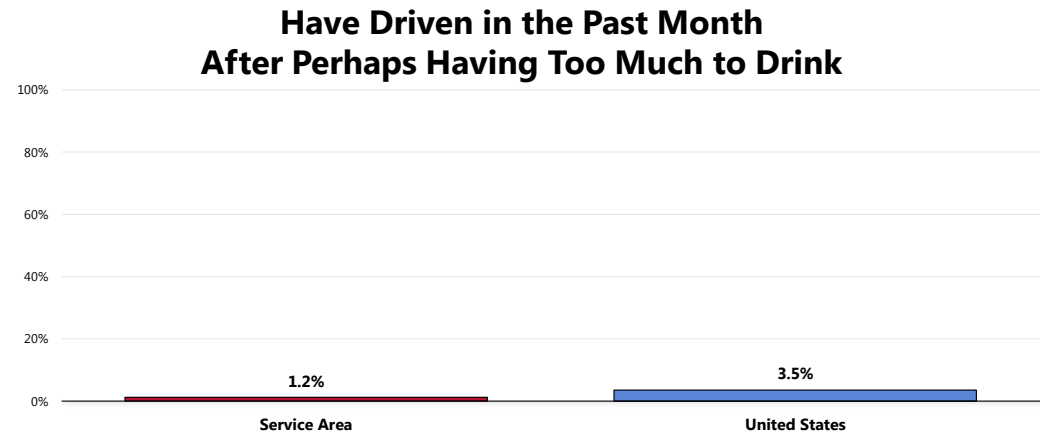
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 190]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-14.3]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.
- Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion

Note: 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.

A total of 1.2% of Service Area adults acknowledge having driven a vehicle in the past month after they had perhaps too much to drink.

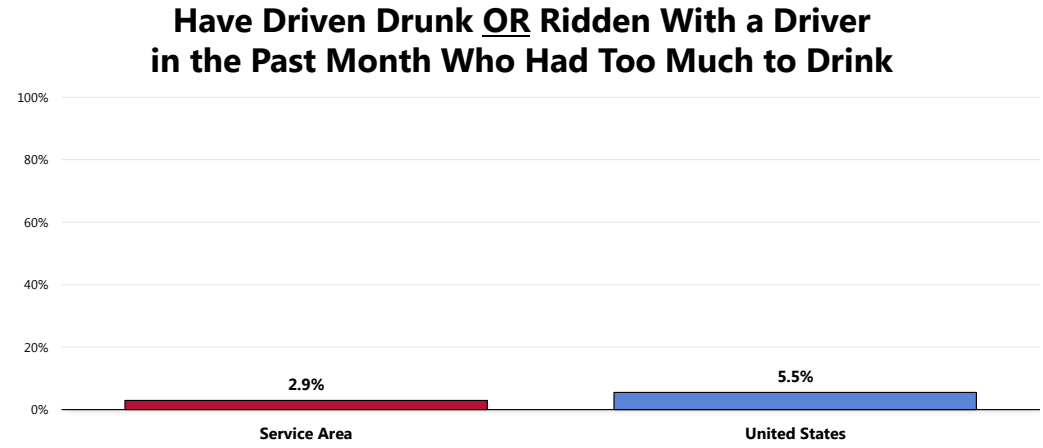
- More favorable than the national findings.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 70]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

A total of 2.9% of Service Area adults acknowledge either drinking and driving or riding with a drunk driver in the past month.

- More favorable than the national findings.

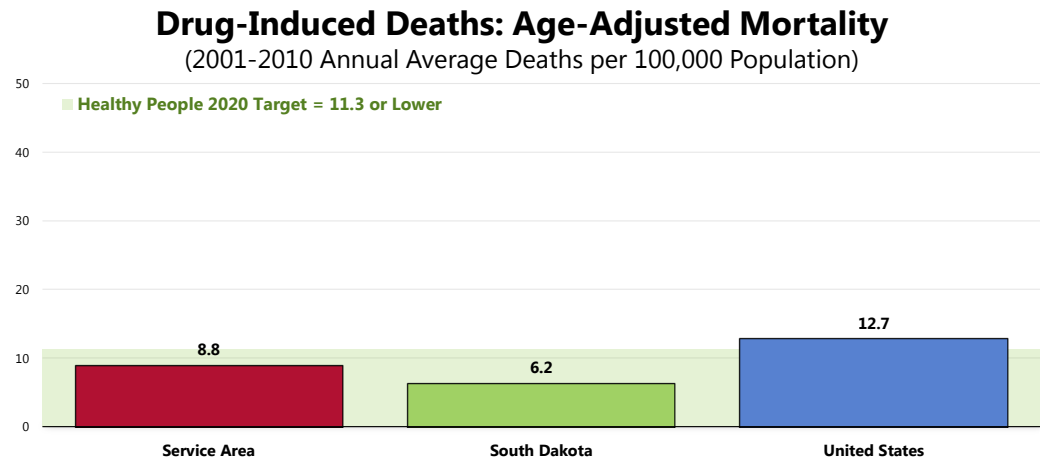


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 191]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Age-Adjusted Drug-Induced Deaths

Between 2001 and 2010, there was an annual average age-adjusted drug-induced mortality rate of 8.8 deaths per 100,000 population in the Service Area.

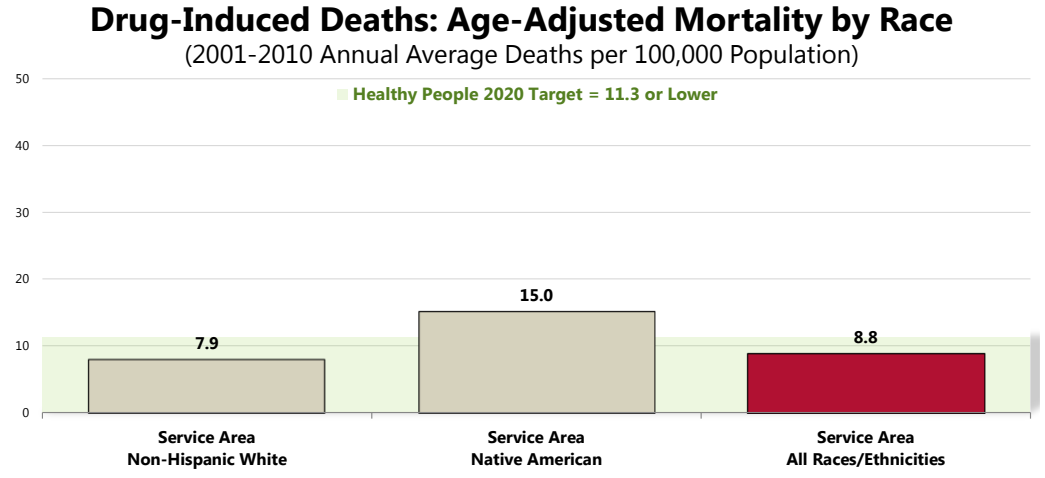
- Worse than the statewide rate.
- Better than the national rate.
- Satisfies the Healthy People 2020 target (11.3 or lower).



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US 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.

The drug-induced mortality rate is higher among Native Americans than among Whites in the Service Area.



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2013.
- US 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.

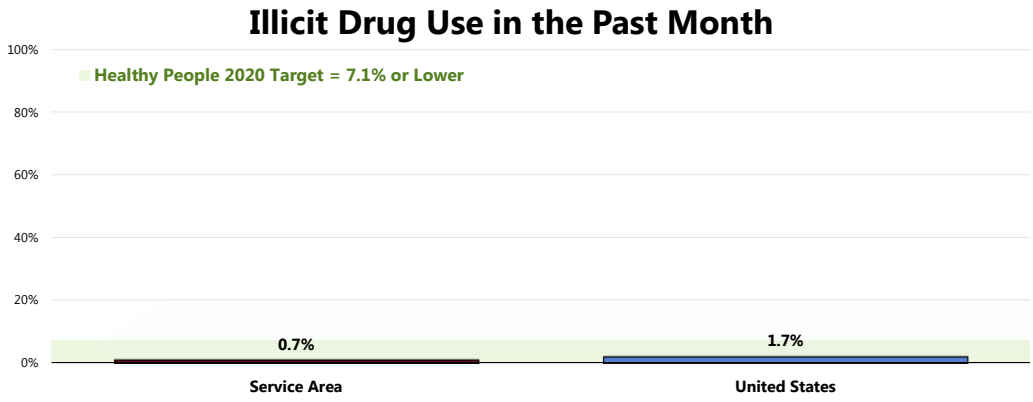
Illicit Drug Use

For the purposes of this survey, "illicit drug use" includes use of illegal substances or of prescription drugs taken without a physician's order.

Just 0.7% of Service Area adults acknowledge using an illicit drug in the past month.

- Similar to the proportion found nationally.
- Easily satisfies the Healthy People 2020 target of 7.1% or lower.

Note: 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 actual illicit drug use in the community is likely higher.



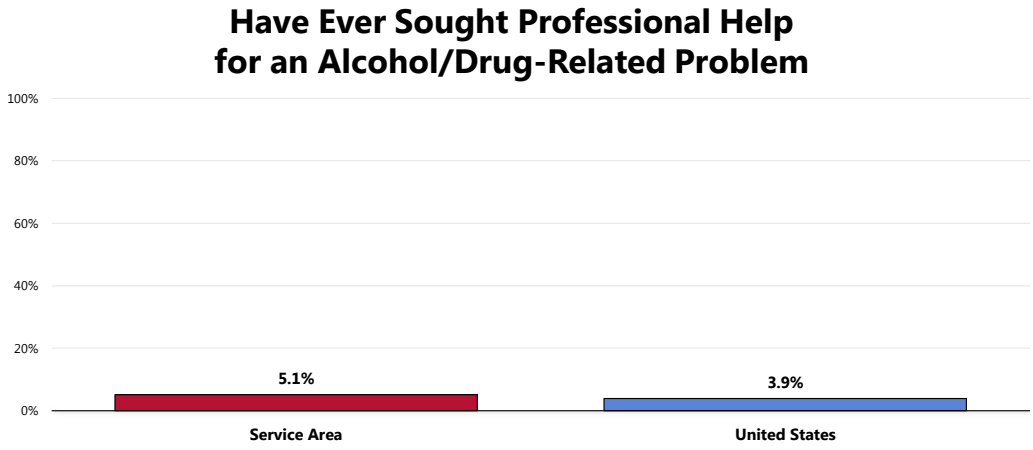
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 72]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-13.3]

Notes:
- Asked of all respondents.

Alcohol & Drug Treatment

A total of 5.1% of Service Area adults report that they have sought professional help for an alcohol or drug problem at some point in their lives.

- Similar to national findings.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 73]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Related Focus Group Findings: Substance Abuse

Substance abuse in the community is of concern to many focus group attendees. The main issues discussed surrounding substance abuse included:

- Prevalence of drug use
- Substance use perpetuates mental health issues
- Need additional treatment facilities

A number of focus group participants worry about the **prevalence of drug use** in the community, especially use of alcohol, methamphetamines, cocaine, heroin, marijuana, synthetic drugs, over-the-counter and prescription drugs. Respondents worry about the over-subscribing of prescription drugs coupled with the easy access in many homes. A state central database could track prescriptions and possibly eliminate "doctor shopping" for prescription drugs.

Overall, focus group members believe that substance abuse occurs across all demographics in the region; further, **substance abuse also perpetuates any mental health issues**. Attendees believe that over-indulging in substances has become a coping mechanism for some residents. Prompted by the pervasive alcohol industry's advertising, residents' substance use becomes abuse, as a participant describes:

> *"I think every one of us in this room has struggled with time and struggled with family and kids and everything, but not everybody goes to the bar to deal with it with a drink, and that leads to one more and one more and one more and addiction, and addiction leads to many, many, many other things…. Some people have that predisposition to addiction. Some people have that predisposition to not being able to cope with crisis, but when we see things on TV, when we see billboards, I know nobody in here works for Budweiser so I can say you really are praying on people when you put up a billboard that says, 'Every hour should be a happy one, so go buy a beer.'"*

Substance use among adolescents also concerns attendees, with online access to methods for intoxication available to many. One participant explains:

> *"These kids are getting ideas about drugs and alcohol on the Internet. They have access to their online sources of information. They go online. They can find out about all kinds of different things that they can do…People figure out ways to do this and it's not just alcohol and the rich man's drugs like coke and heroin."*

Attendees believe the Black Hills region **needs additional substance abuse treatment facilities**. Only a limited number of treatment facilities and other resources operate in the region, with many of these only offering outpatient treatment options. Several adult social detox programs operate in Rapid City: the Hope Center provides a day drop-in program for addicts, and the Safe Bed program provides a safe space for a resident to spend the night:

> *"A person that isn't interested in receiving help they can just go and be in a safe bed overnight and there are six beds I believe. It's not even a bed. It's a cot on the floor. It's a mat on the floor. They can be there for a night and they don't have to do anything, just sleep there, but it gets them off the street, out of detox, keeps them out of jail."*

Other participants feel that residents need to have more accountability with their choices and do not feel the current treatment options offer long-term solutions:

"What we do really well is put people under really high levels of care and they have no intention of doing the treatment, and so we spend lots of money on high levels of care for a person who's not motivated to make a change."

Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. Each year, approximately 443,000 Americans die from tobacco-related illnesses. For every person who dies from tobacco use, 20 more people suffer with at least one serious tobacco-related illness. In addition, tobacco use costs the US $193 billion annually in direct medical expenses and lost productivity.

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).

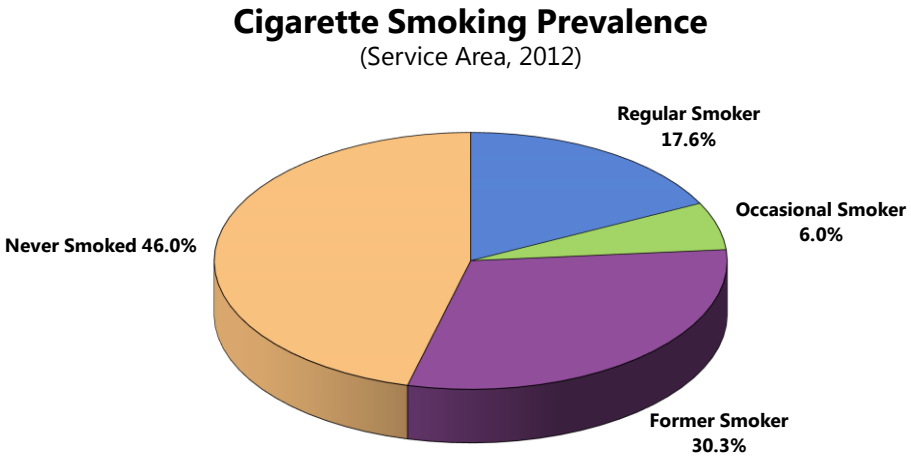
Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontitis, and tooth loss. Cigar use causes cancer of the larynx, mouth, esophagus, and lung.

– Healthy People 2020 (www.healthypeople.gov)

Cigarette Smoking

Cigarette Smoking Prevalence

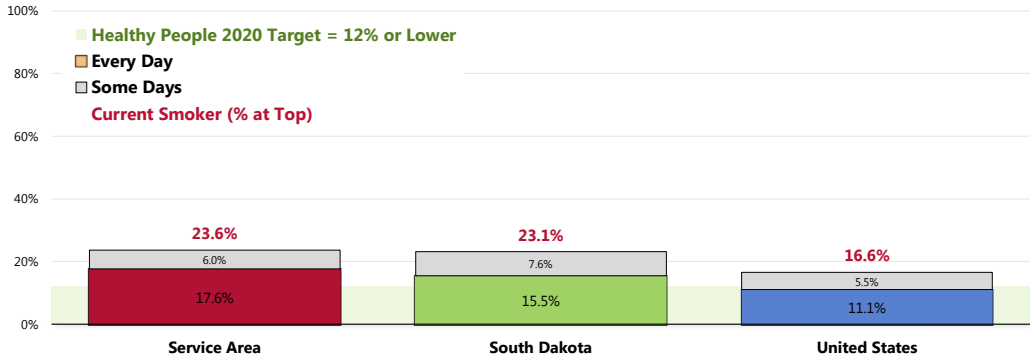
A total of 23.6% of Service Area adults currently smoke cigarettes, either regularly (17.6% every day) or occasionally (6.0% on some days).



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 184]
Notes: • Asked of all respondents.

- Almost identical to statewide findings.
- Less favorable than national findings.
- Fails to satisfy the Healthy People 2020 target (12% or lower).

Current Smokers



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 184]
- 2011 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): 2011 South Dakota 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 (everyday and some days).

Cigarette smoking is more prevalent among:

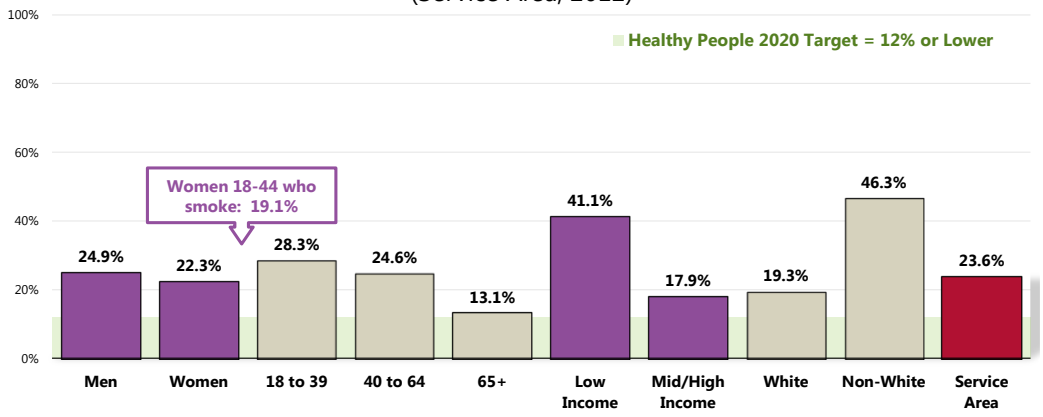
- Adults under 65 (note the negative correlation with age).
- Lower-income residents.
- Non-Whites.

Note also:

- 19.1% of women of child-bearing age (ages 18 to 44) currently smoke. This is notable given that tobacco use increases the risk of infertility, as well as the risks for miscarriage, stillbirth and low birthweight for women who smoke during pregnancy.

Current Smokers

(Service Area, 2012)

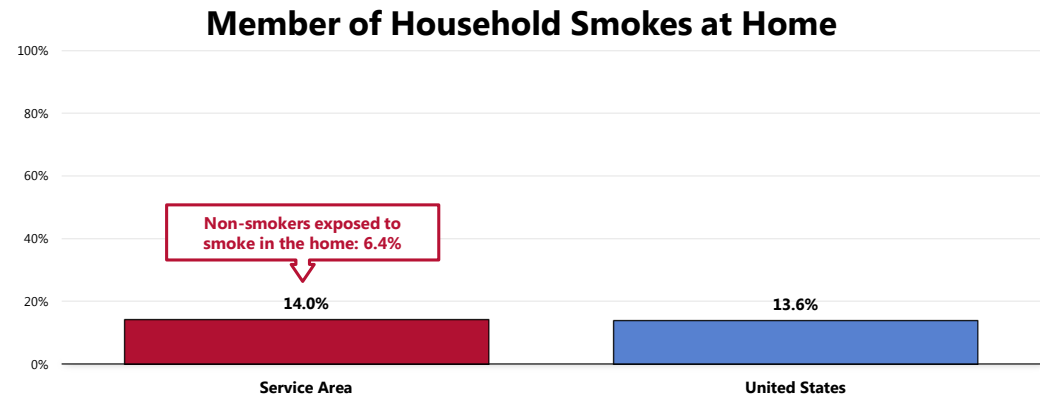


Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 184-185]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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 (everyday and some days).

A total of 14.0% of Service Area adults (including smokers and non-smokers) report that a member of their household has smoked cigarettes in the home an average of four or more times per week over the past month.

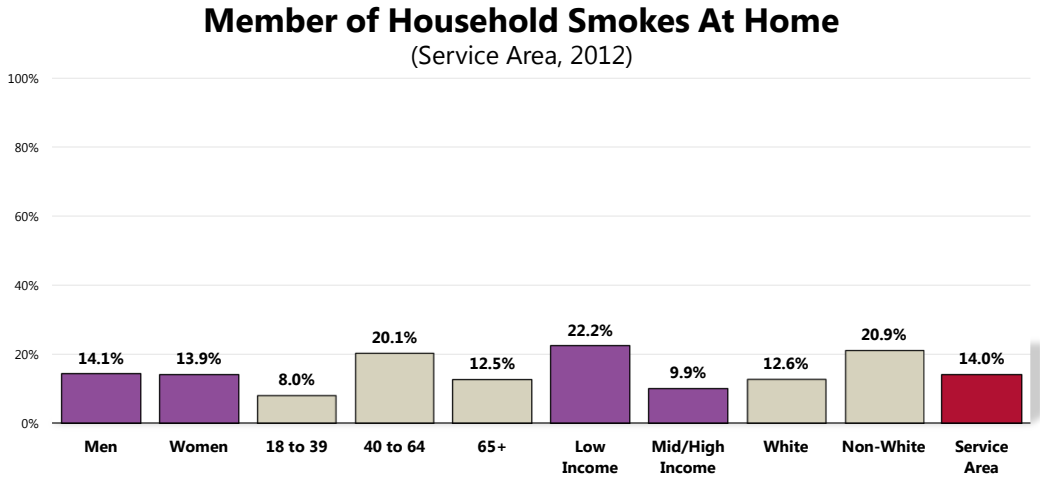
- Comparable to national findings.
- Note that 6.4% of Service Area non-smokers are exposed to cigarette smoke at home.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 64, 186]
- 2011 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.

- Notably higher among residents aged 40 to 64 and those with lower incomes.

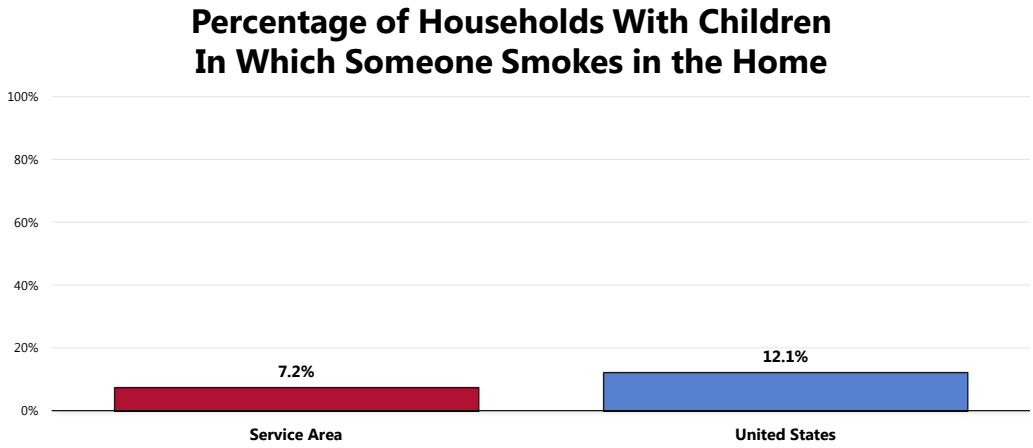


Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 64]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.
- "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.

Among households with children, 7.2% have someone who smokes cigarettes in the home.

- Similar to national findings.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 187]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked among parents of children age 0-17.
• "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.

Smoking Cessation

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.

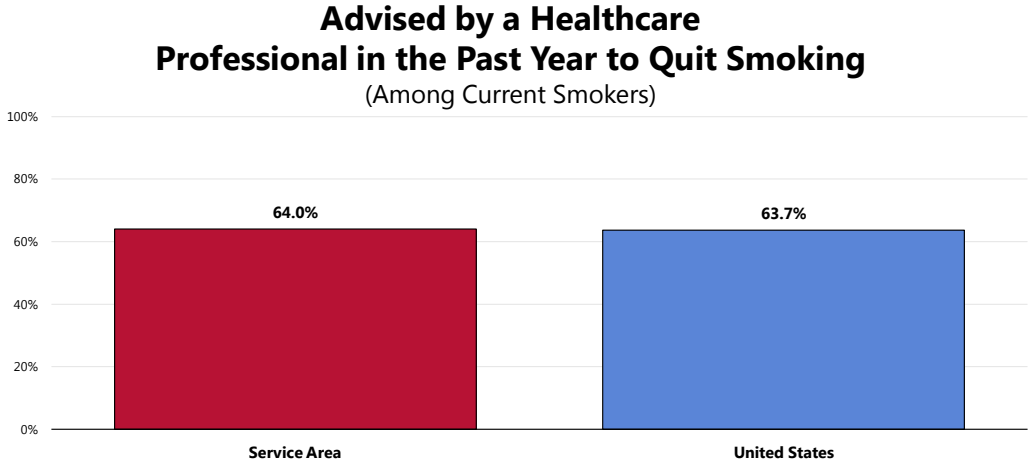
Many factors influence tobacco use, disease, and mortality. Risk factors include race/ethnicity, age, education, and socioeconomic status. Significant disparities in tobacco use exist geographically; such disparities typically result from differences among states in smoke-free protections, tobacco prices, and program funding for tobacco prevention.

– Healthy People 2020 (www.healthypeople.gov)

Health Advice About Smoking Cessation

A total of 64.0% of smokers say that a doctor, nurse or other health professional has recommended in the past year that they quit smoking.

