

# 2013 PRC Community Health Needs Assessment Report

Total Service Area

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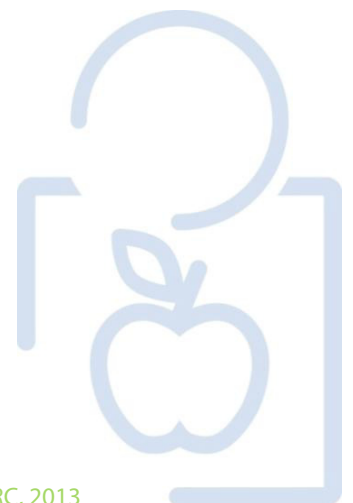
Sierra Surgery Hospital

In Partnership with Carson Tahoe Health



Professional Research Consultants, Inc.

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# Table Of Contents

<b>INTRODUCTION</b>	<b>5</b>
<b>Project Overview</b> .....	<b>6</b>
Project Goals	6
Methodology	6
<b>Summary of Findings</b> .....	<b>13</b>
Significant Health Needs of the Community	13
Summary Tables: Comparisons With Benchmark Data	14
<b>GENERAL HEALTH STATUS</b>	<b>30</b>
<b>Overall Health Status</b> .....	<b>31</b>
Self-Reported Health Status	31
Activity Limitations	32
<b>Mental Health &amp; Mental Disorders</b> .....	<b>35</b>
Mental Health Status	36
Depression	37
Stress	39
Suicide	41
Mental Health Treatment	42
Children & ADD/ADHD	43
<b>DEATH, DISEASE &amp; CHRONIC CONDITIONS</b>	<b>45</b>
<b>Leading Causes of Death</b> .....	<b>46</b>
Distribution of Deaths by Cause	46
Age-Adjusted Death Rates for Selected Causes	47
<b>Cardiovascular Disease</b> .....	<b>48</b>
Age-Adjusted Heart Disease & Stroke Deaths	48
Prevalence of Heart Disease & Stroke	52
Cardiovascular Risk Factors	54
<b>Cancer</b> .....	<b>61</b>
Age-Adjusted Cancer Deaths	61
Prevalence of Cancer	64
Cancer Screenings	65
<b>Respiratory Disease</b> .....	<b>71</b>
Age-Adjusted Respiratory Disease Deaths	72
Prevalence of Respiratory Conditions	75
<b>Injury &amp; Violence</b> .....	<b>78</b>
Leading Causes of Accidental Death	78
Unintentional Injury	79
Intentional Injury (Violence)	83
<b>Diabetes</b> .....	<b>86</b>
Age-Adjusted Diabetes Deaths	86
Prevalence of Diabetes	88
Diabetes Treatment	89
<b>Alzheimer's Disease</b> .....	<b>90</b>
Age-Adjusted Alzheimer's Disease Deaths	90
<b>Kidney Disease</b> .....	<b>92</b>
Age-Adjusted Kidney Disease Deaths	92
<b>Potentially Disabling Conditions</b> .....	<b>94</b>
Arthritis, Osteoporosis, & Chronic Pain	94
Vision & Hearing Impairment	97

## INFECTIOUS DISEASE

100

<b>Vaccine-Preventable Conditions .....</b>	<b>101</b>
Pertussis .....	101
Childhood Vaccinations .....	102
<b>Influenza &amp; Pneumonia Vaccination .....</b>	<b>103</b>
Flu Vaccinations .....	103
Pneumonia Vaccination .....	104
<b>Tuberculosis.....</b>	<b>106</b>
<b>Sexually Transmitted Diseases.....</b>	<b>107</b>
Gonorrhea .....	108
Syphilis .....	109
Chlamydia .....	109
Safe Sexual Practices .....	110
HIV Testing .....	113
<b>Hepatitis .....</b>	<b>115</b>
Hepatitis A .....	115
Hepatitis B .....	115
Hepatitis C .....	117

## BIRTHS

118

<b>Prenatal Care .....</b>	<b>119</b>
<b>Birth Outcomes &amp; Risks .....</b>	<b>121</b>
Low-Weight Births .....	121
Infant Mortality .....	122
C-Sections .....	123
Use of Tobacco .....	124
Use of Alcohol .....	125
<b>Family Planning.....</b>	<b>126</b>
Births to Unwed Mothers .....	126
Births to Teen Mothers .....	128

## MODIFIABLE HEALTH RISKS

129

<b>Actual Causes Of Death.....</b>	<b>130</b>
<b>Nutrition.....</b>	<b>131</b>
Daily Recommendation of Fruits/Vegetables .....	132
Water Consumption .....	133
Health Advice About Diet & Nutrition .....	134
<b>Physical Activity .....</b>	<b>135</b>
Level of Activity at Work .....	136
Leisure-Time Physical Activity .....	136
Activity Levels .....	138
Health Advice About Physical Activity & Exercise .....	140
<b>Weight Status .....</b>	<b>142</b>
Adult Weight Status .....	142
Weight Management .....	146
Childhood Overweight & Obesity .....	147
<b>Substance Abuse .....</b>	<b>150</b>
Age-Adjusted Cirrhosis/Liver Disease Deaths .....	151
High-Risk Alcohol Use .....	152
Age-Adjusted Drug-Induced Deaths .....	156
Illicit Drug Use .....	157
Alcohol & Drug Treatment .....	158
<b>Tobacco Use.....</b>	<b>160</b>
Cigarette Smoking .....	160
Other Tobacco Use .....	165

## ACCESS TO HEALTH SERVICES

168

<b>Health Insurance Coverage .....</b>	<b>169</b>
Type of Healthcare Coverage .....	169
Lack of Health Insurance Coverage .....	171
<b>Difficulties Accessing Healthcare .....</b>	<b>174</b>
Available Healthcare Professionals .....	174
Difficulties Accessing Services .....	174
Barriers to Healthcare Access .....	176
Prescriptions .....	177
Accessing Healthcare for Children .....	178
<b>Primary Care Services .....</b>	<b>182</b>
Specific Source of Ongoing Care .....	182
Utilization of Primary Care Services .....	185
<b>Emergency Room Utilization .....</b>	<b>187</b>
<b>Inpatient, Long-Term, &amp; Surgical Care .....</b>	<b>188</b>
Inpatient Care .....	188
Long-Term Acute Care .....	189
Surgical Care .....	189
<b>Oral Health .....</b>	<b>191</b>
Dental Care .....	192
Dental Insurance .....	194
<b>Vision Care .....</b>	<b>195</b>

## HEALTH EDUCATION & OUTREACH

196

<b>Healthcare Information .....</b>	<b>197</b>
Healthcare Information Sources .....	197
Use of Social Media .....	197
<b>Participation in Health Promotion Events .....</b>	<b>199</b>

## LOCAL RESOURCES

201

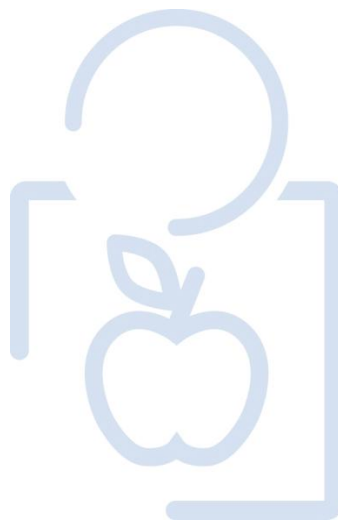
<b>Perceptions of Local Healthcare Services .....</b>	<b>202</b>
<b>Resources Available to Address Significant Health Needs .....</b>	<b>204</b>
<b>Other Issues .....</b>	<b>206</b>
Collaboration .....	206
Elderly .....	207

## APPENDICES

208

<b>Appendix I: Carson City Summary Table .....</b>	<b>209</b>
<b>Appendix II: Douglas County Summary Table .....</b>	<b>220</b>

# INTRODUCTION



# Project Overview

## Project Goals

This Community Health Needs Assessment, a follow-up to a similar study conducted regionally in 2010 (and earlier studies in Carson City and Douglas County), is a systematic, data-driven approach to determining the health status, behaviors and needs of residents in the Total Service Area of Carson Tahoe Regional Medical 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 Carson Tahoe Regional Medical 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 two Key Informant Focus Groups.

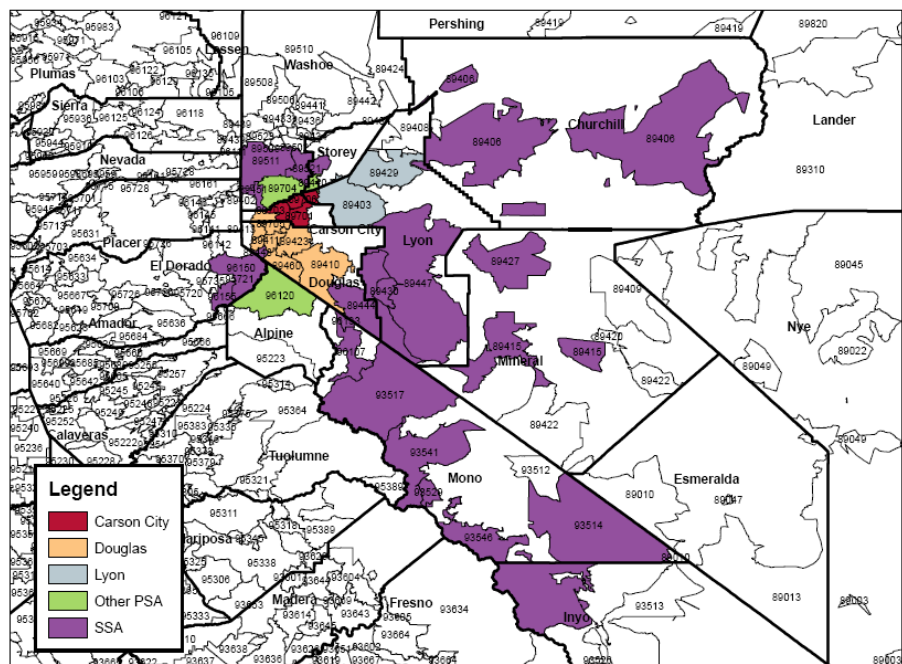
## PRC Community Health Survey

### 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 the Carson Tahoe Regional Medical Center and PRC, and is similar to previous surveys used in the region, allowing for data trending.

### Community Defined for This Assessment

The study area for the survey effort (referred to as the “Total Service Area” in this report) includes a Primary Service Area or PSA (comprised of Carson City, Douglas and Lyon county ZIP Codes, as well as ZIP Codes 96120, 89428, 89440, and 89704) and a Secondary Service Area or SSA (comprised of 29 residential ZIP Codes throughout the region). This community definition — determined based on the ZIP Codes of residence of recent patients of Carson Tahoe Regional Medical Center — 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.

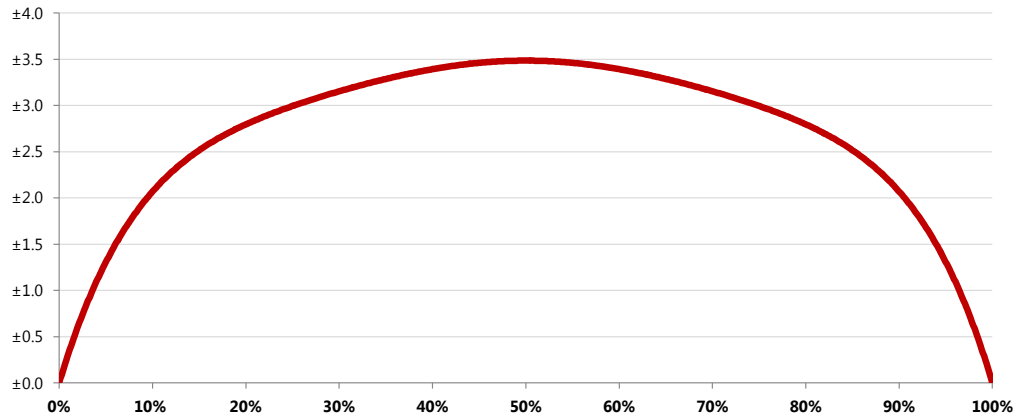
The sample design used for this effort consisted of a stratified random sample of 800 individuals age 18 and older in the Total Service Area, including 600 in the Primary

Service Area and 200 in the Secondary Service Area. Once the interviews were completed, these were weighted in proportion to the actual population distribution so as to appropriately represent Total 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 800 respondents is  $\pm 3.5\%$  at the 95 percent level of confidence.

### Expected Error Ranges for a Sample of 800 Respondents 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 800 respondents answered a certain question with a "yes," it can be asserted that between 8.0% and 12.0% ( $10\% \pm 2.0\%$ ) 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 46.5% and 53.5% ( $50\% \pm 3.5\%$ ) of the total population would respond "yes" if asked this question.

### Sample Characteristics

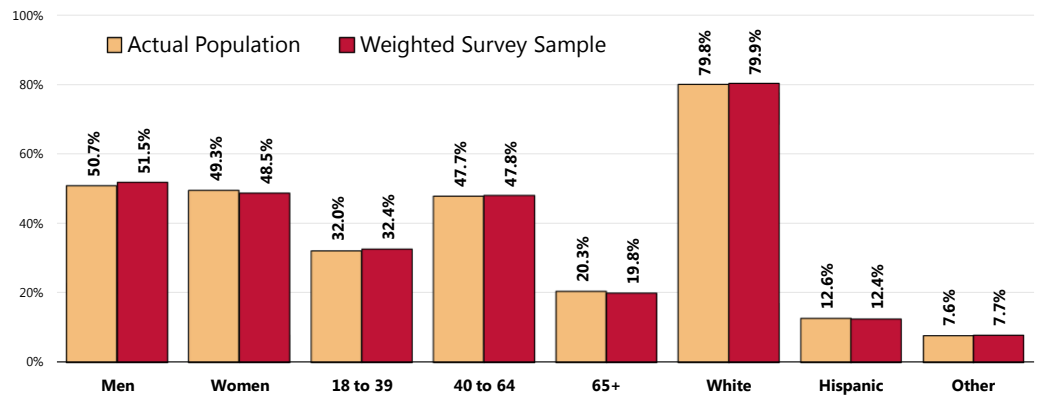
To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. And, while this random sampling of the population produces a highly representative sample, it is a common and preferred practice to "weight" 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 Total 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

(Total Service Area, 2013)



Sources: • Census 2010, Summary File 3 (SF 3), U.S. Census Bureau.  
• 2013 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 Groups

As part of this Community Health Needs Assessment, two focus groups were held on May 2, 2013. The focus group participants included 17 local key informants: physicians, a public health representative, other health professionals, social service providers, business leaders and other community leaders.

A list of recommended participants for the focus groups was provided by Carson Tahoe Health. 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. 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 day before the groups were scheduled to insure a reasonable turnout.