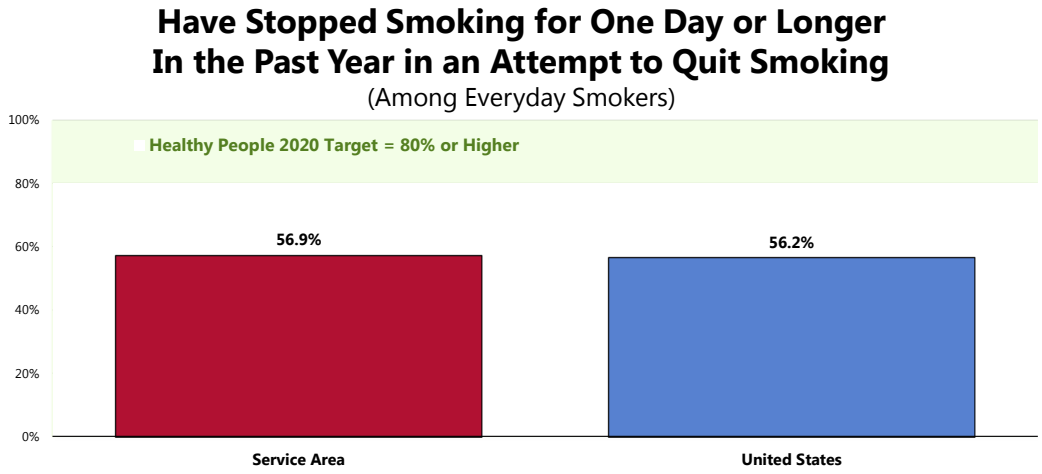
- Comparable to the national percentage.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 63]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all current smokers.

More than one-half (56.9%) of regular smokers went without smoking for one day or longer in the past year because they were trying to quit smoking.

- Similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (80% or higher).



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 62]
- 2011 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]

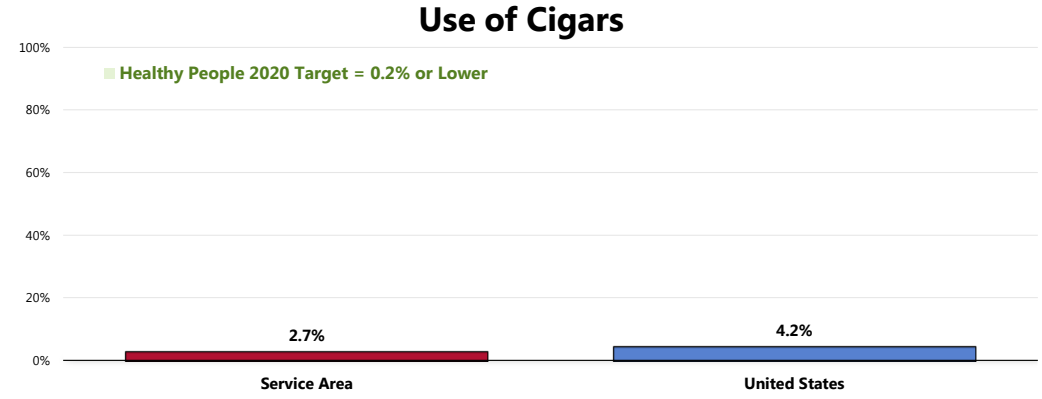
Notes:
- Asked of respondents who smoke cigarettes every day.

Other Tobacco Use

Cigars

A total of 2.7% of Service Area adults use cigars every day or on some days.

- Similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (0.2% or lower).



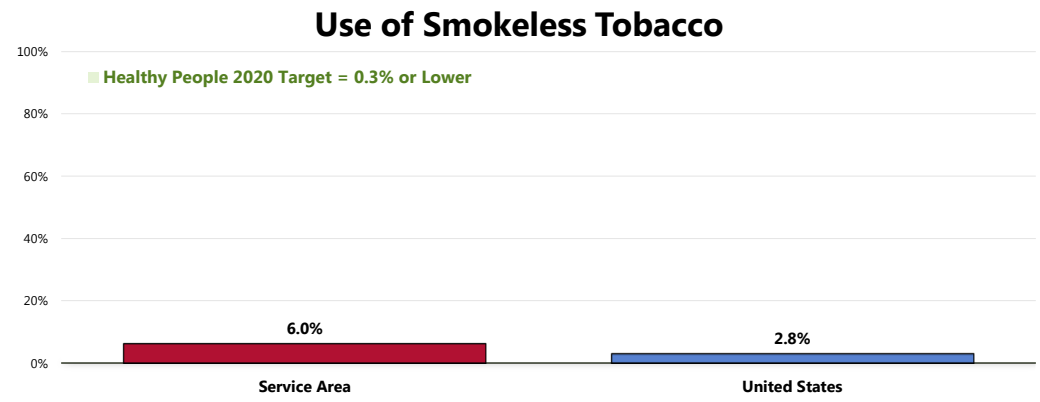
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 66]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.3]

Notes:
- Asked of all respondents.

Smokeless Tobacco

A total of 6.0% of Service Area adults use some type of smokeless tobacco every day or on some days.

- Higher than the national percentage.
- Fails to satisfy the Healthy People 2020 target (0.3% or lower).



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 65]
- 2011 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-1.2]

Notes:
- Asked of all respondents.
- Smokeless tobacco includes chewing tobacco or snuff.

Related Focus Group Findings: Tobacco

Examples of smokeless tobacco include chewing tobacco, snuff, or "snus."

Many focus group participants are concerned with tobacco use in the community, especially among the Native American population. Group attendees worry about the consequences of tobacco use in the community and believe a high percentage of **Native American residents** use tobacco products (some participants estimate nearly half of the population). Participants feel that the overall rates of smoking have decreased because of the state helpline, which provides cessation programs and products at no fee.

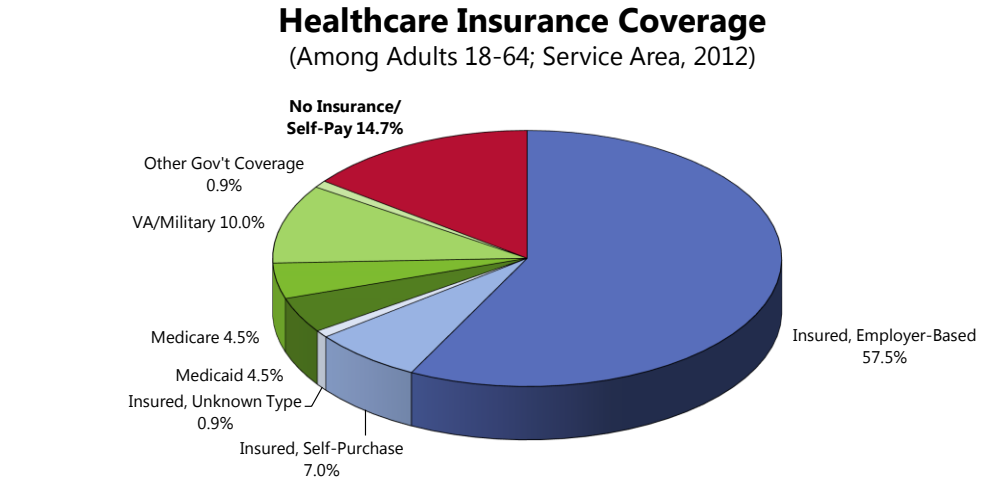
ACCESS TO HEALTH SERVICES

Health Insurance Coverage

Type of Healthcare Coverage

Survey respondents were asked a series of questions to determine their healthcare insurance coverage, if any, from either private or government-sponsored sources.

A total of 65.4% of Service Area adults age 18 to 64 report having healthcare coverage through private insurance. Another 19.9% report coverage through a government-sponsored program (e.g., Medicaid, Medicare, military benefits).

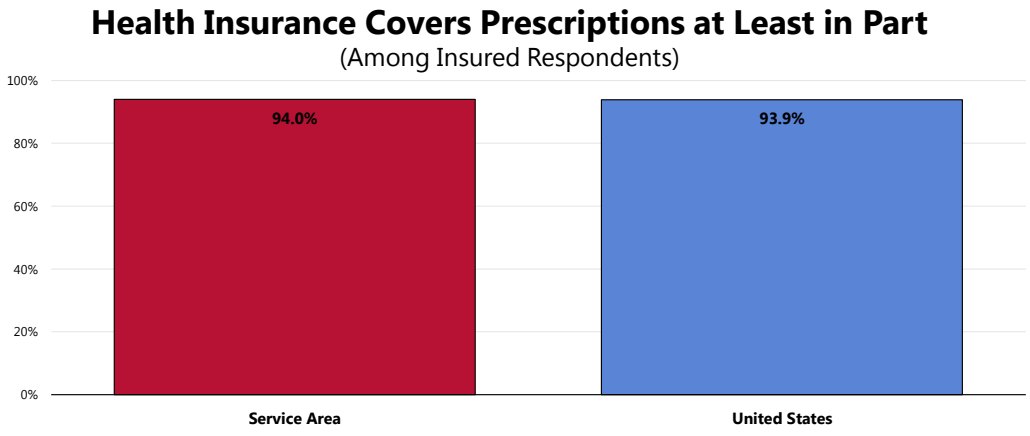


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 192]
Notes: • Reflects respondents age 18 to 64.

Prescription Drug Coverage

Among insured adults, 94.0% report having prescription coverage as part of their insurance plan.

- Nearly identical to the national prevalence.

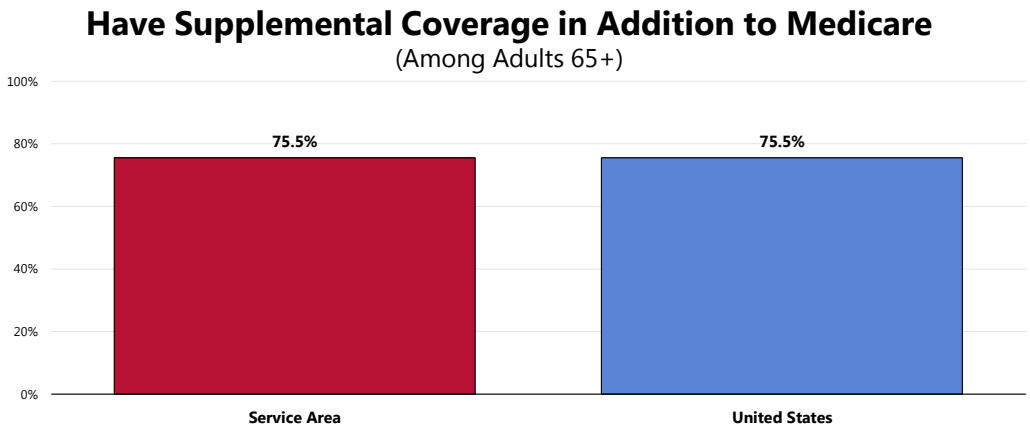


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 87]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents with healthcare insurance coverage.

Supplemental Coverage

Among Medicare recipients, three in four (75.5%) have additional, supplemental healthcare coverage.

- Identical to the prevalence reported among Medicare recipients nationwide.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 86]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

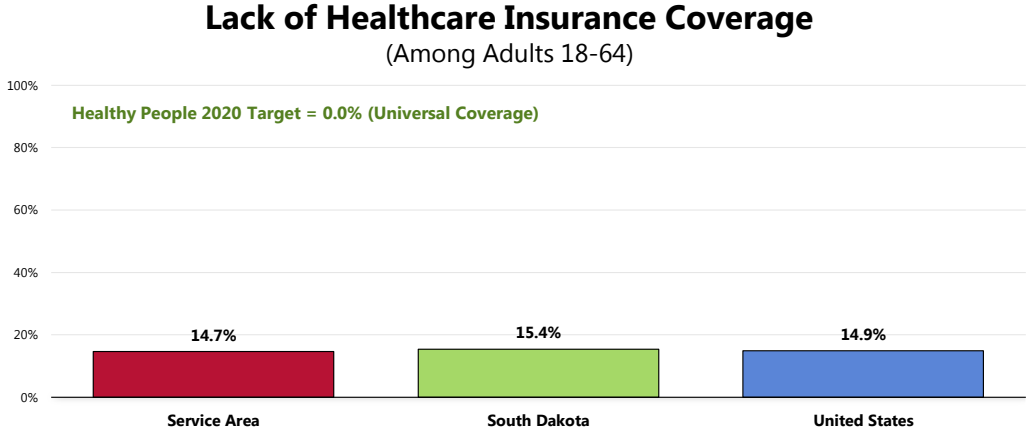
Notes:
- Asked of respondents age 65+.

Lack of Health Insurance Coverage

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).

Among adults age 18 to 64, 14.7% report having no insurance coverage for healthcare expenses.

- Similar to the state finding.
- Similar to the national finding.
- The Healthy People 2020 target is universal coverage (0% uninsured).

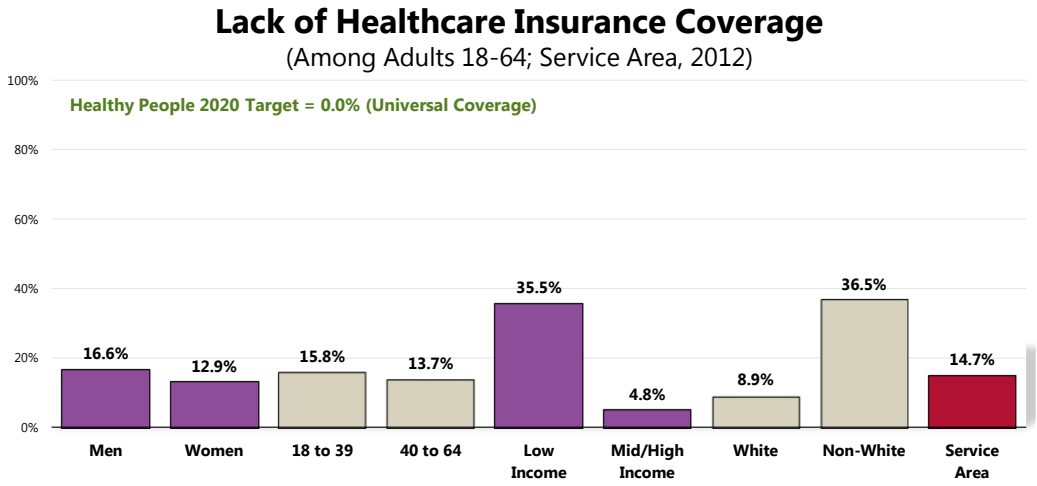


Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 192]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 South Dakota data.
- 2011 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.

The following population segments (aged 18 to 64) are more likely to be without healthcare insurance coverage:

- Residents living at lower incomes (note the 35.5% uninsured prevalence among low-income adults).
- Non-Whites (36.5%).



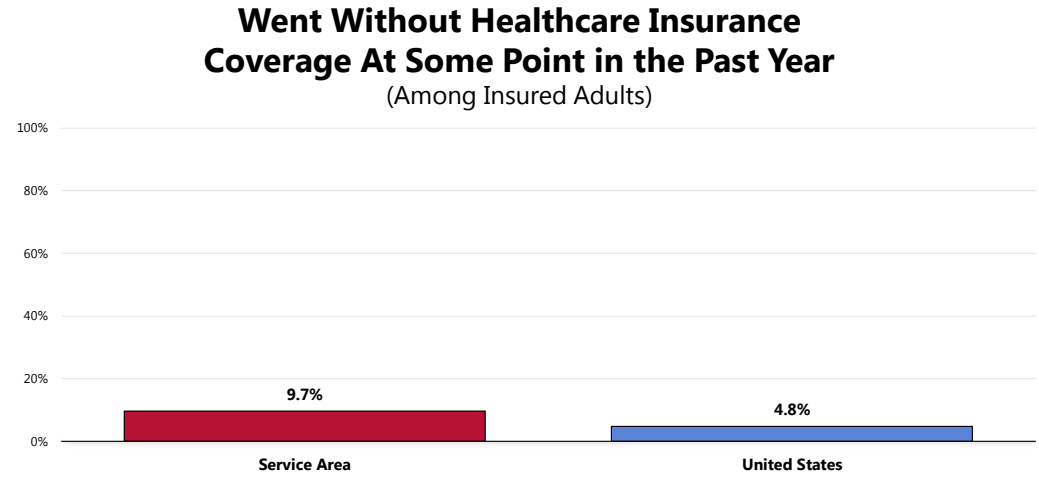
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 192]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]

Notes:
- Asked of all respondents under the age of 65.
- Hispanics can be of any race; "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.

Recent Lack of Coverage (Insurance Instability)

Among currently insured adults in the Service Area, 9.7% report that they were without healthcare coverage at some point in the past year.

- Twice the US prevalence.



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 88]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all insured respondents.

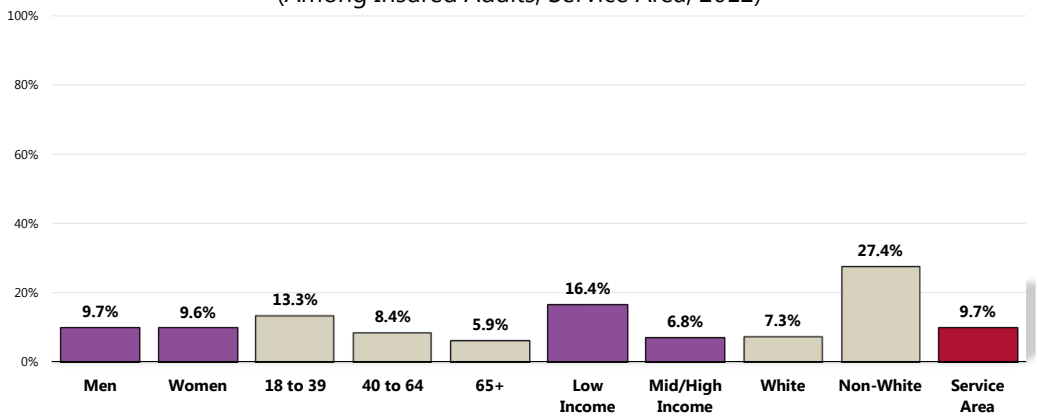
Among insured adults, the following segments are more likely to have gone without healthcare insurance coverage at some point in the past year:

- Adults under age 40 (note the negative correlation with age).
- Low-income residents.

Non-Whites.

Went Without Healthcare Insurance Coverage At Some Point in the Past Year

(Among Insured Adults; Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 88]

Notes:
- Asked of all insured respondents.
- Hispanics can be of any race; "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

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)

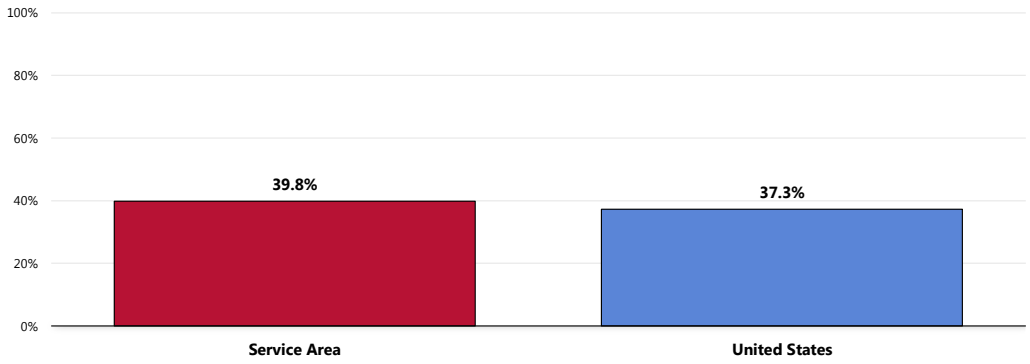
Difficulties Accessing Services

This indicator reflects the percentage of the total population experiencing problems accessing healthcare in the past year, regardless of whether they needed or sought care.

A total of 39.8% of Service Area adults report some type of difficulty or delay in obtaining healthcare services in the past year.

- Comparable to national findings.

Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 196]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

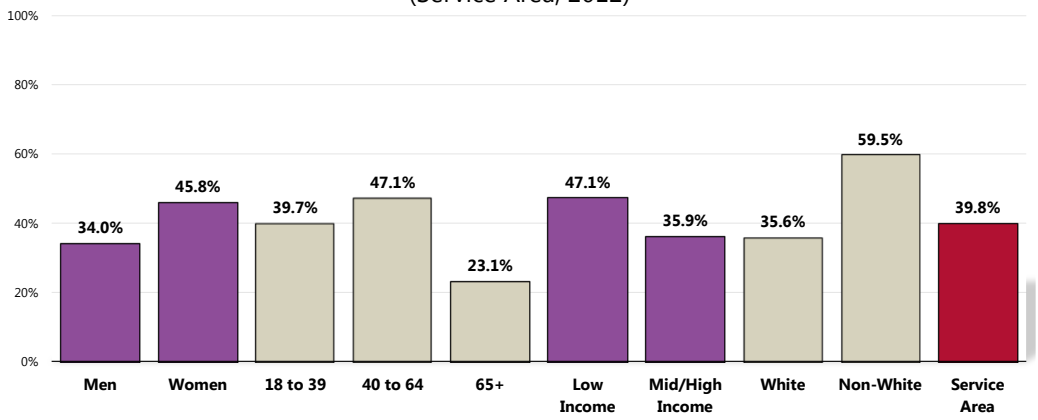
Notes:
- Asked of all respondents.
- Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.

Note that the following demographic groups more often report difficulties accessing healthcare services:

- Women.
- Adults under the age of 65.
- Low-income residents.
- Non-Whites.

Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 196]

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; "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.

Barriers to Healthcare Access

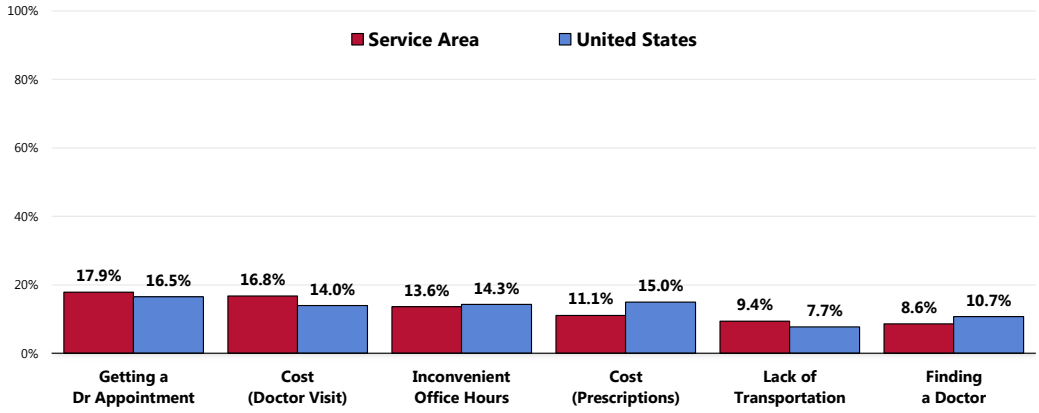
To better understand healthcare access barriers, survey participants were asked whether any of six types of barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

Again, these percentages reflect the total population, regardless of whether medical care was needed or sought.

Of the tested barriers, difficulty getting a medical appointment impacted the greatest share of Service Area adults (17.9% experienced difficulty obtaining an appointment in the past year).

- The proportion of Service Area adults impacted was statistically comparable to or better than that found nationwide for **each** of the tested barriers.

Barriers to Access Have Prevented Medical Care in the Past Year



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-12]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

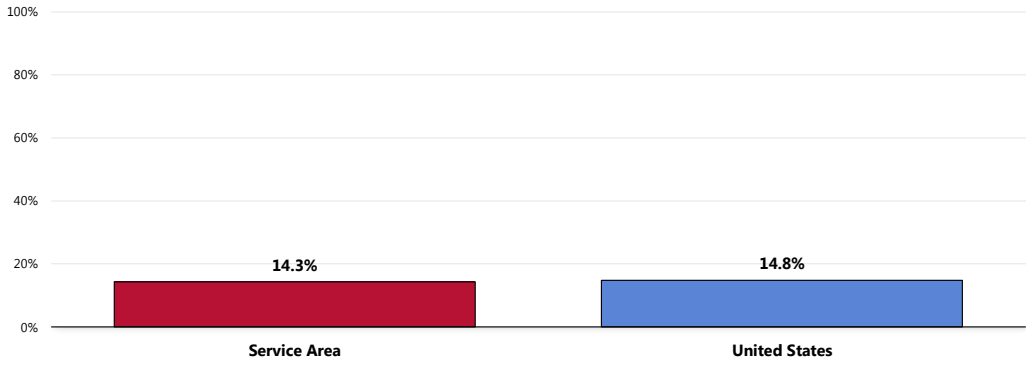
Notes:
- Asked of all respondents.

Prescriptions

Among all Service Area adults, 14.3% skipped or reduced medication doses in the past year in order to stretch a prescription and save money.

- Similar to national findings.

Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money



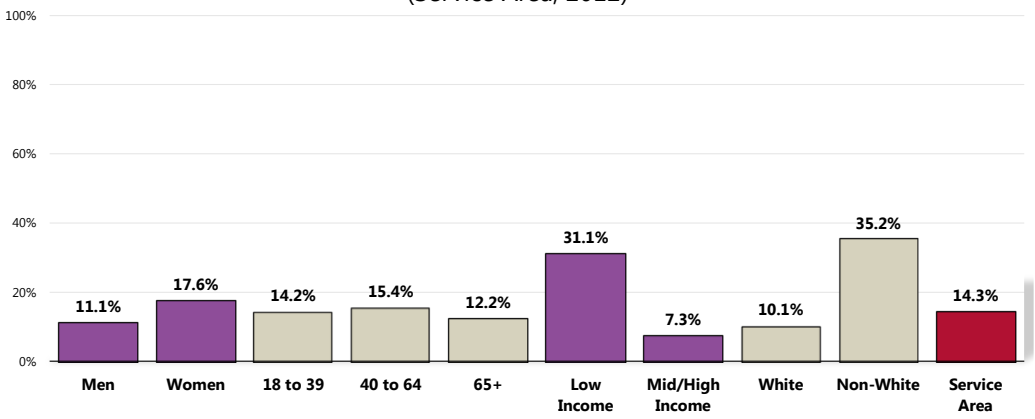
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Adults more likely to have skipped or reduced their prescription doses include:

- Women.
- Respondents in low-income households.
- Non-Whites.

Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money

(Service Area, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "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.

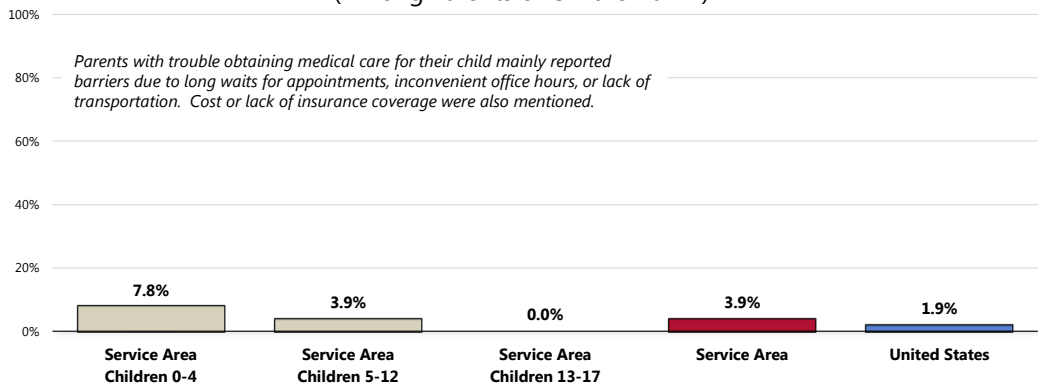
Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly-selected child in their household.

A total of 3.9% of parents say there was a time in the past year when they needed medical care for their child, but were unable to get it.

- Statistically similar to what is reported nationwide.
- Note the negative correlation with the child's age.

Had Trouble Obtaining Medical Care for Child in the Past Year

(Among Parents of Children 0-17)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 125-126]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents with children 0 to 17 in the household.

Among the parents experiencing difficulties, the majority cited long **waits** for appointments, inconvenient office **hours**, or lack of **transportation**. Cost or a lack of insurance were also mentioned.

Related Focus Group Findings: Access to Healthcare Services

Many focus group participants are concerned with access to healthcare. The main issues discussed include:

- Barriers to accessing healthcare
  - *Insurance status*
  - *Cost*
  - *Complexity of healthcare system*
  - *Transportation*
- Emergency room overutilization

Focus group participants describe the overall Black Hills region as having many healthcare resources, but agree that the Native American reservations suffer from access barriers and worse health outcomes than the general population. Attendees believe that even with the considerable amount of healthcare options, residents encounter several **barriers** when trying to **access healthcare services** in the Black Hills region. Many times **insurance status and carrier** determine whether a resident can obtain routine medical treatment in a timely manner. Even residents with government insurance struggle to

access care because of the limited number of physicians accepting new Medicaid patients due to low reimbursement rates.

In addition, focus group members describe many residents as under- or uninsured. The underinsured population includes the working poor: those individuals who may qualify for employer insurance but the deductibles are too high or the co-payment is too much, so they elect to go without. For under-insured residents, actually qualifying for health-care assistance programs may be the greatest barrier:

> *"People frequently tell me that there are so many different programs and each one has its requirements, its certain eligibility. There are some people that just don't seem to fit into any of them and they're usually the middle class or the lower middle class who still can't afford health insurance, and their income is just above being eligible for Medicaid or any of those other programs. People just get tired of filling out paperwork and they'd just rather not do anything more. It's just a lot of frustration that I get feedback on."*

Within the Black Hills region, many jobs offer low wages. For low-income residents, **cost** of healthcare can become a barrier:

> *"We have a lot of services for people who don't have health insurance, but when they go through the system they get stuck with, 'Well you have to pay part of this and you have to pay part of that', and they can't afford that."*

Another participant describes how the lack of well-paying jobs and benefitted positions negatively affects the community:

> *"I'm one of those people that we keep talking about that are kind of in the middle. I have good paying jobs and don't do too badly, however I don't quite do well enough. If I want to go up to that next level and be able to afford things like healthcare I have to move out of this community. So now this community loses also because I have an education and I'm contributing to that greater good and that potential, but I may have to leave because that's the only way I'm going to advance my position in life and be able to provide better for my family."*

Several local options exist for under-insured and uninsured residents. These options include the Community Health Center, Indian Health Services, Veteran's Administration, hospitals and community health nurses. The Community Health Center is located in north Rapid City; it offers preventive care services and reduced (or free) prescription medication. Good Shepherd in Spearfish is another free clinic. Indian Health Services can be accessed by residents who can demonstrate a degree of Indian blood. However, participants agree that the paperwork and **complexity of the healthcare system** continue to deter residents from accessing care, as a participant explains:

> *"What we've seen in the last few years is you have those families who are really falling into poverty whether it's a temporary move or not, but they don't know those rules. They don't know how the system works and all the systems are fragmented and you're right, they all have their own rules. If you don't understand the rules of that game it is very, very frustrating for families who've never had to ask for assistance before and are trying to figure out all of these different systems to access and utilize."*

Focus group attendees believe that some community members have turned their frustration with the healthcare system into complacency, as a participant describes:

> *"So in their mindset it's hopeless. They (the healthcare system) can't meet my needs right now, so they're not going to be able to meet any needs down the road. So they become complacent probably in their own right because of maybe one bad experience."*

Participants also view transportation as an obstacle to accessing healthcare and other services. Medicaid recipients can utilize Medicaid cabs or Dial-A-Ride, but residents must provide a few days' notice and it may become an all-day experience. For residents with disabilities this option is not sufficient; one attendee recalls her father's experience:

> *"You have to call a few days in advance, you have to be ready two hours before your appointment, then you have to possibly wait two hours after your appointment and they're hoping that they're going to get you there on time. My dad's a double amputee and so it's not as easy you can get on and off very fast. Needless to say he doesn't do that."*

In addition, a public bus system also operates throughout Rapid City and certain populations (homeless) can qualify for free bus passes, but the bus serves limited routes. Another transportation option for residents in Shannon County includes a shuttle, which runs from Shannon to Pennington County and to the Indian Health Services hospital.

Respondents report that both Medicaid recipients and uninsured residents **over-utilize the emergency room**. Attendees describe the culture in the Black Hills region as one in which residents use the emergency room like a primary care provider office, but participants realize an emergency room does not represent the most appropriate setting for routine healthcare services. For those with Medicaid, the ER represents the no-cost option.

Primary Care Services

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)

Specific Source of Ongoing Care

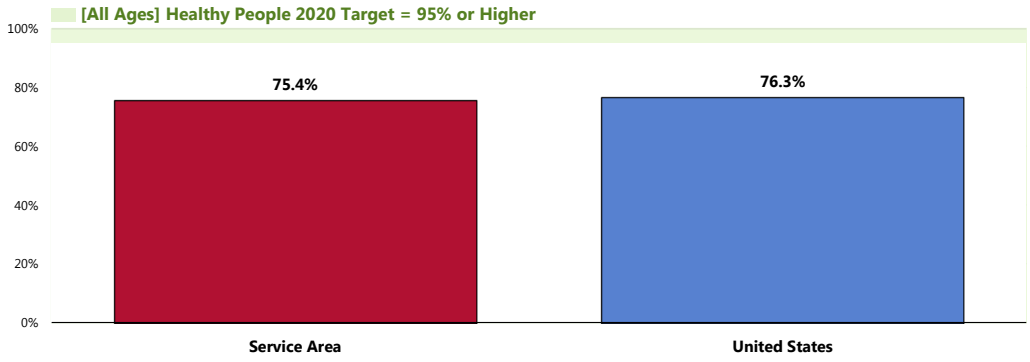
Having a specific source of ongoing care includes having a doctor's office, clinic, urgent care center, walk-in clinic, health center facility, hospital outpatient clinic, HMO or prepaid group, military/VA clinic, or some other kind of place to go if one is sick or needs advice about his or her health. This resource is also known as a "medical home."

A hospital emergency room is not considered a source of ongoing care in this instance.

A total of 75.4% of Service Area adults were determined to have a specific source of ongoing medical care (a "medical home").

- Similar to national findings.
- Fails to satisfy the Healthy People 2010 objective (95% or higher).

Have a Specific Source of Ongoing Medical Care



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 193]
- 2011 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.

When viewed by demographic characteristics, the following population segments are less likely to have a specific source of care:

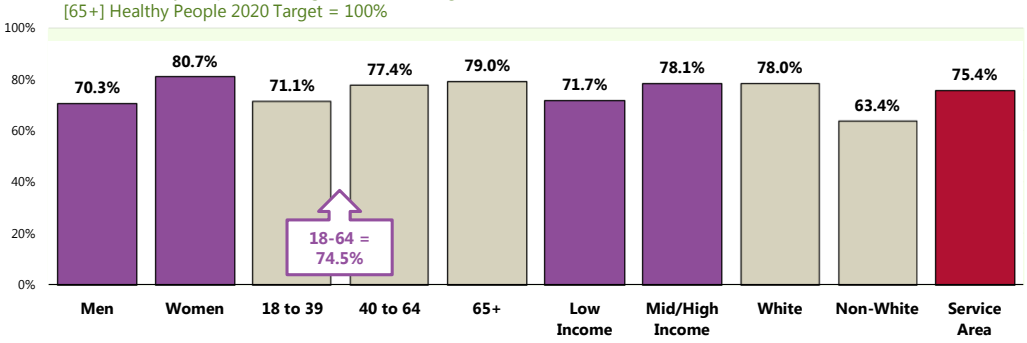
- Men.
- Non-Whites.
- Among adults age 18-64, 74.5% have a specific source for ongoing medical care, comparable to national findings.
  - Fails to satisfy the Healthy People 2020 target for this age group (89.4% or higher).

- Among adults 65+, 79.0% have a specific source for care, similar to the percentage reported among seniors nationally.
  - Fails to satisfy the Healthy People 2020 target of 100% for seniors.

Have a Specific Source of Ongoing Medical Care

(Service Area, 2012)

[All Ages] Healthy People 2020 Target = 95.0% or Higher
[18-64] Healthy People 2020 Target = 89.4% or Higher
[65+] Healthy People 2020 Target = 100%



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 193-195]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives AHS-5.1, 5.3, 5.4]

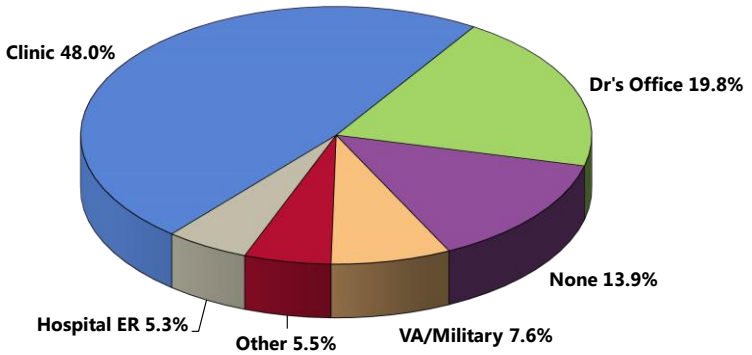
Notes:
- Asked of all respondents.
- Hispanics can be of any race; "White" reflects non-Hispanic White respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200%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

Type of Place Used for Medical Care

When asked where they usually go if they are sick or need advice about their health, the greatest share of respondents (48.0%) identified some type of clinic. A total of 19.8% say they usually go to a particular doctor's office, while 7.6% rely on VA/military care and 5.3% seek medical care in a hospital emergency room.

Particular Place Utilized for Medical Care

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 15-16]

Notes:
- Asked of all respondents.

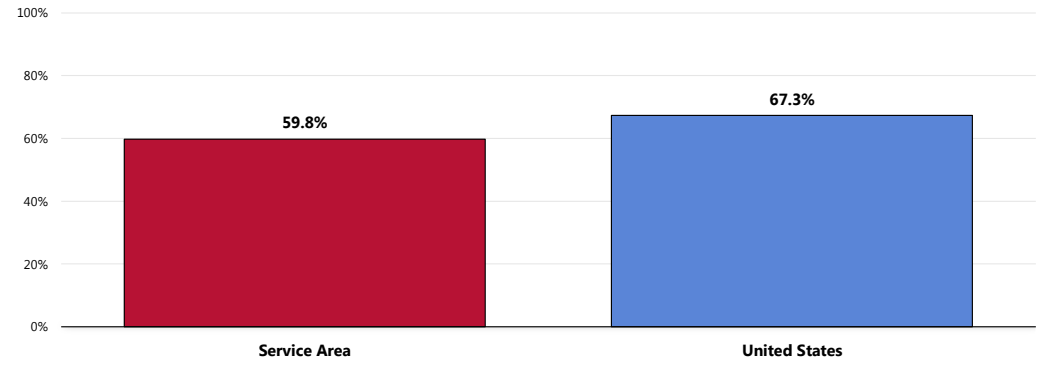
Utilization of Primary Care Services

Adults

A total of 6 in 10 (59.8%) adults visited a physician for a routine checkup in the past year.

- Lower than the national figure.