Final participation included representatives of the organizations outlined in the following chart. Through this process, input was gathered from a representative of public health, as well as several individuals whose organizations work with low-income, minority (including African American, Hispanic, Native American, and undocumented residents), or other medically underserved populations (specifically, elderly, disabled, the uninsured/underinsured, homeless and Medicaid recipients).

Key Informant Focus Groups	Populations Served		
	Medically Underserved	Low-Income Residents	Minority Populations
Thursday, May 2nd, 7:30 to 9:30am (Physicians)			
Thursday, May 2nd, Noon to 2:00pm (Other Community Leaders)			
Organization Represented			
Individual Physicians	X	X	X
Carson Mental Health	x	X	x
Sierra Family Health Center	X	X	X
Carson City School Board	X	X	X
Carson City Fire Department	X	X	X
Nevada Health Centers	X	X	X
Advocates to End Domestic Violence	X	X	X
Carson City Senior Center	x	X	
Douglas County School District	X	X	X
FISH (Friends in Service Helping)	X	X	X
Nevada Public Health Foundation	X	X	X
Carson City Health and Human Services	X	X	X
Nevada Rural Housing Authority	X	X	X

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

- Carson City Health and Human Services
- Centers for Disease Control & Prevention
- National Center for Health Statistics
- National Electronic Telecommunication Surveillance System
- Nevada Department of Health and Human Services , Nevada State Health Division
- Nevada Department of Public Safety
- Nevada Tuberculosis Information Management System
- US Census Bureau
- US Department of Health and Human Services
- US Department of Justice, Federal Bureau of Investigation

Note that secondary data reflect county-level data.

## Benchmark Data

### Trending

A similar survey was administered *in the Primary Service Area (PSA)* in 2010 by PRC on behalf of Carson Tahoe Regional Medical Center. Trending data, as revealed by comparison to prior PSA survey results, are provided throughout this report whenever available. Historical data for secondary data indicators are also included for the purposes of trending.

### Nevada 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

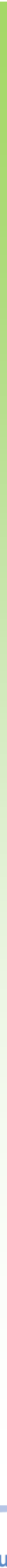
established benchmarks and monitored progress over time in order to:

- 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

## Significant Health Needs of the Community

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

Areas of Opportunity Identified Through This Assessment	
<b>Access to Health Services</b>	<ul style="list-style-type: none"> <li>• Lack of Health Insurance Coverage</li> <li>• Insurance Instability</li> <li>• Difficulty Accessing Healthcare               <ul style="list-style-type: none"> <li>◦ Cost of Doctor Visits</li> <li>◦ Difficulty Finding a Doctor</li> <li>◦ Difficulty Getting a Medical Appointment [PSA Trend]</li> <li>◦ Difficulty Getting Child’s Medical Care</li> </ul> </li> <li>• Routine Medical Checkups (Adults)</li> <li>• Use of the Emergency Room</li> <li>• Perceptions of Local Healthcare Services</li> <li>• <i>Ranked as #1 top concern among focus group participants; they emphasized:</i> <ul style="list-style-type: none"> <li>◦ Barriers to Access</li> <li>◦ Lack of Insurance Coverage</li> <li>◦ Lack of Preventive Care</li> <li>◦ Lack of Specialty Services</li> </ul> </li> </ul>
<b>Cancer</b>	<ul style="list-style-type: none"> <li>• Overall Cancer Deaths               <ul style="list-style-type: none"> <li>◦ Including Lung, Prostate &amp; Colorectal Cancer Deaths</li> </ul> </li> <li>• Breast Cancer Screening [PSA Trend]</li> </ul>
<b>Diabetes</b>	<ul style="list-style-type: none"> <li>• Diabetes Deaths</li> </ul>
<b>Disability</b>	<ul style="list-style-type: none"> <li>• Activity Limitations</li> </ul>
<b>Dementias</b>	<ul style="list-style-type: none"> <li>• Alzheimer’s Disease Deaths</li> </ul>
<b>Injury &amp; Violence Prevention</b>	<ul style="list-style-type: none"> <li>• Unintentional Injury Deaths               <ul style="list-style-type: none"> <li>◦ Including Motor Vehicle Crash Deaths</li> </ul> </li> <li>• Firearm-Related Deaths</li> </ul>
<b>Maternal/Infant Health &amp; Family Planning</b>	<ul style="list-style-type: none"> <li>• Prenatal Care [PSA Trend]</li> <li>• Teenage Birth Rate</li> <li>• Births to Unwed Mothers</li> </ul>
<b>Mental Health &amp; Mental Disorders</b>	<ul style="list-style-type: none"> <li>• Suicides</li> <li>• Self-Reported Mental Health Status [PSA Trend]</li> <li>• <i>Ranked as #2 top concern among focus group participants; they emphasized:</i> <ul style="list-style-type: none"> <li>◦ Limited Number of Providers</li> </ul> </li> </ul>

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## Areas of Opportunity (continued)

<b>Nutrition, Physical Activity &amp; Weight</b>	<ul style="list-style-type: none"> <li>• Overweight Prevalence</li> <li>• Moderate Physical Activity [PSA Trend]</li> <li>• Professional Advice on Diet/Weight/Exercise</li> <li>• <i>Ranked as #4 top concern among focus group participants; they emphasized:</i> <ul style="list-style-type: none"> <li>○ Poor Nutrition, Fast Food</li> <li>○ Sedentary Lifestyles</li> <li>○ Issues of Hunger</li> </ul> </li> </ul>
<b>Oral Health</b>	<ul style="list-style-type: none"> <li>• <i>Ranked as #5 top concern among focus group participants; they emphasized:</i> <ul style="list-style-type: none"> <li>○ Importance of Preventative Care</li> <li>○ Lack of Options for the Uninsured</li> </ul> </li> </ul>
<b>Respiratory Diseases</b>	<ul style="list-style-type: none"> <li>• Chronic Lower Respiratory Disease Deaths</li> <li>• Pneumonia/Influenza Deaths</li> </ul>
<b>Substance Abuse</b>	<ul style="list-style-type: none"> <li>• Cirrhosis/Liver Disease Deaths</li> <li>• Chronic Drinking</li> <li>• Drug-Induced Deaths</li> <li>• Seeking Professional Help [PSA Trend]</li> <li>• <i>Ranked as #3 top concern among focus group participants; they emphasized:</i> <ul style="list-style-type: none"> <li>○ Prevalence of Substance Use and Abuse</li> <li>○ Prescription Misuse</li> <li>○ Lack of Treatment Facilities</li> </ul> </li> </ul>
<b>Tobacco Use</b>	<ul style="list-style-type: none"> <li>• Cigarette Smoking/Cessation Attempts</li> </ul>

## Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in the Total Service Area, including comparisons among the individual communities and the primary/secondary service areas, as well as trend data. These data are grouped to correspond with the Focus Areas presented in Healthy People 2020.

### Reading the Summary Tables

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

■ The green columns [to the left of the Total Service Area column] provide comparisons for Carson City, Douglas County and Lyon County (versus all opposing areas), as well as comparisons between the Primary and Secondary Service Areas, identifying differences for each as “better than” (☀️), “worse than” (💜), or “similar to” (☁️) the combined opposing areas.

■ The columns to the right of the Total Service Area column provide trending (for *Primary Service Area* results), as well as comparisons between the Total Service Area and any available state and national findings, and Healthy People 2020 targets. Again, symbols indicate whether the Total 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.

### TREND SUMMARY


























































(Current vs. Baseline Data)





























#### Survey Data Indicators:






































Trends for survey-derived indicators represent significant changes in the *Primary Service Area* since 2010. *Note that survey data reflect the ZIP Code-defined PSA.*















#### Other (Secondary) Data

**Indicators:** Trends for other indicators (e.g., public health data) represent point-to-point changes between the most current reporting period and the earliest presented in this report or previous reports (typically representing the span of roughly a decade). *Note that secondary data reflect county-level data for the Primary Service Area.*


























Access to Health Services	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% [Age 18-64] Lack Health Insurance	 20.7	 23.1	 10.8	 19.8	 22.8
% [65+] With Medicare Supplement Insurance					
% [Insured] Insurance Covers Prescriptions	 89.9	 88.2	 96.4	 90.8	 93.3
% [Insured] Went Without Coverage in Past Year	 6.2	 7.7	 16.8	 8.9	 6.8
% Difficulty Accessing Healthcare in Past Year (Composite)	 44.1	 40.8	 48.6	 43.6	 42.0
% Inconvenient Hrs Prevented Dr Visit in Past Year	 13.4	 11.6	 21.3	 13.8	 13.8
% Cost Prevented Getting Prescription in Past Year	 17.4	 14.8	 17.8	 15.9	 13.0
% Cost Prevented Physician Visit in Past Year	 22.1	 21.6	 24.0	 22.1	 20.2
% Difficulty Getting Appointment in Past Year	 19.2	 16.3	 20.8	 18.5	 20.7
% Difficulty Finding Physician in Past Year	 16.1	 10.2	 14.5	 13.7	 14.5
% Transportation Hindered Dr Visit in Past Year	 6.3	 5.5	 8.9	 6.5	 5.4
% Skipped Prescription Doses to Save Costs	 19.9	 17.8	 14.8	 18.2	 12.7
% Difficulty Getting Child's Healthcare in Past Year				 10.6	 7.0















Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
21.5	 32.1	 14.9	 0.0	 18.8
78.5		 75.5		 78.0
92.2		 93.9		 93.1
7.8		 4.8		 6.6
42.7		 37.3		 40.4
13.8		 14.3		 12.1
14.3		 15.0		 16.3
21.1		 14.0		 18.3
19.7		 16.5		 14.3
14.2		 10.7		 10.9
5.9		 7.7		 5.4
15.2		 14.8		 18.9
8.4		 1.9		 4.7











Access to Health Services (continued)	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% [Age 18+] Have a Specific Source of Ongoing Care	 79.3	 74.1	 76.2	 76.5	 69.7
% Have Had Routine Checkup in Past Year	 57.6	 56.1	 56.7	 56.2	 57.9
% Child Has Had Checkup in Past Year				 76.5	 84.0
% Two or More ER Visits in Past Year	 5.6	 5.1	 15.7	 7.1	 10.7
% Rate Local Healthcare "Fair/Poor"	 14.4	 16.8	 23.3	 16.6	 22.8
% Member of HH Received Inpatient Care/Past 2 Years	 33.4	 28.5	 40.6	 32.3	 33.4
% Member of HH Received Long-Term Acute Care/3 Yrs	 3.9	 2.9	 7.8	 4.0	 3.7
% Member of HH Received Surgical Care/Past 3 Yrs	 47.8	 47.8	 47.4	 47.1	 43.9
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					
























Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
72.7		 76.3	 95.0	 70.9
57.2		 67.3		 57.1
81.1		 87.0		 80.1
9.2		 6.5		 6.6
20.0		 15.3		 16.4
32.9				
3.8				
45.3				
<div> better       similar       worse</div>				




















































Arthritis, Osteoporosis & Chronic Back Conditions	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% [50+] Arthritis/Rheumatism	 32.9	 31.1	 36.9	 33.4	 31.6
% [50+] Osteoporosis	 12.3	 9.5	 8.8	 10.7	 10.2
% Sciatica/Chronic Back Pain	 23.8	 21.3	 34.1	 24.2	 18.9
% Migraine/Severe Headaches	 16.0	 15.6	 26.6	 17.2	 12.2
% Chronic Neck Pain	 12.0	 12.2	 19.3	 13.1	 7.8
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					





Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
32.4		<div> 35.4</div>		<div> 37.4</div>
10.4		<div> 11.4</div>	<div> 5.3</div>	<div> 10.4</div>
21.2		<div> 21.5</div>		<div> 22.7</div>
14.4		<div> 16.9</div>		<div> 16.1</div>
10.2		<div> 8.3</div>		<div> 10.4</div>
<div><div> better</div><div> similar</div><div> worse</div></div>				







Cancer	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
Cancer (Age-Adjusted Death Rate)	 196.1	 152.5	 216.6	 184.8	 192.1
Lung Cancer (Age-Adjusted Death Rate)					
Prostate Cancer (Age-Adjusted Death Rate)					
Female Breast Cancer (Age-Adjusted Death Rate)					
Colorectal Cancer (Age-Adjusted Death Rate)					
% Skin Cancer	 9.4	 12.6	 11.2	 10.7	 6.7











Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
185.8	 176.2	 174.2	 160.6	 208.3
54.3	 50.7	 48.5	 45.5	 54.7
29.1	 22.4	 22.3	 21.2	 26.7
20.4	 23.8	 22.3	 20.6	 21.9
17.9	 17.4	 16.1	 14.5	 17.9
8.5	 5.4	 8.1		 11.2











Cancer	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% Cancer (Other Than Skin)	 6.3	 7.8	 7.7	 6.9	 4.7
% [Men 50+] Prostate Exam in Past 2 Years				 68.5	 68.9
% [Women 50-74] Mammogram in Past 2 Years				 71.8	 75.6
% [Women 21-65] Pap Smear in Past 3 Years				 72.9	 84.6
% [Age 50+] Sigmoid/Colonoscopy Ever	 67.9	 74.0	 56.4	 67.5	 66.0
% [Age 50+] Blood Stool Test in Past 2 Years	 25.9	 23.7	 23.9	 23.9	 26.8
% [Age 50-75] Colorectal Cancer Screening	 64.8	 71.3	 52.7	 65.1	 71.3
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					






Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
5.7	 6.9	 5.5		 7.8
68.7		 70.5		 77.1
73.9	 69.9	 79.9	 81.1	 80.0
79.8	 78.4	 84.7	 93.0	 79.6
66.7	 61.5	 72.0		 68.0
25.5	 17.2	 28.3		 29.8
68.5			 70.5	
 better  similar  worse				







Chronic Kidney Disease	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
Kidney Disease (Age-Adjusted Death Rate)	 11.6		 14.1	 11.7	 15.2
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					











Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
12.4	 19.5	 15.2		 10.8
 better  similar  worse				






Diabetes	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
Diabetes Mellitus (Age-Adjusted Death Rate)	 36.7	 17.4	 27.3	 26.8	 23.9
% Diabetes/High Blood Sugar	 9.5	 8.0	 14.7	 9.8	 8.1
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					









Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
26.2	 14.9	 21.3	 19.6	 19.6
8.8	 10.3	 10.1		 12.4
 better  similar  worse				









Dementias, Including Alzheimer's Disease	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
Alzheimer's Disease (Age-Adjusted Death Rate)	 28.6	 15.4	 25.2	 23.2	 30.1
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					











Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
24.3	 14.7	 25.0		 16.3
 better  similar  worse				










Educational & Community-Based Programs	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% Attended Health Event in Past Year	 13.5	 18.9	 10.7	 14.7	 24.3
% Use Social Media for Local Healthcare Info	 10.4	 7.3	 8.0	 9.9	 9.9
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					






Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
20.0		 22.2		 17.7
9.9				
 better  similar  worse				