Have Visited a Physician for a Checkup in the Past Year



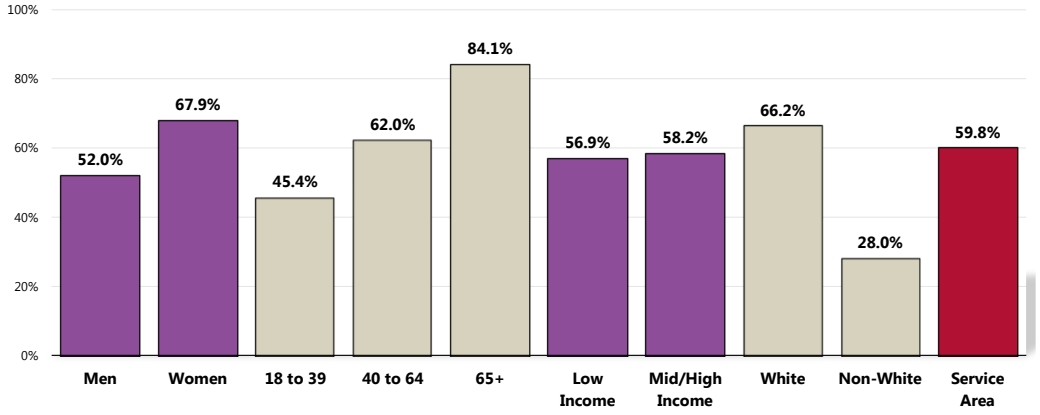
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 17]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Men, young adults and Non-Whites are less likely to have received routine care in the past year (note the positive correlation with age).

Have Visited a Physician for a Checkup in the Past Year

(Service Area, 2012)



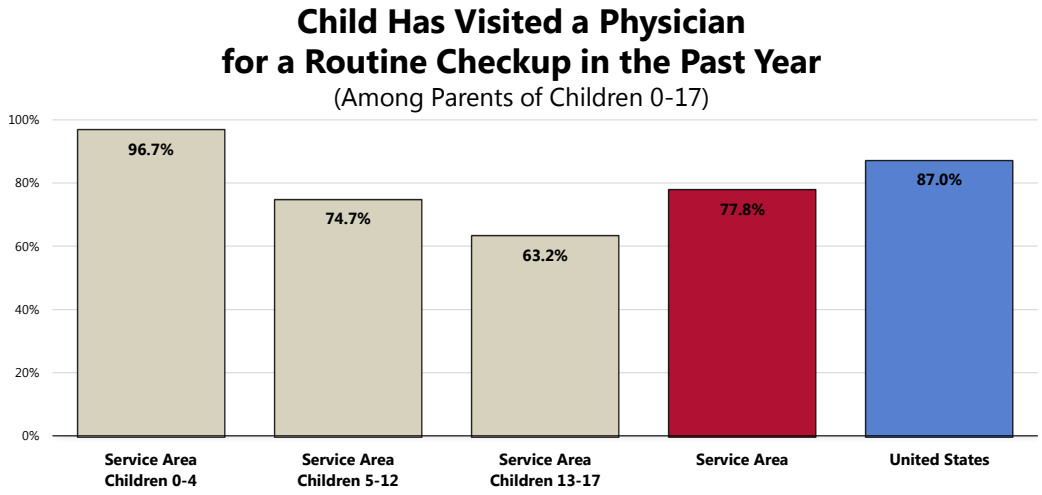
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 17]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.

Children

Among surveyed parents, 77.8% report that their child has had a routine checkup in the past year.

- Lower than national findings.
- Note that routine checkups are highest in the Service Area among children under age 5 (negative correlation with age).



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 127]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents with children 0 to 17 in the household.

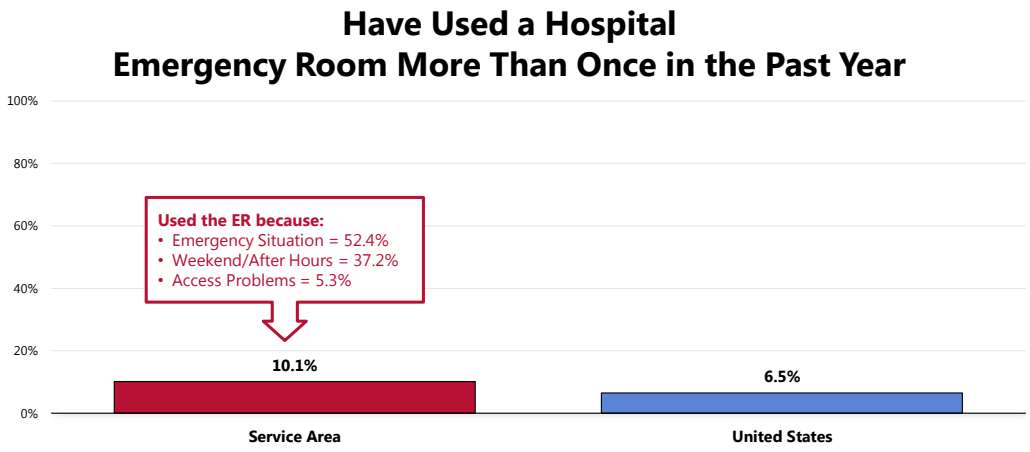
Related Focus Group Findings: Specialists

Most of the focus group participants agree that the Black Hills region would benefit from **additional specialists**, including dentists, rheumatologists, pulmonologists, psychiatrists, psychologists, special needs pediatricians and geneticists.

Emergency Room Utilization

A total of 10.1% of Service Area adults have gone to a hospital emergency room more than once in the past year about their own health.

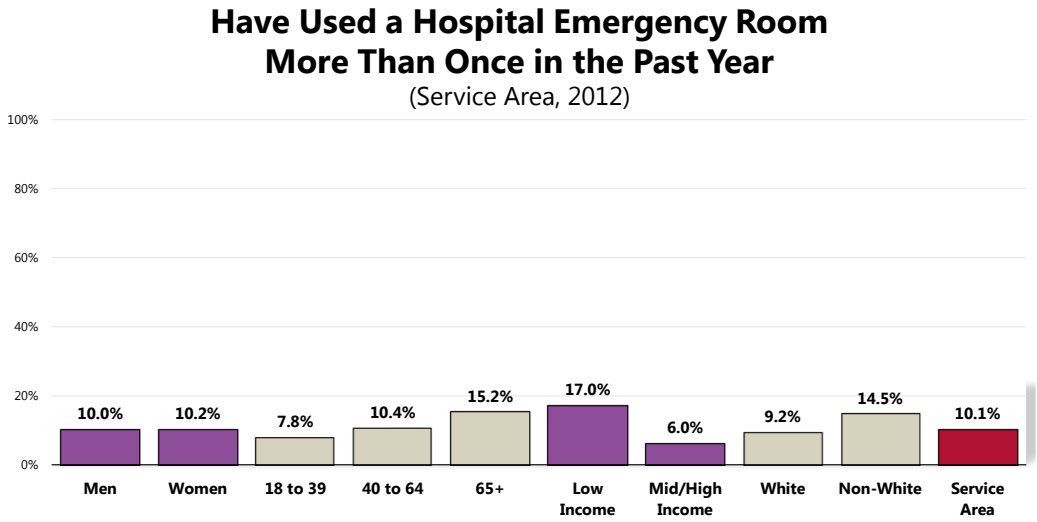
- Higher than national findings.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 23-24]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Of those using a hospital ER, 52.4% say this was due to an **emergency or life-threatening situation**, while 37.2% indicated that the visit was during **after-hours or on the weekend**. A total of 5.3% cited **difficulties accessing primary care** for various reasons.

ER use is statistically high among residents in low-income households.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 23]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "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.

Oral Health

The health of the mouth and surrounding craniofacial (skull and face) structures is central to a person's overall health and well-being. Oral and craniofacial diseases and conditions include: dental caries (tooth decay); periodontal (gum) diseases; cleft lip and palate; oral and facial pain; and oral and pharyngeal (mouth and throat) cancers.

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.

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
- Poor dietary choices

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
- 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.

Community water fluoridation and school-based dental sealant programs are 2 leading evidence-based interventions to prevent tooth decay.

Major improvements have occurred in the nation's oral health, but some challenges remain and new concerns have emerged. One important emerging oral health issue is the increase of tooth decay in preschool children. A recent CDC publication reported that, over the past decade, dental caries (tooth decay) in children ages 2 to 5 have increased.

Lack of access to dental care for all ages remains a public health challenge. This issue was highlighted in a 2008 Government Accountability Office (GAO) report that described difficulties in accessing dental care for low-income children. In addition, the Institute of Medicine (IOM) has convened an expert panel to evaluate factors that influence access to dental care.

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)

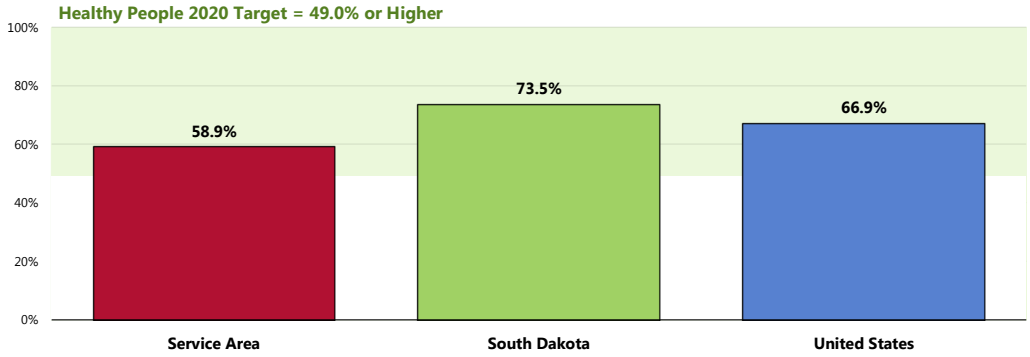
Dental Care

Adults

Just under 6 in 10 Service Area adults (58.9%) have visited a dentist or dental clinic (for any reason) in the past year.

- Lower than statewide findings.
- Lower than national findings.
- Satisfies the Healthy People 2020 target (49% or higher).

Have Visited a Dentist or Dental Clinic Within the Past Year



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 21]
- 2011 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]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2010 South Dakota data.

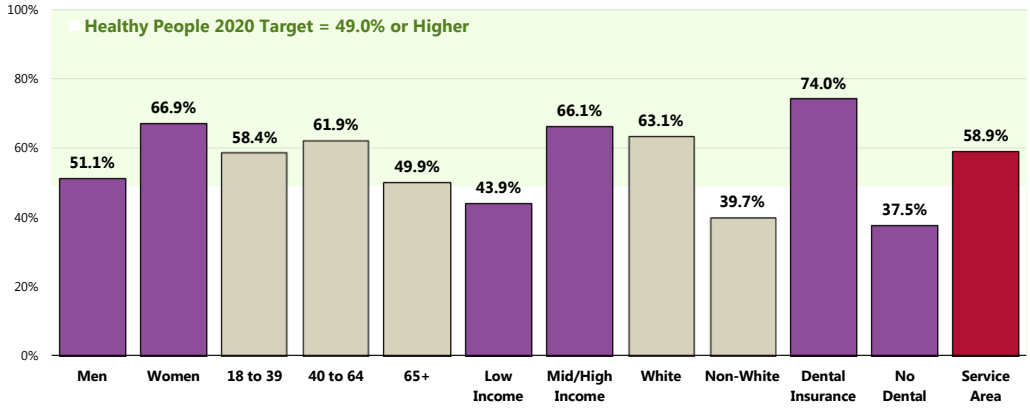
Notes:
- Asked of all respondents.

The following population segments are <u>less likely</u> to report recent dental visits:

- Men.
- Seniors.
- Persons living in low-income households.
- Non-Whites.
- Adults without dental insurance.

Have Visited a Dentist or Dental Clinic Within the Past Year

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 21]
- 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; "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.

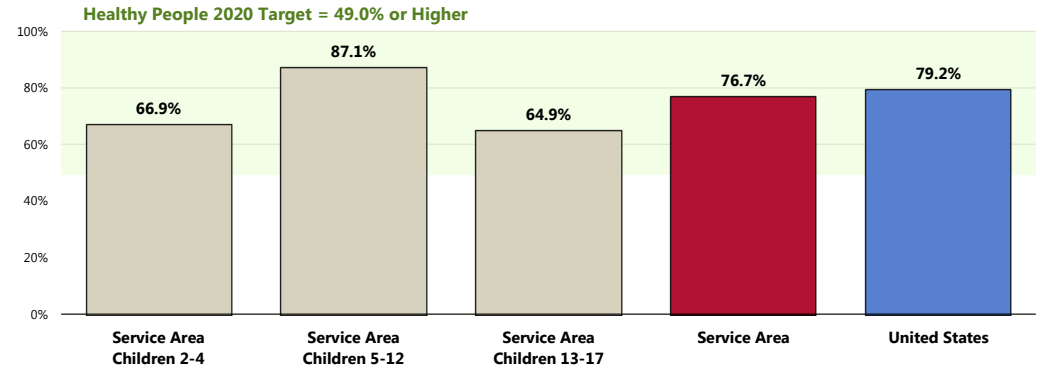
Children

A total of 76.7% of parents report that their child (age 2 to 17) has been to a dentist or dental clinic within the past year.