Family Planning	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% of Births to Unwed Mothers	 48.1	 31.3	 37.9	 39.9	 43.9
Teenage Birth Rate (15-19)/1,000	 53.5	 25.7	 46.0		
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					


















































Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
40.6	 57.2	 40.8		 26.1
53.5	 50.6	 34.5		
 better  similar  worse				






































General Health Status	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% "Fair/Poor" Physical Health	 18.5	 13.1	 27.6	 18.1	 8.7
% Activity Limitations	 23.5	 21.3	 29.3	 24.3	 22.2
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					

Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
12.9	 20.2	 16.8		 15.6
23.2	 23.2	 17.0		 25.8
 better  similar  worse				






Hearing & Other Sensory or Communication Disorders	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% Deafness/Trouble Hearing	 8.8	 15.9	 11.5	 12.0	 9.4
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					







Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
10.5		 9.6		 11.9
 better  similar  worse				






























Heart Disease & Stroke	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
Diseases of the Heart (Age-Adjusted Death Rate)	 190.0	 150.9	 201.2	 178.3	 202.3
Stroke (Age-Adjusted Death Rate)	 37.8	 28.7	 38.8	 34.7	 32.2
% Heart Disease (Heart Attack, Angina, Coronary Disease)	 8.7	 8.1	 13.8	 8.9	 4.0
% Stroke	 3.6	 3.0	 2.5	 3.1	 1.8
% Blood Pressure Checked in Past 2 Years	 92.6	 94.1	 94.3	 93.5	 96.3
% Told Have High Blood Pressure (Ever)	 38.3	 35.9	 50.9	 39.3	 34.7
% [HBP] Taking Action to Control High Blood Pressure				 95.2	 91.0
% Cholesterol Checked in Past 5 Years	 86.8	 85.0	 90.5	 86.4	 88.4
% Told Have High Cholesterol (Ever)	 32.9	 34.7	 45.0	 35.8	 27.3
% [HBC] Taking Action to Control High Blood Cholesterol				 87.1	 86.7
% 1+ Cardiovascular Risk Factor	 87.0	 84.3	 90.5	 85.8	 82.6
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					




















Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
182.4	 197.9	 184.6	 152.7	 254.2
33.5	 36.9	 40.2	 33.8	 53.3
6.2		 6.1		 10.6
2.4	 3.2	 2.7		 2.8
95.1		 94.7	 94.9	 92.6
36.7	 30.8	 34.3	 26.9	 36.3
93.0		 89.1		 92.4
87.5	 71.5	 90.7	 82.1	 83.9
31.1	 37.3	 31.4	 13.5	 36.6
86.9		 89.1		 90.4
84.0		 86.3		 83.8
 better  similar  worse				























HIV	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% [Age 18-44] HIV Test in the Past Year					
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					
















Immunization & Infectious Diseases	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
Pertussis per 100,000					
Hepatitis C, non-A non-B Incidence per 100,000					
% [Age 65+] Flu Shot in Past Year					
% [High-Risk 18-64] Flu Shot in Past Year					
% [Age 65+] Pneumonia Vaccine Ever					
% [High-Risk 18-64] Pneumonia Vaccine Ever					
Tuberculosis Incidence per 100,000					
% Ever Vaccinated for Hepatitis B	 36.2	 33.3	 33.9	 34.3	 42.5
Hepatitis A Incidence per 100,000					
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					












Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
17.1	 19.9	 16.9	 18.9	
 better  similar  worse				











Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
1.6	 1.9	 5.3		
0.5	 0.5	 0.5	 0.2	
72.5	 53.7	 71.6	 90.0	 68.3
47.6		 52.5	 90.0	 51.6
68.3	 68.9	 68.1	 90.0	 67.3
43.0		 32.0	 60.0	 39.4
1.1	 3.9	 4.8	 1.0	
38.8		 38.4		 35.3
1.2	 0.7	 2.0		
 better  similar  worse				









Injury & Violence Prevention	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
Unintentional Injury (Age-Adjusted Death Rate)	 39.0	 50.8	 46.8	 44.6	 63.6
Motor Vehicle Crashes (Age-Adjusted Death Rate)				 11.1	 22.2
% Child [Age 0-17] "Always" Uses Seat Belt/Car Seat				 96.2	 94.7
% Child [Age 5-17] "Always" Wears Bicycle Helmet					
Firearm-Related Deaths (Age-Adjusted Death Rate)					
Violent Crime per 100,000	 295.7	 161.9	 227.2	 237.1	 278.5
Domestic Violence Offenses per 100,000	 741.9	 542.4	 792.0	 695.5	 460.5
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					

























Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
48.4	 41.4	 38.2	 36.0	 36.2
13.5	 11.0	 11.9	 12.4	 15.3
95.3		 91.6		 95.0
57.4		 35.3		 42.0
13.9	 14.9	 10.2	 9.2	
246.0	 648.0	 407.3		 448.1
644.8	 2030.7			
 better  similar  worse				





















Maternal, Infant & Child Health	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% Less Than Adequate Prenatal Care	 27.9	 25.3	 28.6	 27.5	 38.0
% of Low Birthweight Births	 6.4	 7.5	 6.4	 6.9	 6.7
Infant Death Rate					
% Alcohol Use During Pregnancy	 0.2	 0.8	 0.7	 0.5	 1.0

Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
29.7	 35.1		 22.4	
6.9	 10.5	 8.2	 7.8	 7.6
3.6	 5.6	 6.5	 6.0	
0.6	 0.7			 0.5































Maternal, Infant & Child Health (continued)	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% Tobacco Use During Pregnancy	 12.4	 7.7	 14.0	 11.8	 13.7
% of C-Section Births	 27.2	 26.1	 29.6	 27.8	 23.7
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					

































Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
12.3	 7.3			 11.3
26.8	 34.6	 32.7		 27.5
 better  similar  worse				













Mental Health & Mental Disorders	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% "Fair/Poor" Mental Health	 12.8	 12.4	 13.2	 12.5	 6.4
% Major Depression	 12.3	 9.0	 14.4	 11.0	 8.3
% Symptoms of Chronic Depression (2+ Years)	 31.2	 27.8	 28.6	 29.0	 26.4
Suicide (Age-Adjusted Death Rate)	 19.1	 26.7	 27.3	 24.4	
% [Those With Major Depression] Seeking Help					
% Typical Day Is "Extremely/Very" Stressful	 10.9	 7.7	 8.8	 9.4	 12.8
% Child [Age 5-17] Takes Prescription for ADD/ADHD					
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					













Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
9.1		 11.7		 8.6
9.5		 11.7		 10.5
27.5		 26.5		 28.3
22.7	 19.4	 11.8	 10.2	 20.6
70.6		 82.0	 75.1	 83.5
11.4		 11.5		 8.5
2.4		 6.5		 6.1
 better  similar  worse				















































Nutrition & Weight Status	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% Eat 5+ Servings of Fruit or Vegetables per Day	 41.1	 47.0	 40.5	 42.3	 49.0
% Drink Filtered Water	 71.8	 54.4	 74.1	 66.7	 59.4
% Medical Advice on Nutrition in Past Year	 34.5	 38.1	 39.8	 35.6	 28.9
% Healthy Weight (BMI 18.5-24.9)	 29.2	 30.9	 26.6	 30.2	 34.2
% Overweight	 69.6	 67.5	 72.8	 68.6	 63.6
% Obese	 22.4	 26.2	 35.8	 25.7	 27.7
% Medical Advice on Weight in Past Year	 20.6	 17.7	 27.8	 20.5	 18.2
% [Overweights] Counseled About Weight in Past Year	 23.7	 23.4	 32.6	 25.1	 26.9
% [Obese Adults] Counseled About Weight in Past Year				 41.3	 43.5
% [Overweights] Trying to Lose Weight Both Diet/Exercise	 37.6	 40.8	 49.6	 40.6	 44.0
% Children [Age 5-17] Overweight					
% Children [Age 5-17] Obese					
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					

































Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
46.0		 48.8		 47.0
62.6				 67.2
31.9		 41.9		 38.4
32.4		 31.7	 33.9	 33.5
65.8	 60.2	 66.9		 66.0
26.8	 24.5	 28.5	 30.6	 25.6
19.2		 25.7		 23.3
26.1		 30.9		 29.4
42.5		 47.4	 31.8	 44.8
42.4		 38.6		 42.7
26.2		 30.7		 28.7
16.4		 18.9	 14.6	 11.7
 better  similar  worse				





















Oral Health	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% [Age 18+] Dental Visit in Past Year	 66.5	 70.6	 52.2	 64.9	 72.1
% Child [Age 2-17] Dental Visit in Past Year				 82.7	 74.5
% Have Dental Insurance	 63.6	 58.2	 59.4	 61.1	 58.6
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					








Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
68.9	 67.2	 66.9	 49.0	 67.6
78.0		 79.2	 49.0	 80.4
59.7		 60.8		 63.7
 better  similar  worse				











Physical Activity	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% [Employed] Job Entails Mostly Sitting/Standing				 61.4	 55.8
% No Leisure-Time Physical Activity	 20.3	 19.5	 19.9	 19.4	 20.9
% Meeting Physical Activity Guidelines	 49.4	 50.3	 43.9	 49.7	 56.3
% Moderate Physical Activity	 29.2	 27.7	 27.4	 28.6	 34.4
% Vigorous Physical Activity	 38.3	 40.0	 28.5	 38.7	 42.6
% Medical Advice on Physical Activity in Past Year	 40.5	 44.2	 53.1	 43.4	 41.3
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					



Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			TREND (PSA Only)
	vs. NV	vs. US	vs. HP2020	
58.1		 63.2		 62.5
20.2	 24.3	 28.7	 32.6	 19.7
53.3		 42.7		 55.0
31.8		 23.9		 35.3
40.9		 34.8		 40.5
42.2		 47.8		 41.3
 better  similar  worse				














































Respiratory Diseases	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
CLRD (Age-Adjusted Death Rate)	 69.5	 34.5	 66.2	 55.5	 69.7
Pneumonia/Influenza (Age-Adjusted Death Rate)	 18.5	 16.9	 18.4	 17.7	 20.4
% Nasal/Hay Fever Allergies	 38.6	 31.6	 38.9	 35.5	 25.3
% Sinusitis	 15.1	 10.2	 16.8	 13.3	 13.5
% Chronic Lung Disease	 10.7	 9.3	 16.6	 10.7	 7.9
% [Adult] Currently Has Asthma	 8.9	 5.3	 15.5	 8.4	 8.4
% [Child 0-17] Currently Has Asthma				 5.8	 2.0
	Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.				






Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
58.3	 53.0	 43.2		 68.2
18.3	 21.7	 16.4		 18.3
29.8		 27.3		 35.1
13.4		 19.4		 14.4
9.1		 8.4		 10.0
8.4	 8.1	 7.5		 8.3
3.5		 6.8		 5.4
 better  similar  worse				






























Sexually Transmitted Diseases	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
Gonorrhea Incidence per 100,000					
Chlamydia Incidence per 100,000	 329.8	 154.9	 216.6	 231.1	 268.0
Hepatitis B Incidence per 100,000					
% [Unmarried 18-64] 3+ Sexual Partners in Past Year				 5.0	 10.9




























Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
4.8	 74.7	 103.2		 53.6
236.7	 387.5	 429.6		 239.0
1.6	 2.0	 2.0		
8.4		 7.1		 7.2











Sexually Transmitted Diseases (continued)	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% [Unmarried 18-64] Using Condoms				 30.8	 45.7
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					

























Substance Abuse	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	 18.1	 16.1	 15.0	 16.0	 14.4
% Current Drinker	 51.3	 61.7	 53.7	 56.1	 59.7
% Chronic Drinker (Average 2+ Drinks/Day)	 9.1	 5.5	 17.1	 9.4	 11.2
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	 15.5	 13.5	 25.2	 16.7	 19.1
% Drinking & Driving in Past Month	 2.2	 1.0	 5.6	 2.4	 1.4
% Driving Drunk or Riding with Drunk Driver	 3.0	 2.9	 5.6	 3.4	 5.9
Drug-Induced Deaths (Age-Adjusted Death Rate)	 20.4	 24.3	 17.8	 20.2	 21.2
% Illicit Drug Use in Past Month	 2.3	 2.1	 5.2	 2.8	 2.4
% Ever Sought Help for Alcohol or Drug Problem	 5.3	 2.3	 3.4	 3.9	 3.6
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					








Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
39.3		 18.9		 37.6
 better  similar  worse				

Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
15.7	 11.4	 9.2	 8.2	 15.4
58.1	 57.0	 58.8		 60.9
10.4	 6.8	 5.6		 7.8
18.0	 18.6	 16.7	 24.3	 18.3
1.9		 3.5		 3.0
4.8		 5.5		 5.7
20.2	 20.2	 12.7	 11.3	
2.5		 1.7	 7.1	 2.9
3.8		 3.9		 6.4
 better  similar  worse				

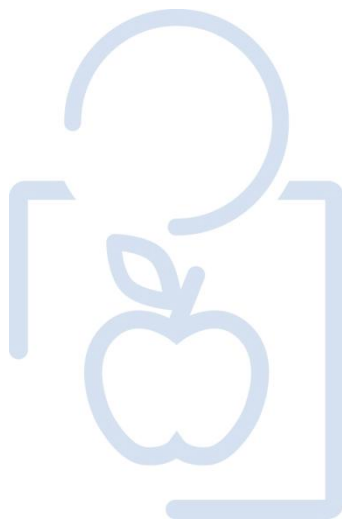
Tobacco Use	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% Current Smoker	 21.0	 12.9	 29.7	 19.0	 17.5
% Someone Smokes at Home	 11.3	 10.6	 23.1	 12.8	 6.9
% [Non-Smokers] Someone Smokes in the Home	 4.6	 6.7	 6.8	 5.9	 1.3
% [Household With Children] Someone Smokes in the Home				 8.8	 0.9
% [Smokers] Received Advice to Quit Smoking					
% [Smokers] Have Quit Smoking 1+ Days in Past Year					
% Smoke Cigars	 5.2	 2.3	 8.0	 4.6	 4.3
% Use Smokeless Tobacco	 2.9	 4.6	 1.9	 3.5	 5.0
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					

Vision	Each Sub-Area vs. Rest of TSA				
	Carson City	Douglas County	Lyon County	PSA	SSA
% Blindness/Trouble Seeing	 10.3	 6.4	 5.7	 7.9	 1.9
% Eye Exam in Past 2 Years	 56.8	 65.2	 55.5	 59.1	 51.3
Note: In the green section, each subarea is compared against the combined balance of the TSA. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.					

Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
18.2	 22.9	 16.6	 12.0	 18.4
9.5		 13.6		 11.2
3.3		 5.7		 4.4
4.1		 12.1		 7.0
57.6		 63.7		 57.5
39.5		 56.2	 80.0	 49.3
4.4		 4.2	 0.2	 4.7
4.3		 2.8	 0.3	 4.3
 better  similar  worse				

Total Service Area (TSA)	Total Service Area (TSA) vs. Benchmarks			
	vs. NV	vs. US	vs. HP2020	TREND (PSA Only)
4.6		 6.9		 8.4
54.8		 57.5		 63.2
 better  similar  worse				

# GENERAL HEALTH STATUS



# Overall 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?"*

## NOTE:

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

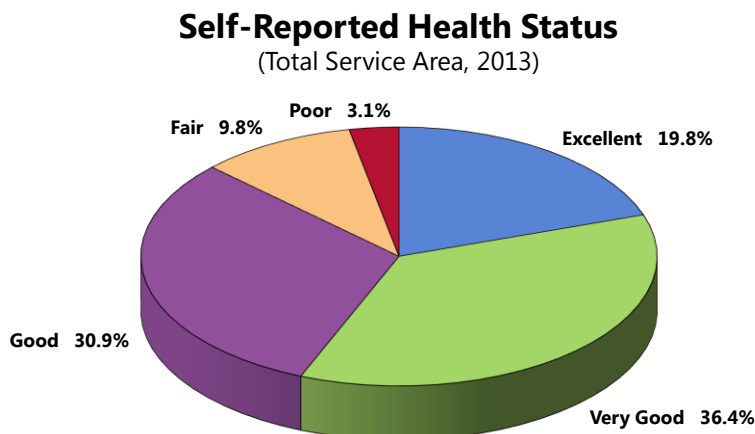
- Where sample sizes permit, community-level data are provided.

- ☒ Trends are measured against baseline data – i.e., the earliest year that data are available or that is presented in this report.

## Self-Reported Health Status

**A total of 56.2% of adults in the Total Service Area rate their overall health as "excellent" or "very good."**

- Another 30.9% gave "good" ratings of their overall health.

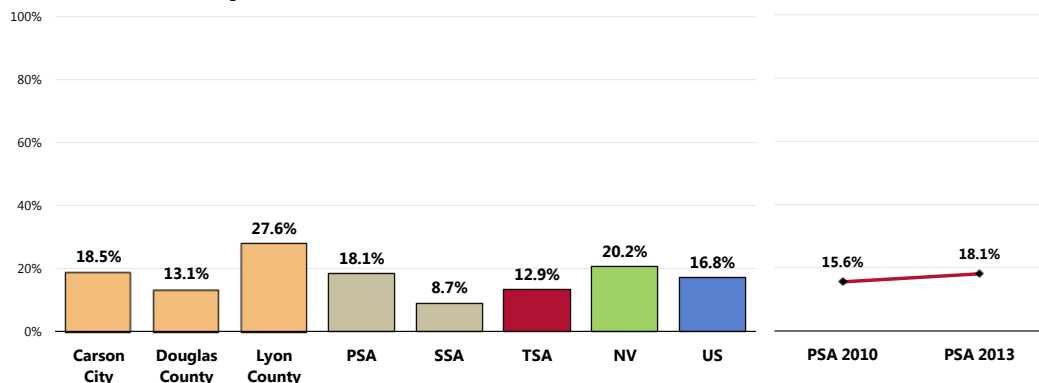


Sources: ● 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]  
Notes: ● Asked of all respondents.

**However, 12.9% of adults believe that their overall health is "fair" or "poor."**

- Much better than statewide findings.
- Better than the national percentage.
- Unfavorably high in Carson City and Lyon County; less favorable in the Primary Service Area than in the Secondary Service Area.
- ☒ No statistically significant change has occurred when comparing "fair/poor" overall health reports to 2010 Primary Service Area survey results.

## Experience "Fair" or "Poor" Overall Health

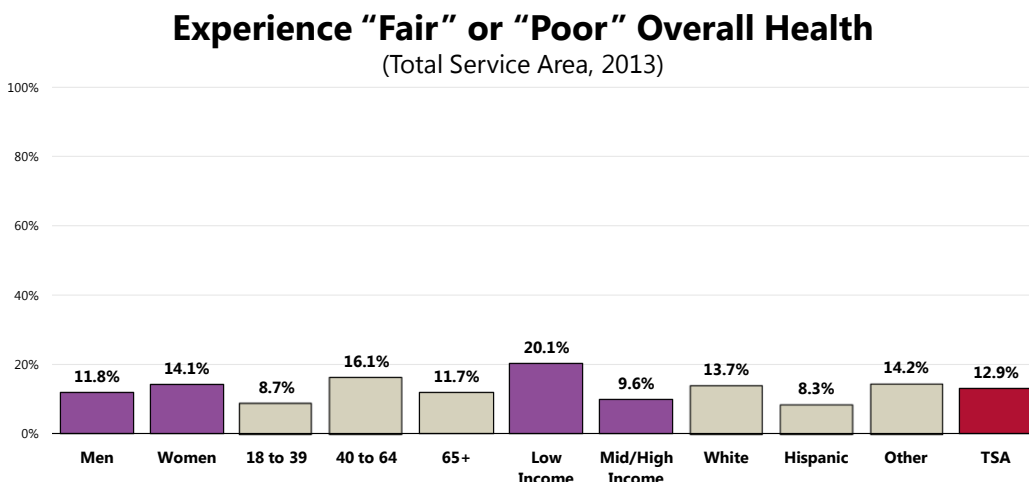


Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 5]  
● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Nevada data.  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.

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

- Those age 40 to 64.
- Residents living at lower incomes.
- Other differences within demographic groups, as illustrated in the following chart, are not statistically significant.

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.



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
• Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

## Activity Limitations

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.



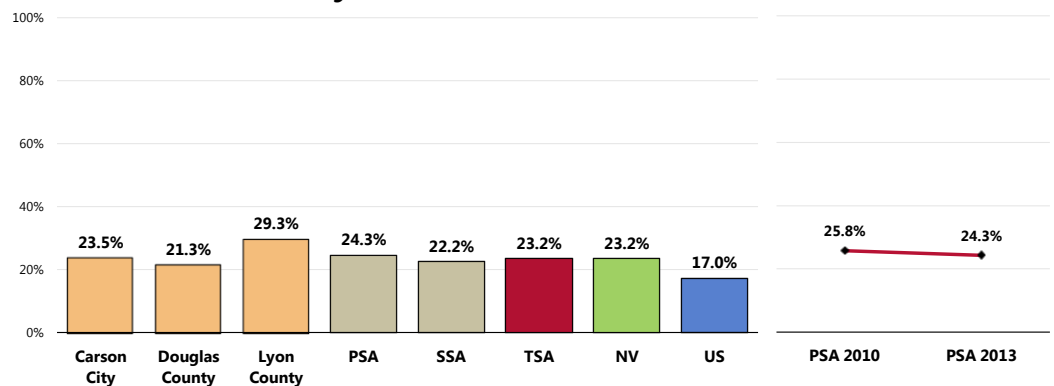
- **Address the inequitable distribution of resources among people with disabilities and those without disabilities** by increasing: appropriate health care for people with disabilities; education and work opportunities; social participation; and access to needed technologies and assistive supports.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

### A total of 23.2% of Total Service Area adults are limited in some way in some activities due to a physical, mental or emotional problem.

- Identical to the prevalence statewide.
- Higher than the national prevalence.
- Statistically similar by area.
- 📊 Statistically unchanged over time in the Primary Service Area.

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



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 112]
- 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 Nevada 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:

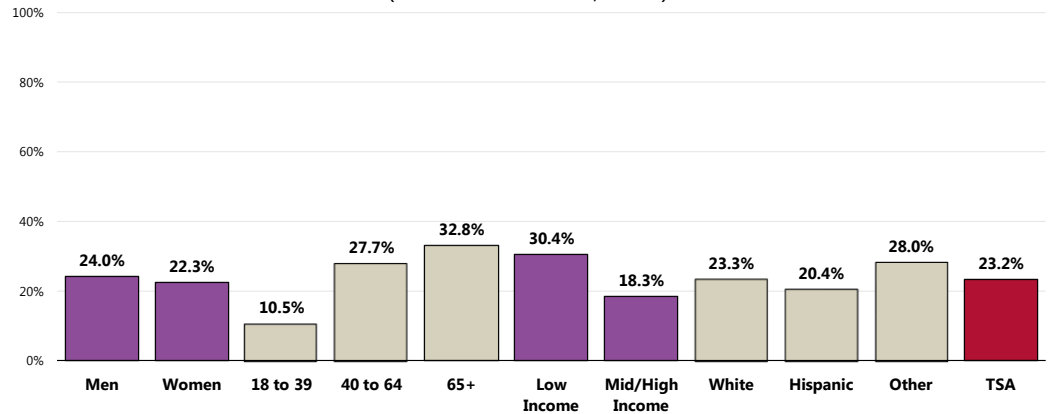
- 👥 Adults age 40 and older are much more often limited in activities (note the positive correlation with age).
- 👥 Residents in households with lower incomes are more likely than higher-income adults to report activity limitations.

#### RELATED ISSUE:

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

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

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 112]

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).

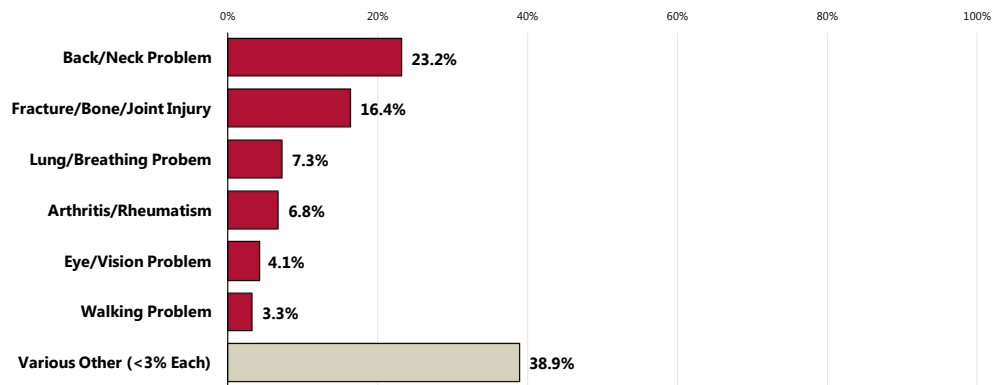
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

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

Lung/breathing problems and eye/vision problems were also mentioned with some frequency.

## Type of Problem That Limits Activities

(Among Those Reporting Activity Limitations; Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 113]

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 11<sup>th</sup> 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](http://www.healthypeople.gov))

## Mental Health Status

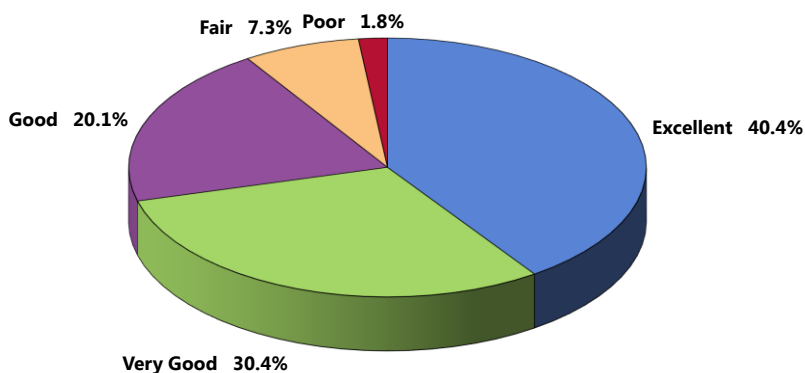
### Self-Reported Mental Health Status

**A total of 70.8% of Total Service Area adults rate their overall mental health as “excellent” or “very good.”**

- Another 20.1% gave “good” ratings of their own mental health status.

### Self-Reported Mental Health Status

(Total Service Area, 2013)

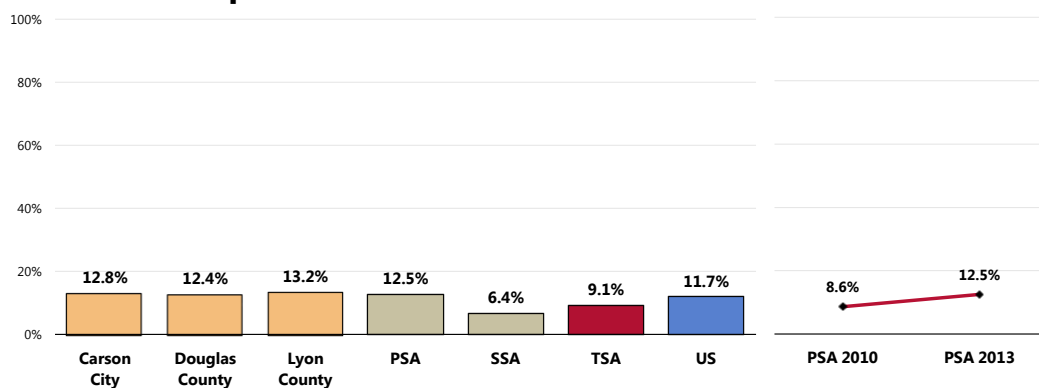


Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 108]  
Notes: • Asked of all respondents.

**A total of 9.1% of Total Service Area adults, however, believe that their overall mental health is “fair” or “poor.”**

- Similar to the “fair/poor” response reported nationally.
- Much higher in the Primary Service Area than in the Secondary Service Area.
- In the Primary Service Area, marks a significant increase since 2010.

### Experience “Fair” or “Poor” Mental Health



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 108]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.



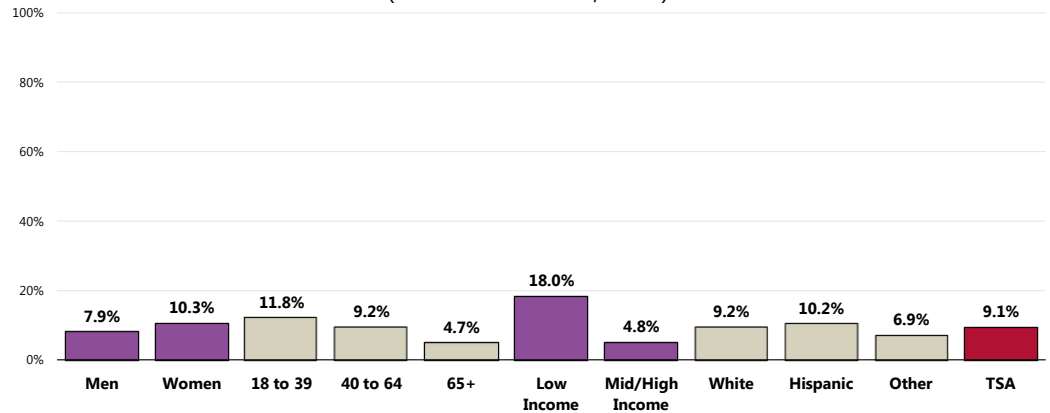
Note the negative correlation between poor mental health and age.



Adults in lower-income households are much more likely to report experiencing “fair/poor” mental health than those with higher incomes.

## Experience “Fair” or “Poor” Mental Health

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 108]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).

• Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

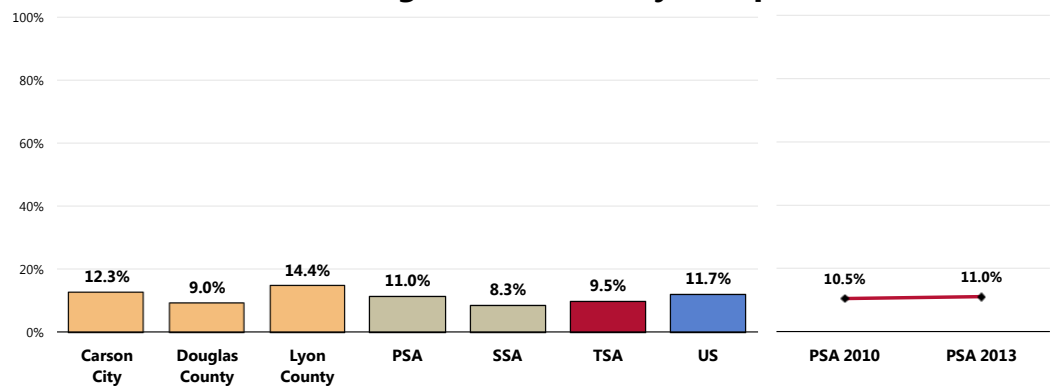
## Depression

### Major Depression

**A total of 9.5% of Total Service Area adults have been diagnosed with major depression by a physician.**

- Similar to the national finding.
- Statistically similar by area.
- Statistically unchanged since 2010 in the Primary Service Area.

## Have Been Diagnosed With Major Depression



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 35]

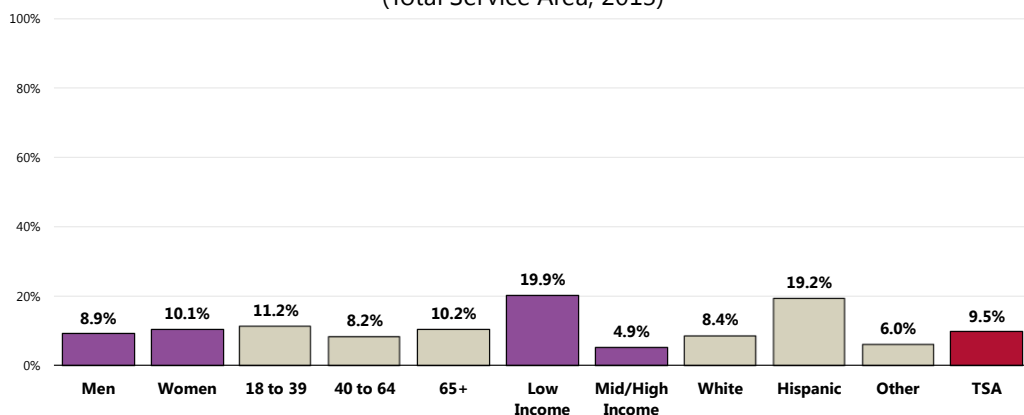
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

The prevalence of major depression is notably higher among:

- Community members living at lower incomes.
- Hispanic adults.

### Have Been Diagnosed With Major Depression (Total Service Area, 2013)



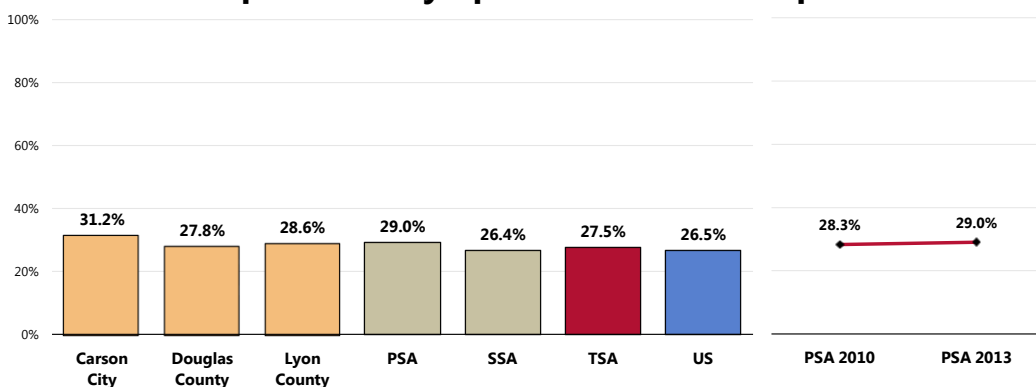
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 35]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories 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.

### Symptoms of Chronic Depression

**A total of 27.5% of Total 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).**




- Comparable to national findings.
- Comparable by area.
- Comparable to that reported in the Primary Service Area in 2010.

### Have Experienced Symptoms of Chronic Depression

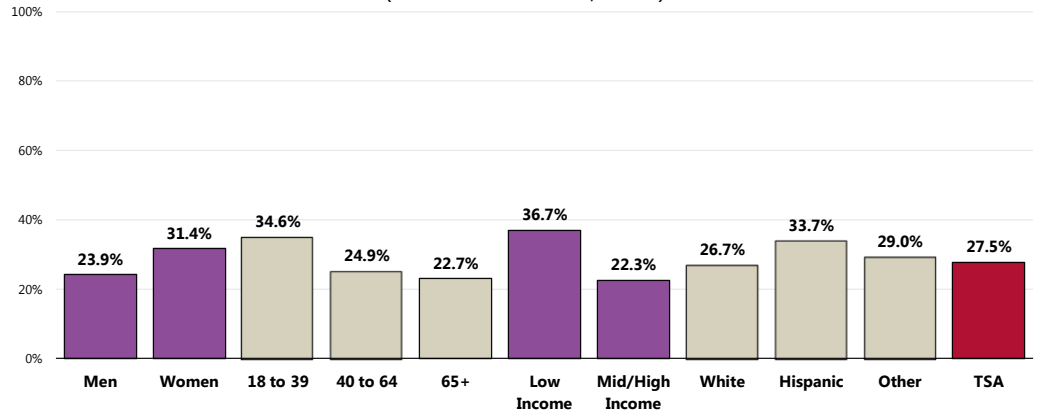


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 109]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

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

-  Women.
-  Young adults (those under 40).
-  Adults with lower incomes.

## Have Experienced Symptoms of Chronic Depression (Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 109]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Stress

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

**Less than one-half of Total Service Area adults consider their typical day to be "not very stressful" (31.0%) or "not at all stressful" (15.0%).**

- Another 42.6% of survey respondents characterize their typical day as "moderately stressful."

## Perceived Level of Stress On a Typical Day (Total Service Area, 2013)

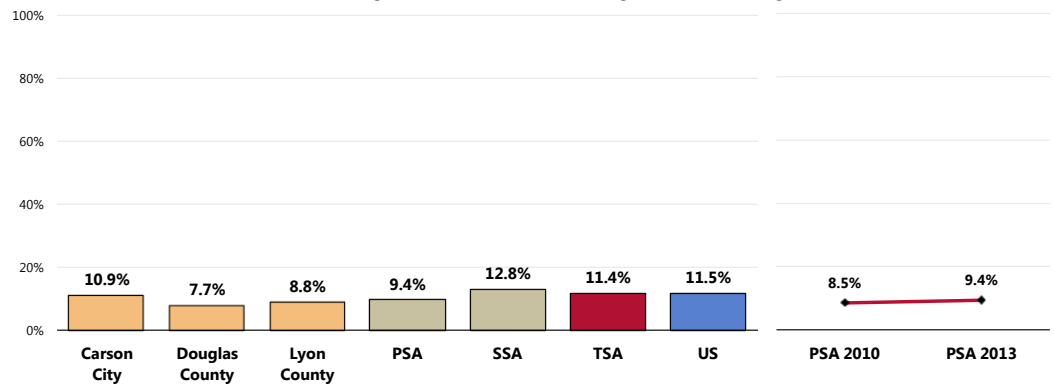


Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 110]  
 Notes: • Asked of all respondents.

In contrast, 11.4% of Total Service Area adults experience “very” or “extremely” stressful days on a regular basis.

- Nearly identical to national findings.
- Similar by area.
- 📊 Statistically similar to 2010 PSA findings.

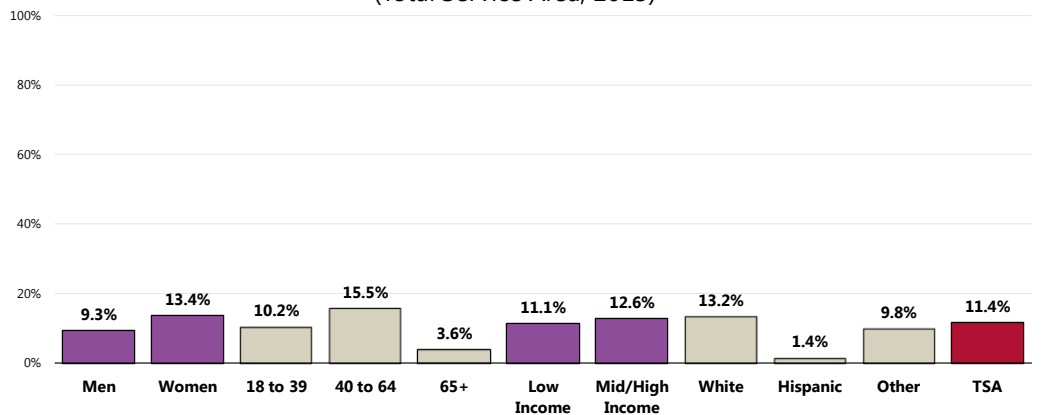
## Perceive Most Days As “Extremely” or “Very” Stressful



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 110]  
 ● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: ● Asked of all respondents.

👤 Note that high stress levels are more prevalent among adults age 40 to 64, White adults, and adults of “Other” racial backgrounds.

## Perceive Most Days as “Extremely” or “Very” Stressful (Total Service Area, 2013)



Sources: ● 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 110]  
 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.



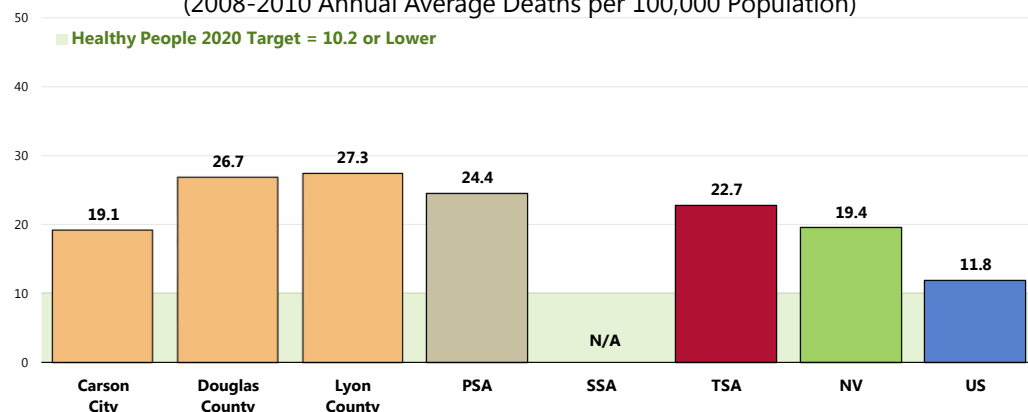
## Suicide

Between 2008 and 2010, there was an annual average age-adjusted suicide rate of 22.7 deaths per 100,000 population in the Total Service Area.

- Higher than the statewide rate.
- Nearly twice the national rate.
- Fails to satisfy the Healthy People 2020 target of 10.2 or lower.
- Favorably low in Carson City; note that the number of suicides in SSA counties during this time were too small to provide a reliable independent rate.

### Suicide: Age-Adjusted Mortality

(2008-2010 Annual Average Deaths per 100,000 Population)

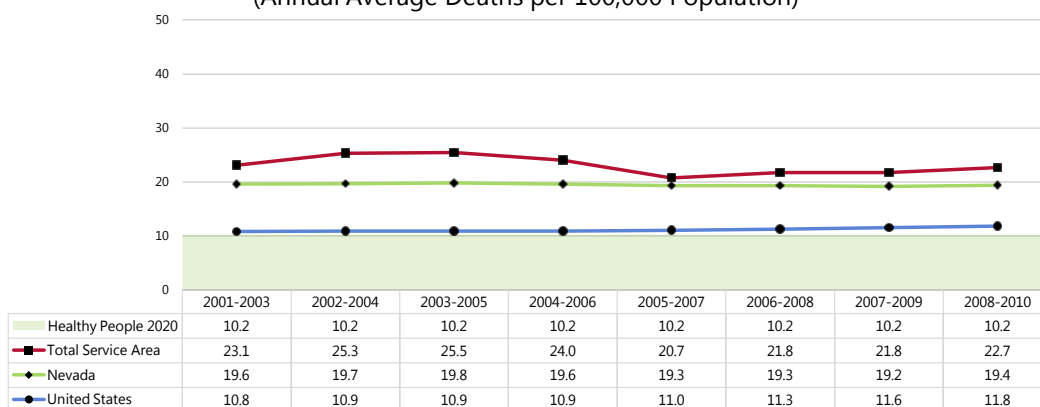


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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 regional suicide rate has remained above state and national rates for the past several years.

### Suicide: Age-Adjusted Mortality Trends

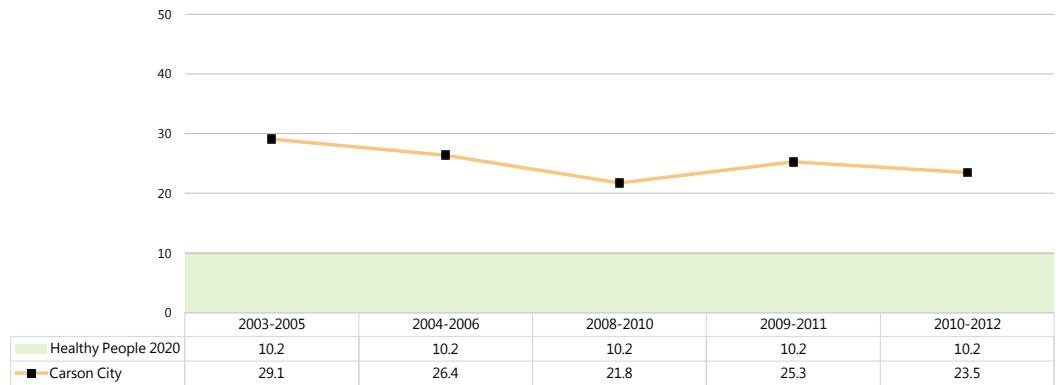
(Annual Average Deaths per 100,000 Population)



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

 In Carson City, the suicide rate has trended downward.