- Comparable to national findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- Regular dental care is highest among children age 5 to 12.

Child Has Visited a Dentist or Dental Clinic Within the Past Year

(Among Parents of Children 2-17)



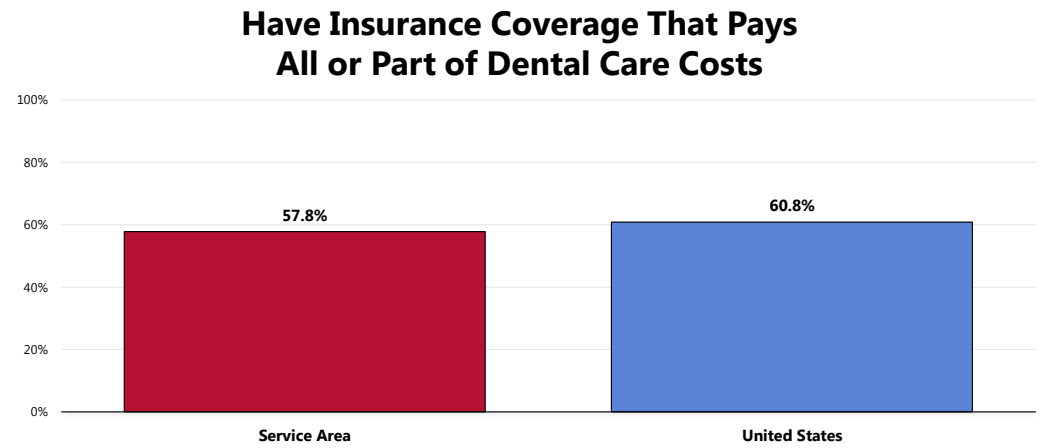
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 128]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

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

Dental Insurance

Over one-half of Service Area adults (57.8%) have dental insurance that covers all or part of their dental care costs.

- Similar to the national finding.



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 22]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Related Focus Group Findings: Oral Health

Many focus group participants discussed oral health in the community. The main issues discussed surrounding oral health included:

- Importance of regular preventative dental care
- Dental insurance

The effects of poor oral health are myriad: focus group participants agree that neglect of oral health can result in a significant decrease to a person's overall health. In children, the prevalence of poor oral health can even lead to low learning outcomes. Attendees recognize the **importance of regular preventative dental care**; however, many residents face barriers in accessing dental treatment.

Many dentists in the Black Hills Region are reaching retirement age, and currently the community does not employ many young dentists and there is no dental school to offer a system for replacement dentists. For Medicaid recipients, finding a provider to accept their insurance can prove troublesome due to the low reimbursement rates. An attendee explains the shortfalls of Medicaid coverage:

> *"I get on average two calls a week for people needing help with payment of dentures because they don't have the insurance. We pay Medicaid rates and I just did one this morning and what Medicaid pays is less than half of what the dentist costs are. Much less than half. The state has put some caps with Medicaid for adults- they'll only pay $1,000.00 now of dental work, so that wouldn't even pay for dentures."*

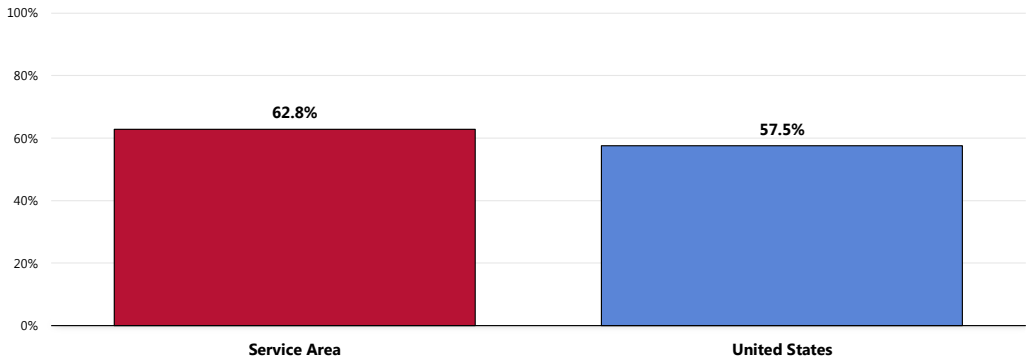
For other low-income residents without **dental insurance**, many cannot afford basic care and do not receive any dental care. The Community Health Center offers limited dental treatment, but it mainly provides emergency dental care. A dental van provides services to the rural communities every six months, but that service does not satisfy the need.

Vision Care

A total of 62.8% of residents had an eye exam in the past two years during which their pupils were dilated.

- Statistically higher than national findings.

Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

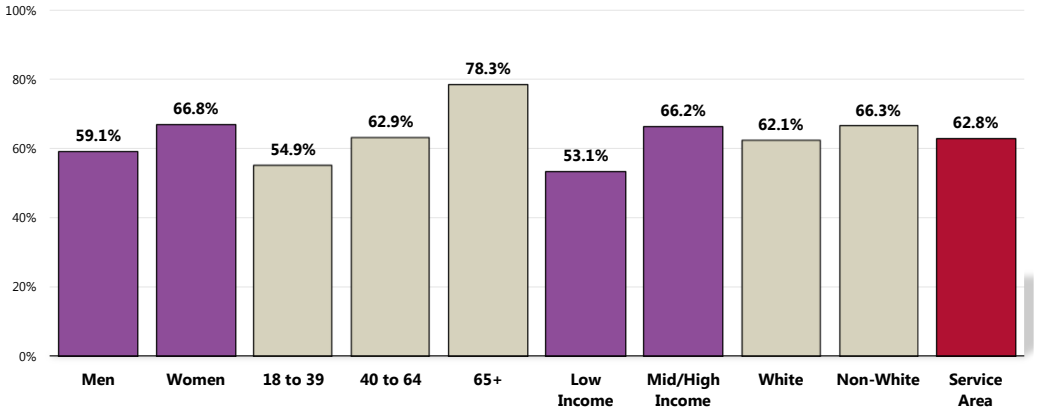
RELATED ISSUE:
See also *Vision & Hearing* in the **Deaths & Disease** section of this report.

Recent vision care in the Service Area is less often reported among:

- Adults under 65 (note the positive correlation with age).
- Residents in low-income households.

Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.

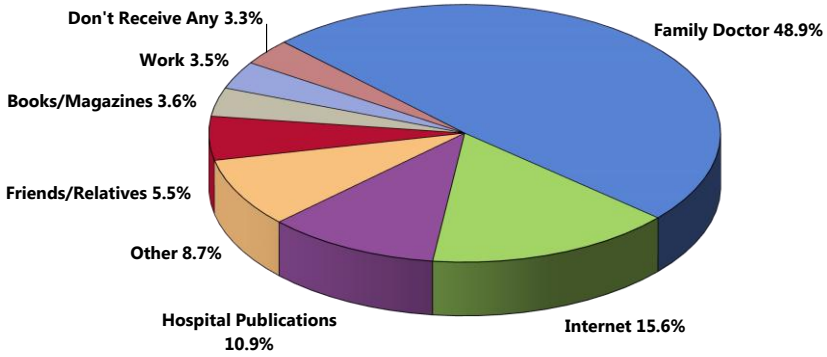
HEALTH EDUCATION & OUTREACH

Healthcare Information Sources

Family physicians and the Internet are residents' primary sources of healthcare information.

- 48.9% of Service Area adults cited their **family physician** as their primary source of healthcare information.
- The **Internet** received the second-highest response, with 15.6%.
  - Other sources mentioned include hospital publications (10.9%), friends and relatives (5.5%), books and magazines (3.6%) and work (3.5%).
- A total of 3.3% of survey respondents say that they do not receive any healthcare information.

Primary Source of Healthcare Information
(Service Area, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 118]
Notes: • Asked of all respondents.

Participation in Health Promotion Events

Educational and community-based programs play a key role in preventing disease and injury, improving health, and enhancing quality of life.

Health status and related-health behaviors are determined by influences at multiple levels: personal, organizational/institutional, environmental, and policy. Because significant and dynamic interrelationships exist among these different levels of health determinants, educational and community-based programs are most likely to succeed in improving health and wellness when they address influences at all levels and in a variety of environments/settings.

Education and community-based programs and strategies are designed to reach people outside of traditional healthcare settings. These settings may include schools, worksites, healthcare facilities, and/or communities.

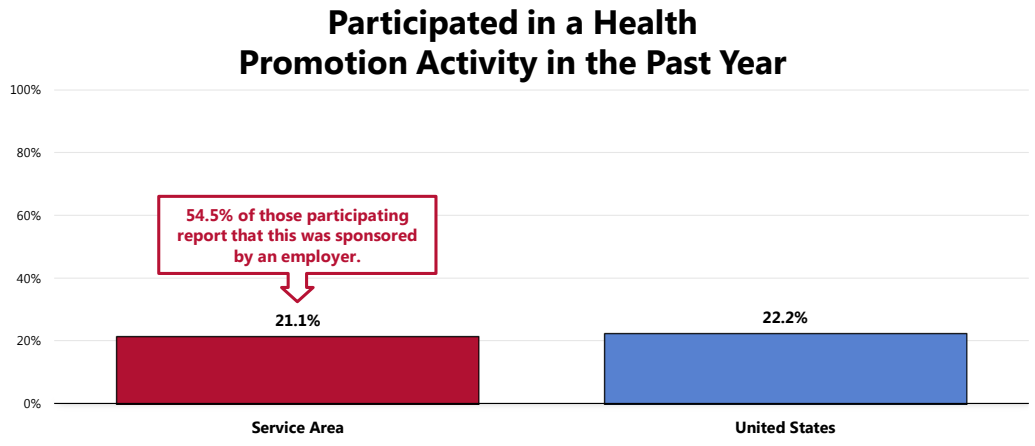
Using nontraditional settings can help encourage informal information sharing within communities through peer social interaction. Reaching out to people in different settings also allows for greater tailoring of health information and education.

Educational and community-based programs encourage and enhance health and wellness by educating communities on topics such as: chronic diseases; injury and violence prevention; mental illness/behavioral health; unintended pregnancy; oral health; tobacco use; substance abuse; nutrition; and obesity prevention.

– Healthy People 2020 (www.healthypeople.gov)

A total of 21.1% of Service Area adults participated in some type of organized health promotion activity in the past year, such as health fairs, health screenings, or seminars.

- Similar to the national prevalence.
- Note that 54.5% of adults who participated in a health promotion activity in the past year indicate that it was sponsored by their employer.



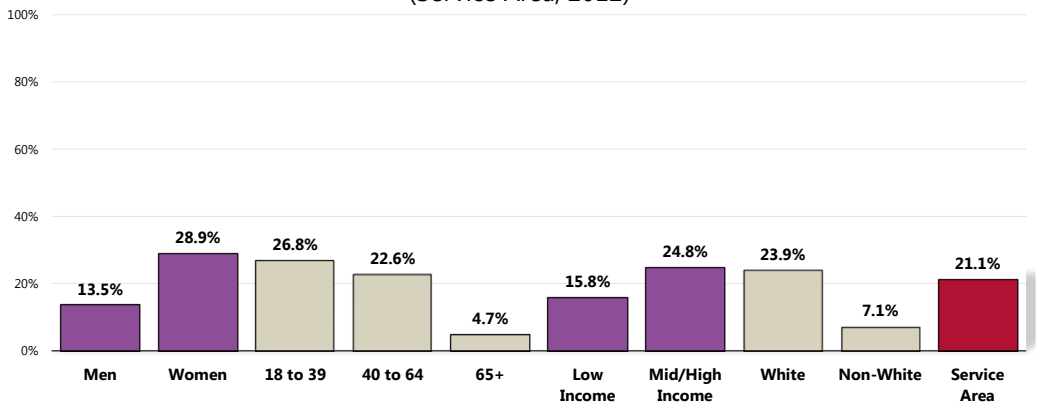
Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 119-120]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

The following residents are less likely to report participation in health promotion activities:

- Men.
- Seniors (note the negative correlation with age).
- Adults in low-income households.
- Non-Whites.

Participated in a Health Promotion Activity in the Past Year
(Service Area, 2012)



Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 119]
Notes: • Asked of all respondents.
• Hispanics can be of any race; "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.

Related Focus Group Findings: Collaboration

Participants spent time discussing the varying levels of collaboration occurring in the community between non-profit organizations, schools, healthcare providers and hospitals. The themes surrounding collaboration were:

- Excellent collaboration
- Challenges include:
  - *Funding*
  - *Schools*
  - *VA*
  - *Indian Health Services (IHS)*

Attendees report that **excellent collaboration** occurs in the Black Hills region and it has improved greatly in the past few years. Several participants spoke about the coordination occurring among non-profit organizations and the larger healthcare system in order to provide high quality healthcare to the community. The United Way also helps connect agencies and residents to meet their needs, as a participant describes:

> *"When someone calls United Way and says 'I need transportation to get my child to the doctor', then we're able to pull up every resource possible within a five-mile radius of where that person is calling from and let them know what is available. So the other piece of that awareness is also*

> *making sure that the organizations and agencies that offer those services know to update 2-11 so that we can get those services out there to people."*

For non-profit agencies, regular collaboration efforts help to discourage or eliminate duplicative services and maintain the most fiscally-responsible programs. The Community Service Connect represents a very successful collaborative effort. This coalition is comprised of a variety of agencies and it offers many networking opportunities for members.

Other participants recognize that collaboration does not occur without challenges, including **decreased funding levels** and the difficulties sometimes associated with **building relationships with the school system, Veteran's Administration (VA)** and **Indian Health Services.** Participants believe that the state budget cuts and the overall low level of funding affect agencies' ability to collaborate; however, as one participant recalls, real change in the behavioral healthcare realm could not have occurred without the efforts on behalf of many local agencies:

> *"We're always fighting the same thing: everybody is fighting with funding to keep our programs going, but we would not have a crisis care center in this community had we not collaborated as a mental health community. We would not have finally seen the rate of suicide finally come down for the first time ever had we not done a lot of those things."*

Participants report that collaboration with the school systems remains frustrating because the relationship between non-profit agencies and school systems depend greatly on individual administrations. The VA and IHS representatives are also not always present during coalition or collaboration meetings, so it can be difficult to facilitate coordination.

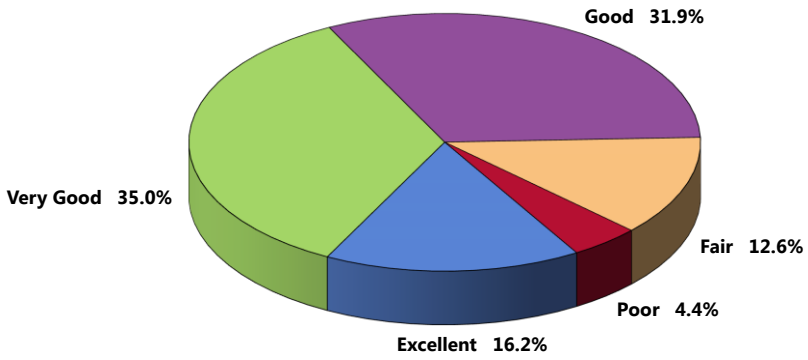
LOCAL HEALTHCARE

Perceptions of Local Healthcare Services

Just over one-half of Service Area adults (51.2%) rate the overall healthcare services available in their community as "excellent" or "very good."

- Another 31.9% gave "good" ratings.

Rating of Overall Healthcare Services Available in the Community
(Service Area, 2012)

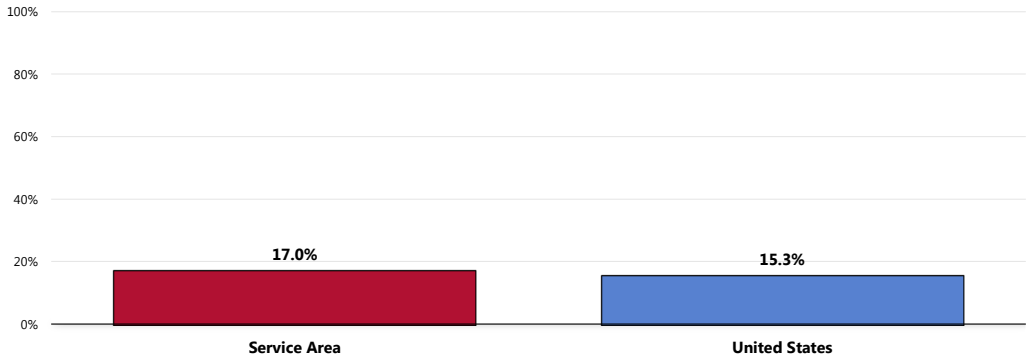


Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]
Notes: • Asked of all respondents.

However, 17.0% of residents characterize local healthcare services as "fair" or "poor."

- Comparable to that reported nationally.

Perceive Local Healthcare Services as "Fair/Poor"



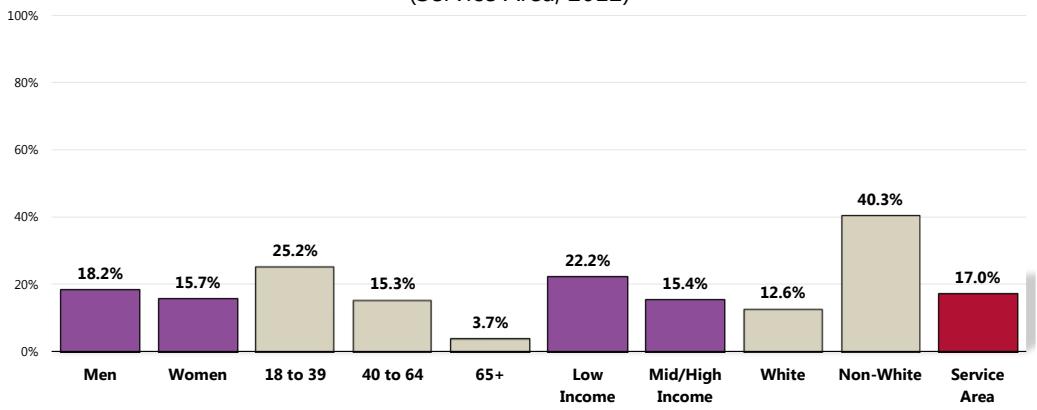
Sources: • 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

The following residents are more critical of local healthcare services:

- Adults under age 65 (note the negative correlation with age).
- Non-Whites.

Perceive Local Healthcare Services as "Fair/Poor"

(Service Area, 2012)



Sources:
- 2012 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]

Notes:
- Asked of all respondents.
- Hispanics can be of any race; "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.

OTHER FINDINGS

Seniors

Related Focus Group Findings: Elderly Residents

Many focus group participants discussed the limited number of services available to senior citizens, with emphasis on the following issues:

- Aging population
- Limited number of resources available for seniors
  - *Assisted living or nursing homes*
  - *Transportation*

According to focus group participants, the number of seniors in the community will continue to increase in the coming years and the Black Hills Region represents an already-**aging community**. Participants agree that the community will continue to lose a number of physicians and dentists as these professionals reach retirement age.

Group attendees report that only a **limited number of resources are available** to seniors. Many seniors have multiple healthcare needs, but do not know about the available services and are reluctant to ask for assistance. The few local nursing homes operate at-capacity, which means families may have to travel out of the community to find an available room for their loved one. A participant describes the negative effects this may have on families:

> *"The elderly have a unique situation too is that nursing home access isn't always available when needed because we've had a ban on building nursing homes for quite a while in this state, and I'll just speak personally 'cause that's what I know the best. My mother almost had to go to Canton, South Dakota to be in a nursing home because that was the only room in the state that was available. I visit and work with her every day, so it would be really hard for her to be in Canton."*

Respondents worry that limited **transportation** options also hinder senior citizens' ability to access healthcare facilities and other social service agencies. Many seniors rely heavily on Dial-A-Ride for their transportation needs.

Native Americans

Related Focus Group Findings: Native American Population

Many focus group participants are worried about the Native American population, with emphasis on the following concerns:

- Low health literacy
- Inadequate housing
- Difficulty to conduct outreach
- Violence
- High rates of tobacco use
- High rates of chronic disease

Focus group attendees believe that the Native American population in the Black Hills region experiences worse health outcomes than the general population, reporting that Native Americans in the region also have a lower life expectancy. These poor health outcomes occur due to **low health literacy, inadequate housing, difficulties conducting outreach, prevalence of violence, and high rates of tobacco use and chronic diseases.** The region's Native American population is also reported to over-utilize the emergency room for primary care.

Participants believe that many Native Americans have low health literacy due to limited health education and overall low educational levels. Due to low educational attainment, many Native American families cannot find jobs and are transient, which in turn affects the children's ability to have continuity in their education. This transient nature equates to multiple families sharing the same residence and a multi-year waiting list exists to obtain government subsidized housing. This reality creates a vicious cycle; as noted:

> *"Native American families go between the reservation and different communities, and I think that affects more than healthcare. It's affecting their education because they're not getting connected at an early age. At General Beetle School we have if you count up from the beginning of August to April/May in a school year we have about 110 percent turnover of students."*

Providing prevention education to this population can also prove difficult for social service agencies and providers. Attendees believe that the best avenue to reach this population is through the school systems. However, funding restrictions limit how much staff time organizations can commit. In addition, telephone and cell service remain low on the reservations, so agencies struggle with how to conduct the outreach, as a participant explains:

> *"Even if you choose to call the person they're only going to have the phone probably four to five days when they have the resources to pay for it. Three weeks out of the month you can't reach them, and Carey knows this because she works with families on the reservation. They'll have that cell for a weekend. Believe me; keeping up with the telephone number as it changes from month to month is another challenge too."*

Attendees also believe that Native American residents may be distrusting of assistance programs because programs often lose grant funding and cease to exist, as one participant describes:

> *"We've not had consistency at the IHS hospital in terms of psychiatric types of staff. It's there and then it's gone, it's there and then it's gone, and I think that leads to some people just not going and getting the help. Yeah. I think it's getting better, it's just I always honestly feel bad in Pine Ridge because you see programs start up and they're there for one or two years and then they're gone. It's like, how does a person count on that?"*

Focus group attendees also worry about the level of violence on the reservations and the high rates of chronic diseases, such as diabetes.

Housing & Homelessness

Related Focus Group Findings: Housing & Homelessness

Many focus group participants discussed homelessness in the community, with a focus on this concern:

- Negative physical and mental health repercussions due to homelessness

Participants worry about Black Hills region residents because the area faces a housing crisis. Many families may live together in one home or apartment to save money because of the high cost of living. Participants believe that these families qualify as homeless; one participant explains further:

> *"How we count homeless is not on the street homelessness. That may be some of it, but it's a lot of living in a motel kind of homelessness. They have no permanent housing. That's that transient piece. Doubling up, living in a hotel, living in a car."*

Many low income residents who qualify for housing assistance remain on a long waiting list due to the high local demand. The homeless lifestyle has **negative physical and mental health repercussions**, with homeless residents less likely to receive care. In addition, children who do not have permanent housing may struggle in school.

APPENDIX

Community Stakeholder Input

A focus group held as part of this Community Health Needs Assessment incorporated input from 13 local key informants (or community stakeholders), with special emphasis on persons who work with or have special knowledge about vulnerable populations in the community, including low-income individuals, minority populations, those with chronic conditions, and other medically underserved residents.

A list of these participants is provided below.

Key Informant Focus Group Participants

Monday, September 24th, Noon to 2:00

Focus Group Participant	Title	Organization	Populations Served: Medically Underserved	Low-Income Residents	Minority Populations	Populations w/ Chronic Disease
Alan Solano	CEO	Behavior Management Systems	X	X	X	X
Brenda Dahlke	Medical Caseworker	Pennington County HHS	X	X		
Carrie Churchill	RN, Bright Start Coordinator, Community Health Services	S.D. Department of Health	X	X	X	
Andrea Barber		Volunteers of America	X	X	X	X
Kasondra Brooke	Black Hills Resource Development Specialist	2-11 Helpline	X	X	X	X
Kibbe Conti	Supervisory Dietician	IHS (Sioux San Hospital)	X	X	X	X
Linda Marchand	Former Regional Manager, S.D. Department of Health	S.D. Department of Health	X	X	X	X
Lisa Sanderson	Associate Director	South Dakota Parent Connection	X	X	X	X
Morgan VonHaden	North Rapid Community Coordinator	Rapid City Area Schools	X	X	X	
Sandy Diegel	Executive Director	John T. Vucurevich Foundation	X	X	X	X
Stephanie Schweitzer Dixon	Community Services Director	Front Porch Coalition	X	X	X	X
Susie Kelts	Health Services - R.N. at Gen Beadle, North	Rapid City Area Schools	X	X	X	X
Tanja Cutting	Diabetes Collaborative Coordinator	Community Health Center of the Black Hills	X	X	X	X

Expertise in Public Health

Note that three of these focus group participants have special knowledge of and expertise in public health; their credentials and experience include:

- **Carrie Churchill** is a Registered Nurse (RN) and the Bright Start Coordinator with the South Dakota Department of Health. Ms. Churchill attended Augustana College and received her nursing degree in 1998. Recently, Ms. Churchill was selected as an honoree for her "dedication to youth, families and the community" by Wellspring, an organization that works with teenagers who have chemical dependency and behavioral issues.
- **Brenda Dahlke** is a medical caseworker for Pennington County Health and Human Services. She received her degree from Black Hills State University in 1996.

- **Linda Marchand** is a former Regional Manager with the South Dakota Department of Health (retired). Linda held leadership roles in department programs ranging from breastfeeding peer counseling to the Bright Start nurse home visiting program. She is also an Advisory Committee member for South Dakota State University and the University of South Dakota Student Nursing Program.

  Linda Marchand recently received the Outstanding Contribution to Public Health Award from the South Dakota Department of Health in the agency's annual Secretary Awards Program (2012). The award is presented to a department employee who has made significant contributions to the state's public health over the course of a career.