## Suicide: Age-Adjusted Mortality Trend (Annual Average Deaths per 100,000 Population)



Sources: 


- Office of Public Health Informatics and Epidemiology.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MHMD-1]

Notes: 

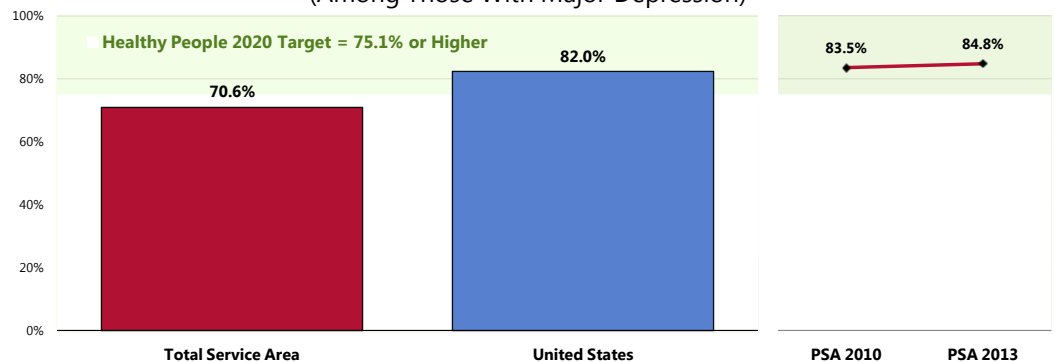
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
- Rates are simple three-year averages of individual year rates.
- 2011 and 2012 data reflect preliminary rates and are subject to change. Note that a rate for 2007 is not available due to reliability concerns.

## Mental Health Treatment

**Among adults with diagnosed depression, 70.6% acknowledge that they have sought professional help for a mental or emotional problem.**

- Statistically similar to national findings.
- Similar to the Healthy People 2020 target of 75.1% or higher.
-  There has been no statistically significant change over time among PSA adults with major depression.

## Have Sought Professional Help for a Mental or Emotional Problem (Among Those With Major Depression)



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 143]
- 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.

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

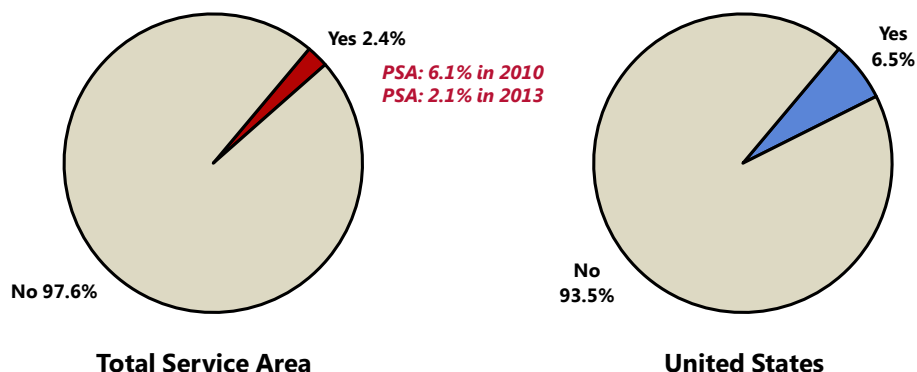
## Children & ADD/ADHD

Among Total Service Area adults with children age 5 to 17, 2.4% report that their child takes medication for attention deficit disorder(ADD) or attention deficit hyperactivity disorder (ADHD).

- More favorable than the national prevalence.
- ☒ Statistically unchanged over time among Primary Service Area children age 5-17.

### Child Takes Medication for ADD/ADHD

(Among Parents of Children 5-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 138]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents with children age 5 to 17.

## Related Focus Group Findings: Mental Health

Focus group participants spent time discussing mental health in the community. The main issues include:

- Limited number of behavioral health providers and services
- Carson Mental Health Center

During the focus groups, issues surrounding mental illness and mental healthcare coverage came up several times. Attendees describe depression, bipolar disorder, and attention deficit hyperactivity disorder (ADHD) as serious concerns for the community and think that the prevalence of mental illness continues to increase.

Focus group members discussed at length the **limited number of behavioral health providers and services** available in the community. The area has only one inpatient facility. Key informants feel that outpatient services remain sparse. The Carson Mental Health Center represents the main behavioral health option for residents; however, the clinics struggle to keep up with the high demand. Many times, patients have several months' waiting periods; therefore, they frequent the emergency room, which is not an appropriate setting.

*"All those services are really good but we still see those patients coming into the emergency department saying, 'I can't get an appointment with Carson Mental Health for two months and I need my medication.' It's that vicious circle. So they come in and we write them a prescription and then they're left with this enormous bill for just filling their prescription. And then there's the*

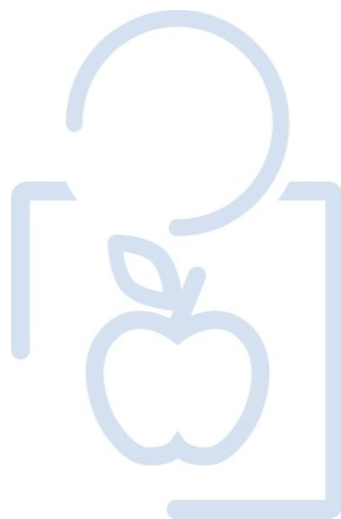
*access to counseling. I think that the medication obviously is a really important issue but I think there's a lack of counseling in this community." — Community Leader*

Due to the inadequate number of psychiatrists, family practice physicians must provide treatment for anyone with a behavioral health concern. In addition, schools struggle with students who have issues because no place exists to refer the youth.

*"We had a kid come in and take a computer screen completely off of the desk and crash it on to the ground and break glass and pick up a piece of the glass and act like he was going to hurt another student with it. Where do you send him? You can't send him to Douglas County Mental Health because they'll say, 'Oh, we're sorry. We don't have an appointment for another month.' You don't send him to the ER. That's not very appropriate because they're probably just going to medicate him and bandage the problem. So it's one of those things where it's this complete lack of access to the under-insured, uninsured, or low-income families." — Community Leader*

Attendees believe that the **Carson Mental Health Center** is working hard to serve the community and has recently developed some new programming. For example, the Carson Mental Health Center is working with law enforcement and the judicial system to combat criminal recidivism. The FAST program is an intervention that provides wrap-around services after incarceration. The clinics are also working to bring in tele-psychiatry to reach more community members.

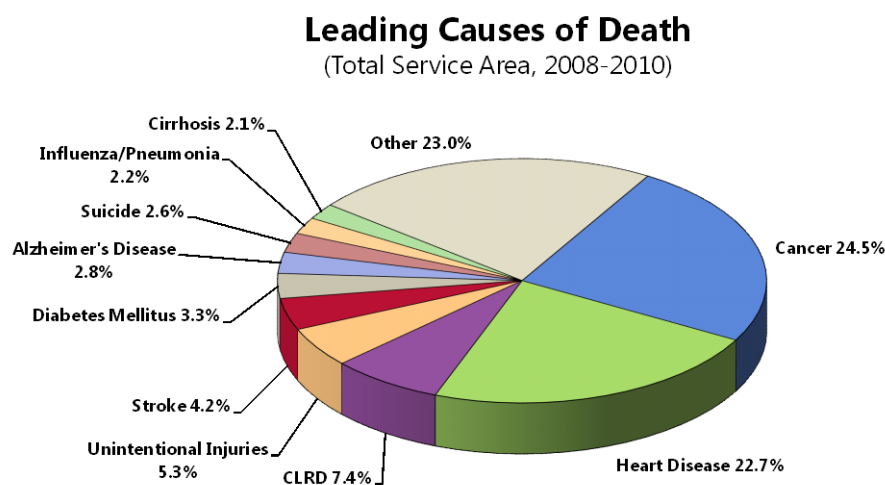
# DEATH, DISEASE & CHRONIC CONDITIONS



# Leading Causes of Death

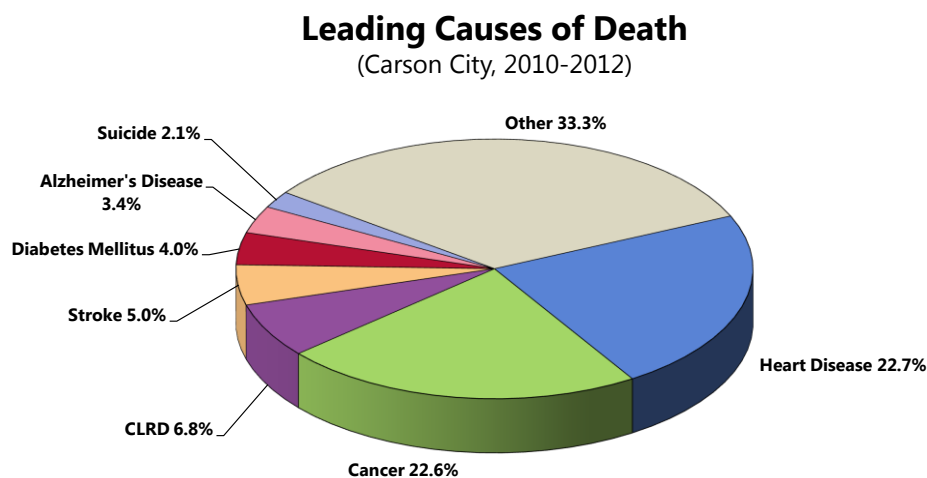
## Distribution of Deaths by Cause

**Together, cardiovascular disease (heart disease and stroke) and cancers accounted for over one-half of all deaths in the Total 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 June 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.

**In Carson City, cardiovascular disease and cancers accounted for 45.3% of all 2010-2012 deaths.**



Sources: • Office of Public Health Informatics and Epidemiology; data extracted May 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, Nevada 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 2008-2010 annual average age-adjusted death rates per 100,000 population for selected causes of death in the Total Service Area.

**Age-adjusted mortality rates in the Total Service Area are worse than national rates for suicide, cancer, CLRD, pneumonia-influenza, unintentional injuries (including motor vehicle accidents), firearm-related deaths, diabetes mellitus, cirrhosis, and drug-induced deaths.**

Of the causes outlined in the following chart for which Healthy People 2020 objectives have been established, Total Service Area rates fail to satisfy the related goals for each, with the exception of stroke deaths (for which the area rate is similar).

### Age-Adjusted Death Rates for Selected Causes

(2008-2010 Deaths per 100,000)

	Total Service Area	Nevada	United States	HP2020
<b>Malignant Neoplasms (Cancers)</b>	<b>185.8</b>	<b>176.2</b>	<b>174.2</b>	<b>160.6</b>
<b>Diseases of the Heart</b>	<b>182.4</b>	<b>197.9</b>	<b>184.6</b>	<b>152.7*</b>
<b>Chronic Lower Respiratory Disease (CLRD)</b>	<b>58.3</b>	<b>53.0</b>	<b>43.2</b>	<b>n/a</b>
<b>Unintentional Injuries</b>	<b>48.4</b>	<b>41.4</b>	<b>38.2</b>	<b>36</b>
<b>Cerebrovascular Disease (Stroke)</b>	<b>33.5</b>	<b>36.9</b>	<b>40.2</b>	<b>33.8</b>
<b>Diabetes Mellitus</b>	<b>26.2</b>	<b>14.9</b>	<b>21.3</b>	<b>19.6*</b>
<b>Alzheimer's Disease</b>	<b>24.3</b>	<b>14.7</b>	<b>25.0</b>	<b>n/a</b>
<b>Intentional Self-Harm (Suicide)</b>	<b>22.7</b>	<b>19.4</b>	<b>11.8</b>	<b>10.2</b>
<b>Drug-Induced</b>	<b>20.2</b>	<b>20.2</b>	<b>12.7</b>	<b>11.3</b>
<b>Pneumonia/Influenza</b>	<b>18.3</b>	<b>21.7</b>	<b>16.4</b>	<b>n/a</b>
<b>Cirrhosis/Liver Disease</b>	<b>15.7</b>	<b>11.4</b>	<b>9.2</b>	<b>8.2</b>
<b>Firearm-Related</b>	<b>13.9</b>	<b>14.9</b>	<b>10.2</b>	<b>9.2</b>
<b>Motor Vehicle Deaths</b>	<b>13.5</b>	<b>11.0</b>	<b>11.9</b>	<b>12.4</b>
<b>Kidney Diseases</b>	<b>12.4</b>	<b>19.5</b>	<b>15.2</b>	<b>n/a</b>

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

• Local, state and national data are simple three-year averages.

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

# 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](http://www.healthypeople.gov))

## Age-Adjusted Heart Disease & Stroke Deaths

### Heart Disease Deaths

**Between 2008 and 2010 there was an annual average age-adjusted heart disease mortality rate of 182.4 deaths per 100,000 population in the Total Service Area.**

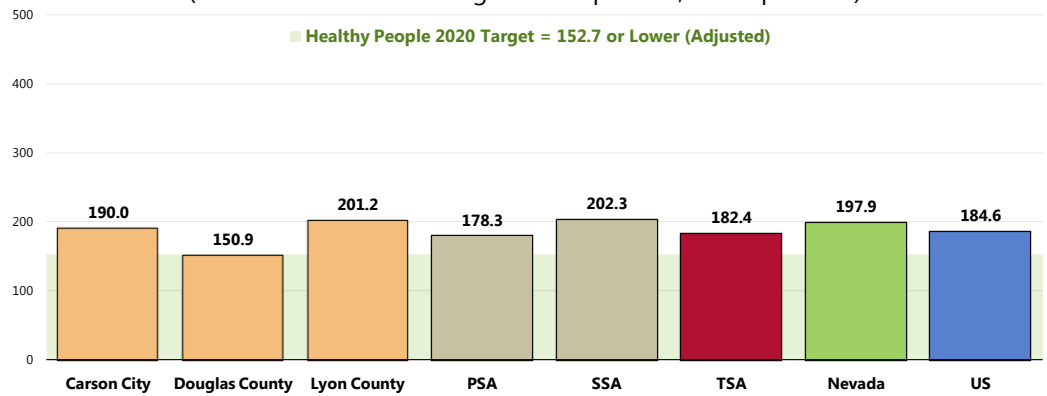
- Lower than the statewide rate.
- Similar to the national rate.
- Fails to satisfy the Healthy People 2020 target (as adjusted to account for all diseases of the heart).
- Unfavorably high in Lyon County and in the Secondary Service Area.

The greatest share of cardiovascular deaths is attributed to heart disease.



## Heart Disease: Age-Adjusted Mortality

(2008-2010 Annual Average Deaths per 100,000 Population)

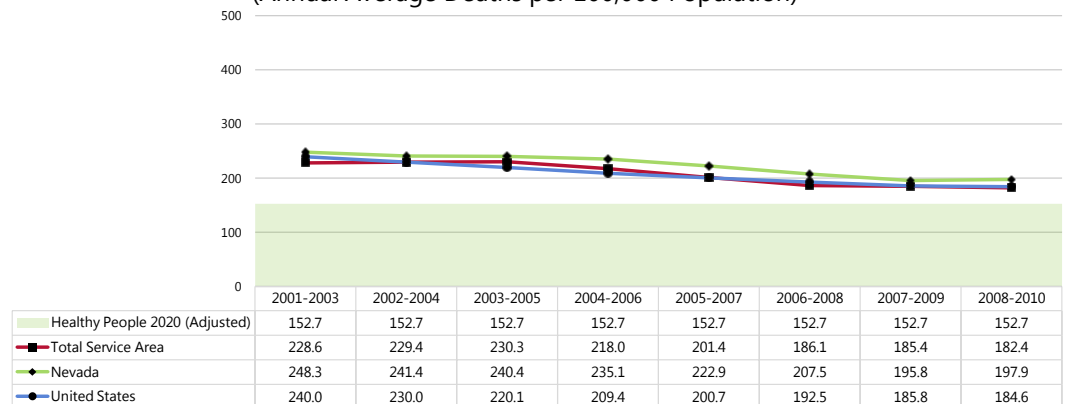


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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.  
• Local, state and national data are simple three-year averages.  
• The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

✚ The heart disease mortality rate has decreased in the Total Service Area, echoing the decreasing trends across Nevada and the US overall.

## Heart Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

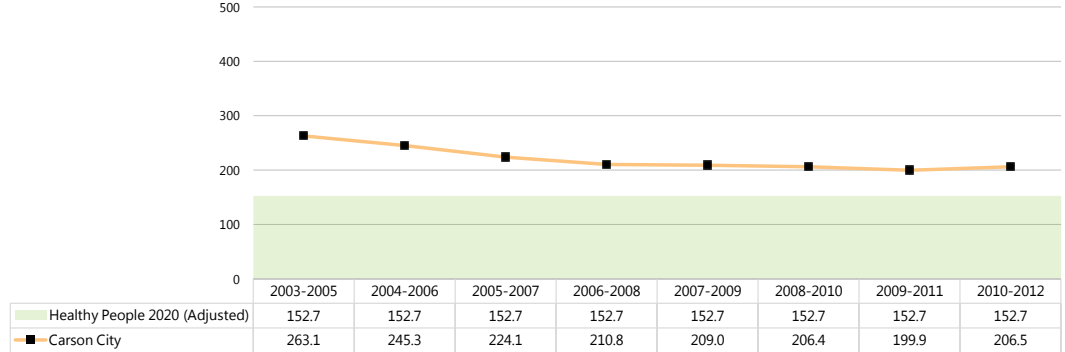


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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.  
• Local, state and national data are simple three-year averages.  
• The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

- In Carson City, the heart disease mortality rate has generally decreased over the past decade.

## Heart Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



Sources: • Office of Public Health Informatics and Epidemiology.  
 • 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.  
 • Rates are simple three-year averages of individual year rates.  
 • 2011 and 2012 data reflect preliminary rates and subject to change.  
 • The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

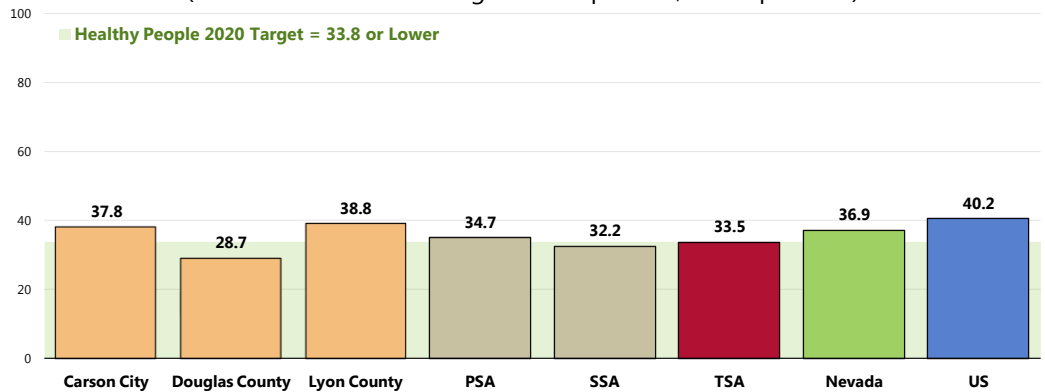
## Stroke Deaths

**Between 2008 and 2010, there was an annual average age-adjusted stroke mortality rate of 33.5 deaths per 100,000 population in the Total Service Area.**

- More favorable than the Nevada rate.
- More favorable than the national rate.
- Similar to the Healthy People 2020 target of 33.8 or lower.
- Unfavorably high in Carson City and Lyon County; similar by service area.

## Stroke: Age-Adjusted Mortality

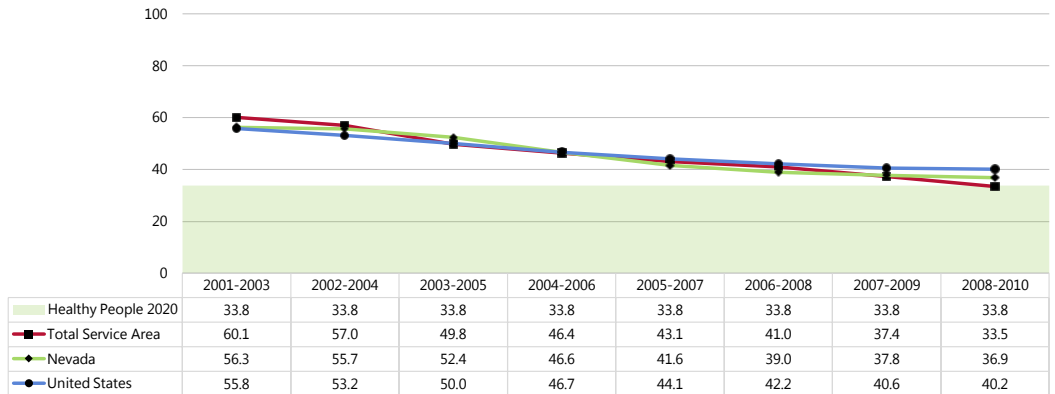
(2008-2010 Annual Average Deaths per 100,000 Population)



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

- ☒ The stroke death rate has declined in recent years, echoing the trends reported across Nevada and the US overall.

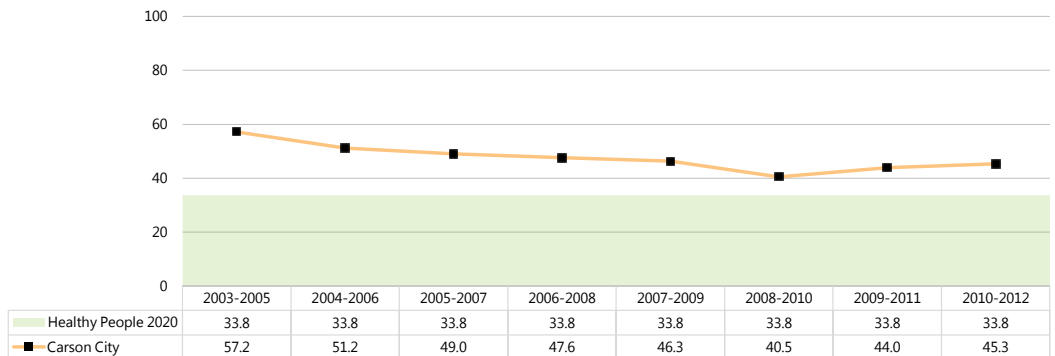
### Stroke: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



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

- ☒ In Carson City, stroke death rates have decreased overall.

### Stroke: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



- Sources:
- Office of Public Health Informatics and Epidemiology.
  - 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.
  - Rates are simple three-year averages of individual year rates.
  - 2011 and 2012 data reflect preliminary rates and subject to change.

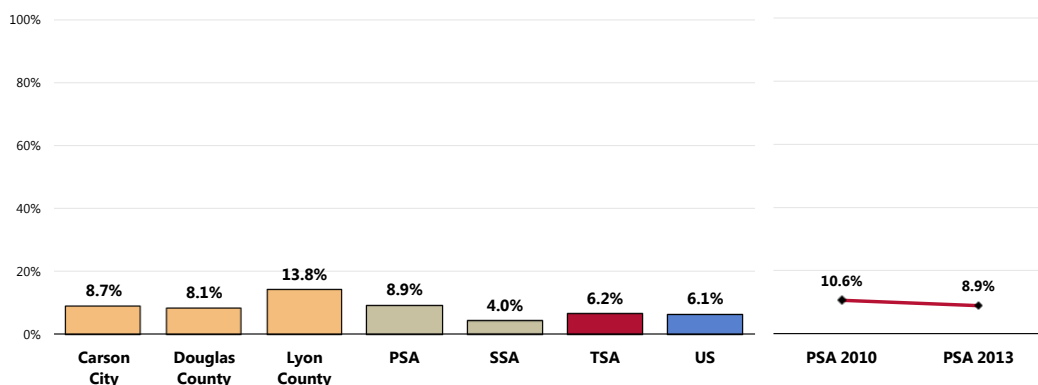
## Prevalence of Heart Disease & Stroke

### Prevalence of Heart Disease

**A total of 6.2% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina or heart attack.**

- Almost identical to the national prevalence.
- Unfavorably high in Lyon County; by service area, over twice as high in the PSA.
- In the Primary Service Area, there has been no significant change in findings since 2010.

### Prevalence of Heart Disease



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

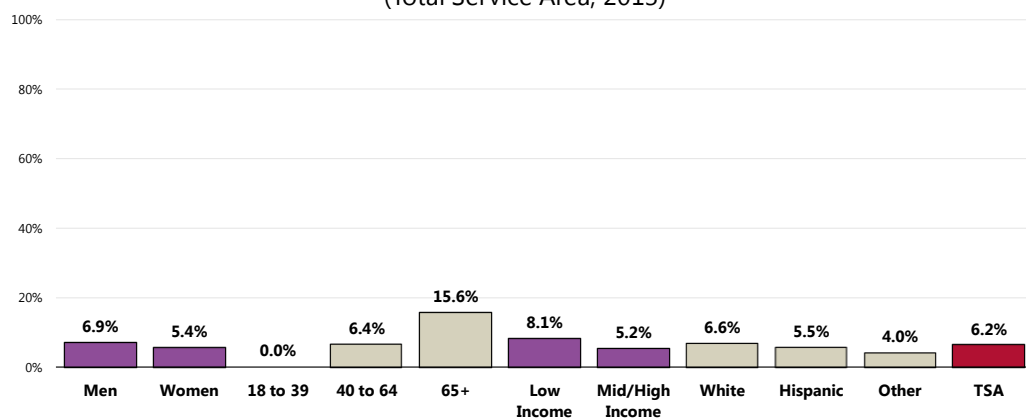
Notes: ● Asked of all respondents.

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

- Those age 40+, and especially seniors (positive correlation with age).

### Prevalence of Heart Disease

(Total Service Area, 2013)



Sources: ● 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 144]

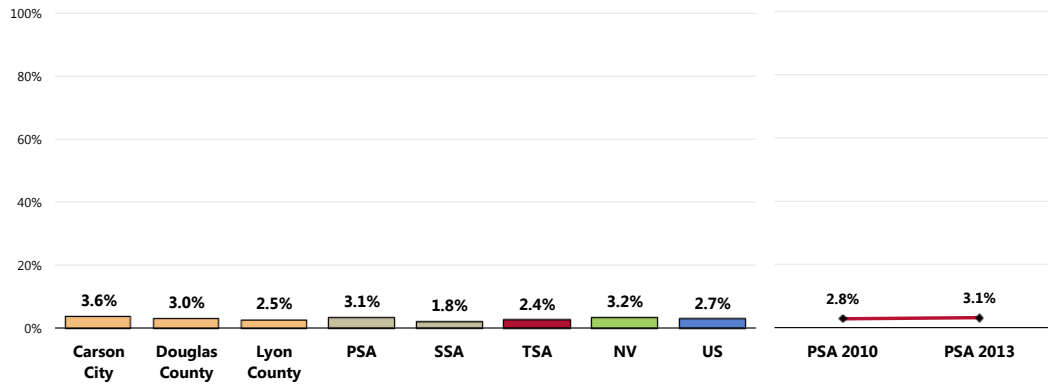
Notes: ● Asked of all respondents.  
 ● Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 ● Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household 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.

## Prevalence of Stroke

**A total of 2.4% 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.
- Similar findings by geography.
- No significant change in stroke prevalence in the Primary Service Area since 2010.

### Prevalence of Stroke

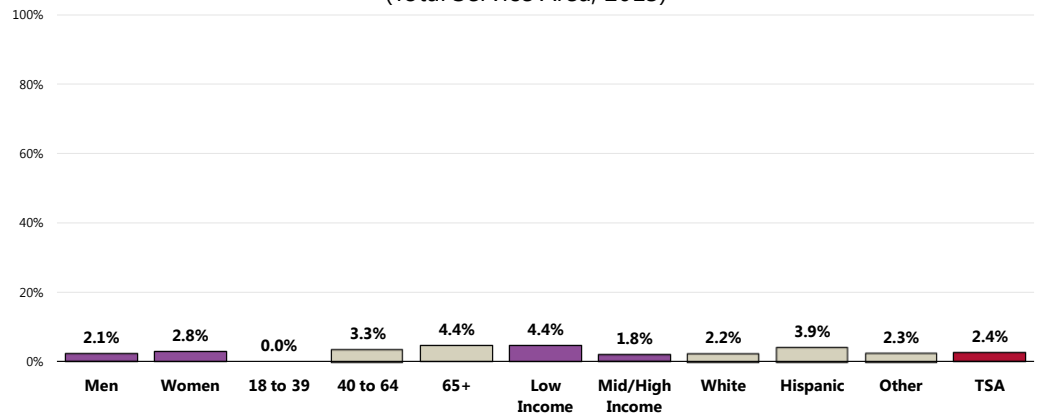


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 42]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Nevada data.

Notes: • Asked of all respondents.

Residents age 40 and older are more likely to have been diagnosed with stroke.

### Prevalence of Stroke (Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 42]  
 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.

## 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](http://www.healthypeople.gov))

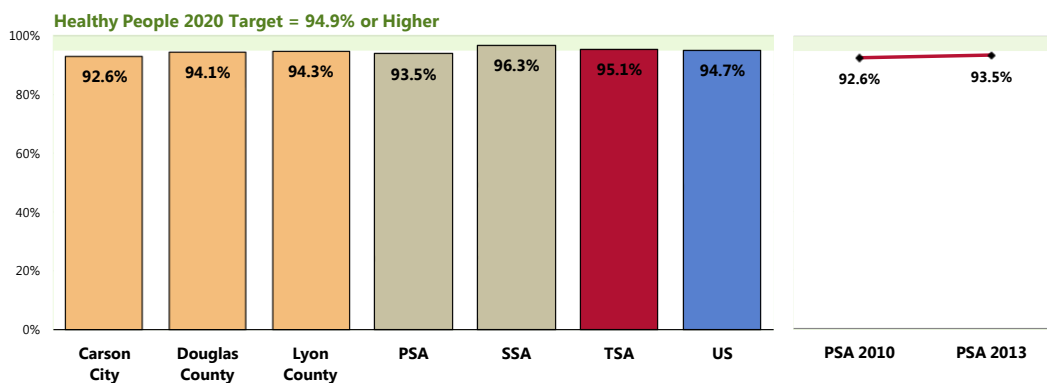
### Hypertension (High Blood Pressure)

#### High Blood Pressure Testing

**A total of 95.1% of Total Service Area adults have had their blood pressure tested within the past two years.**

- Similar to national findings.
- Similar to the Healthy People 2020 target (94.9% or higher).
- No significant difference by area.
- 📊 In the Primary Service Area, there has been no significant change since 2010.

#### Have Had Blood Pressure Checked in the Past Two Years



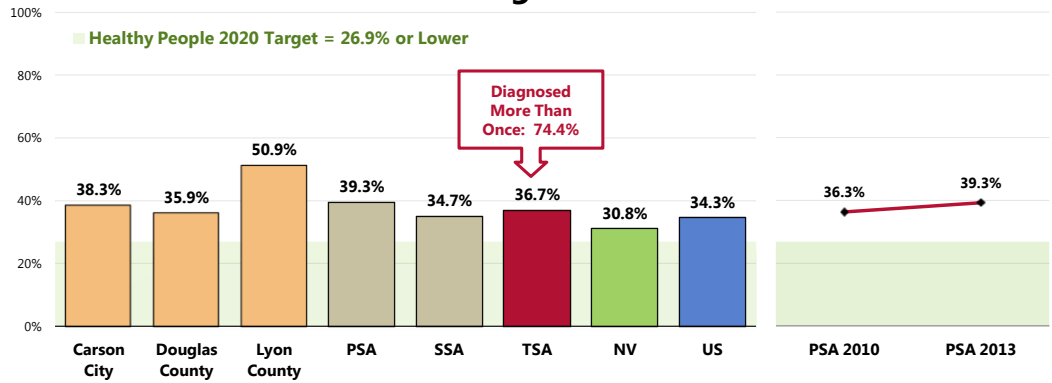
Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 50]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-4]  
Notes: ● Asked of all respondents.

#### Prevalence of Hypertension

**A total of 36.7% of adults have been told at some point that their blood pressure was high.**

- Less favorable than the Nevada prevalence.
- Similar to the national prevalence.
- Fails to satisfy the Healthy People 2020 target (26.9% or lower).
- Unfavorably high in Lyon County; similar by service area.
- 📊 Statistically unchanged over time in the Primary Service Area.
- 👥 Among hypertensive adults, 74.4% have been diagnosed with high blood pressure more than once.

## Prevalence of High Blood Pressure



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 48, 145]  
 • 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 Nevada 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:



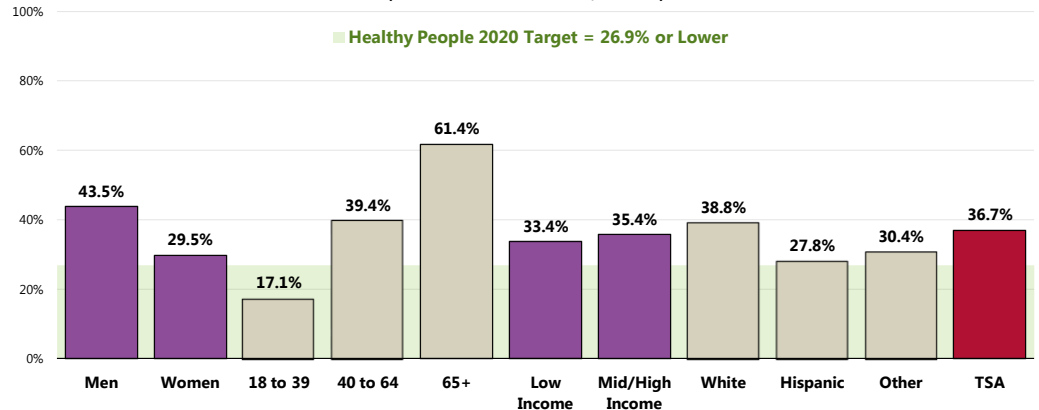
Men.



Adults age 40 and older, and especially those age 65+.

## Prevalence of High Blood Pressure

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 145]  
 • 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. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Respondents reporting high blood pressure were further asked:

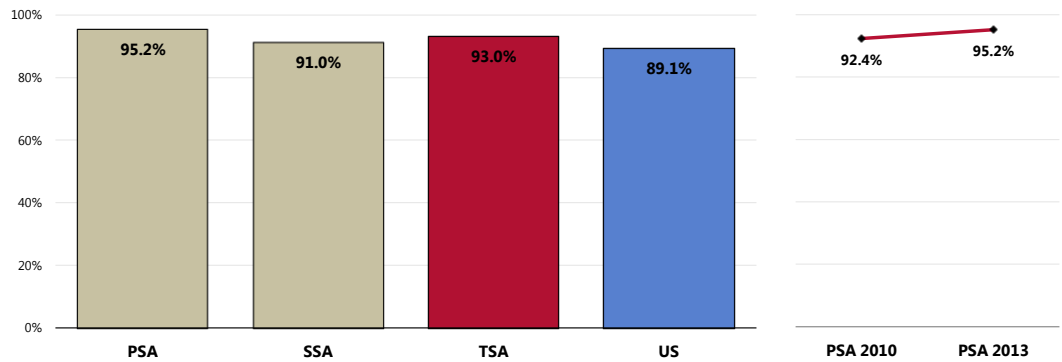
*"Are you currently taking any action to help control your high blood pressure, such as taking medication, changing your diet, or exercising?"*

## Hypertension Management

**Among respondents who have been told that their blood pressure was high, 93.0% report that they are currently taking actions to control their condition.**

- Similar to national findings.
- Similar findings in the service areas.
- ☒ Statistically unchanged since 2010 in the Primary Service Area.

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 49]  
 • 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.

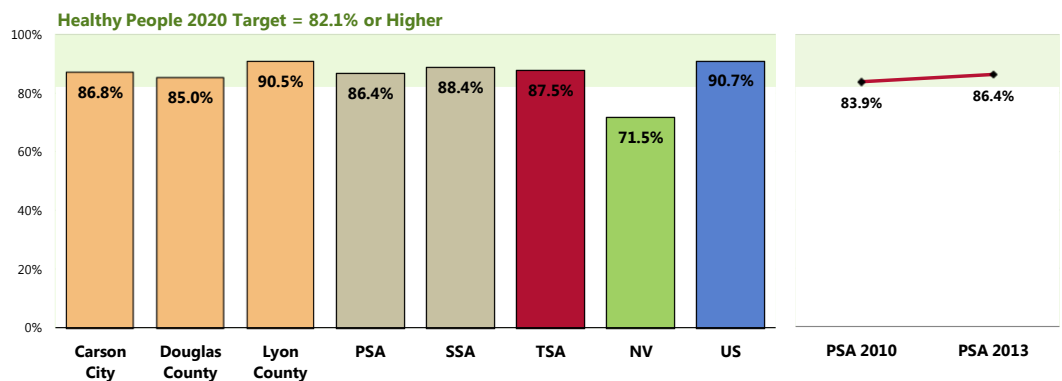
## High Blood Cholesterol

### Blood Cholesterol Testing

**A total of 87.5% of Total Service Area adults have had their blood cholesterol checked within the past five years.**

- More favorable than Nevada findings.
- Less favorable than the national findings.
- Satisfies the Healthy People 2020 target (82.1% or higher).
- No difference by area.
- ☒ Statistically unchanged over time in the Primary Service Area.

## Have Had Blood Cholesterol Levels Checked in the Past Five Years



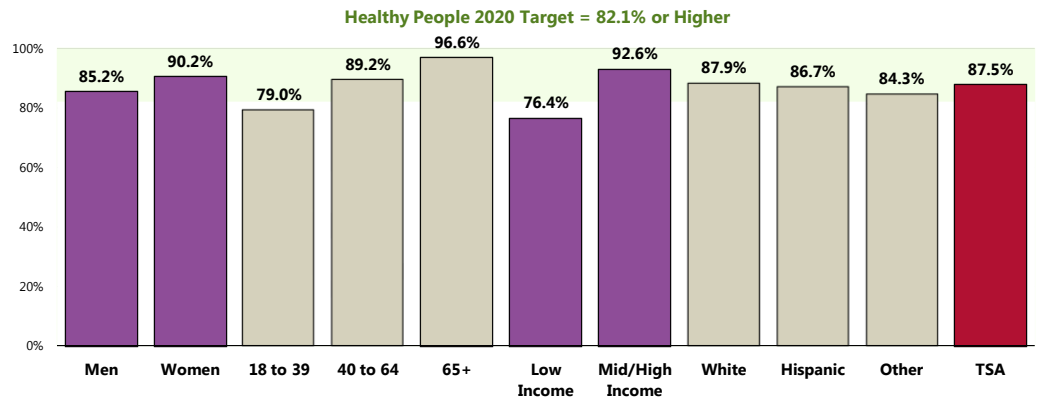
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 53]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2011 Nevada data.  
 • 2011 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.





Men and low-income residents report lower screening levels; note also the positive correlation between age and screenings.

## Have Had Blood Cholesterol Levels Checked in the Past Five Years (Total Service Area, 2013)



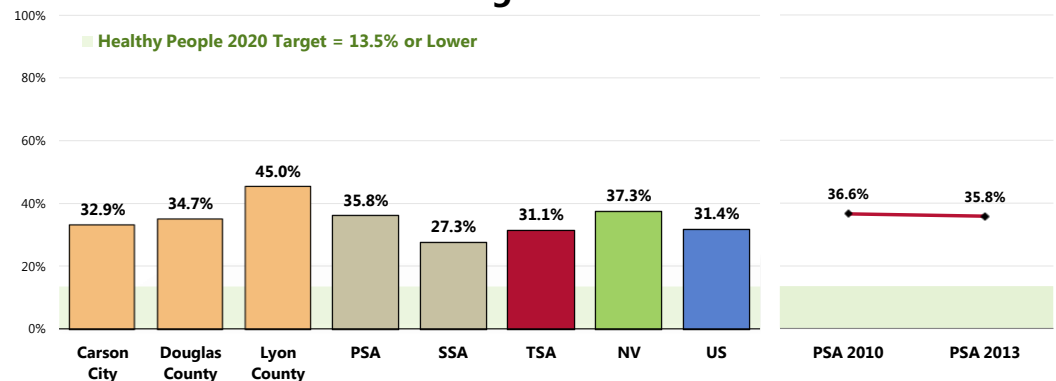
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 53]  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-6]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other 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.

## Self-Reported High Blood Cholesterol

**A total of 31.1% of adults have been told by a health professional that their cholesterol level was high.**

- More favorable than the Nevada findings.
- Similar to the national prevalence.
- Over twice the Healthy People 2020 target (13.5% or lower).
- Unfavorably high in Lyon County; higher in the PSA than in the SSA.
- In the Primary Service Area, there has been no significant change since 2010.

## Prevalence of High Blood Cholesterol

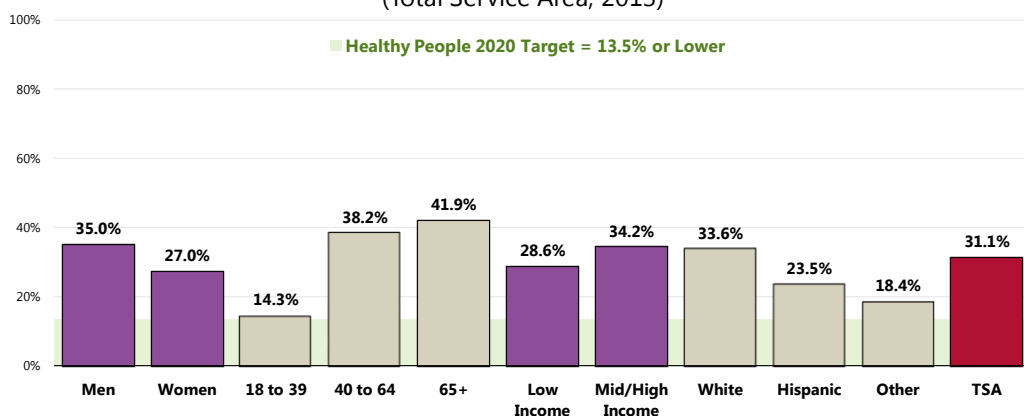


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 146]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Nevada data.  
• 2011 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 Nevada data reflects those adults who have been tested for high cholesterol and who have been diagnosed with it.

Note that 15.5% of Total 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.

- 👤 Men are more likely than women in the Total Service Area to report having high blood cholesterol.
- 👤 Adults age 40+ are much more likely to report high cholesterol than young adults.
- 👤 Whites report a higher prevalence than Hispanics and "Other" races.
- 👤 Keep in mind that "unknowns" are relatively high in young adults and lower-income residents.

### Prevalence of High Blood Cholesterol (Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 146]  
 • 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. 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.

### High Cholesterol Management

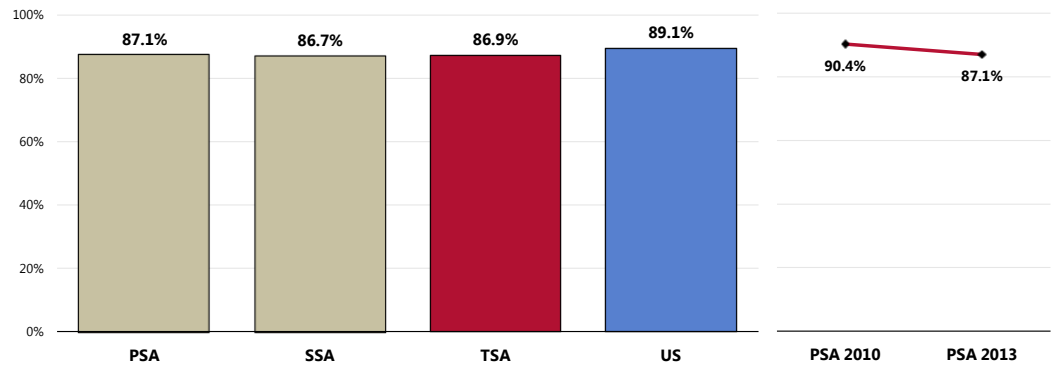
**Among adults who have been told that their blood cholesterol was high, 86.9% report that they are currently taking actions to control their cholesterol levels.**

- Similar to that found nationwide.
- No significant difference by service area.
- 📊 Statistically unchanged in the Primary Service Area since 2010.

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?"*

## Taking Action to Control High Blood Cholesterol Levels (Among Adults with High Cholesterol)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 52]  
 • 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.

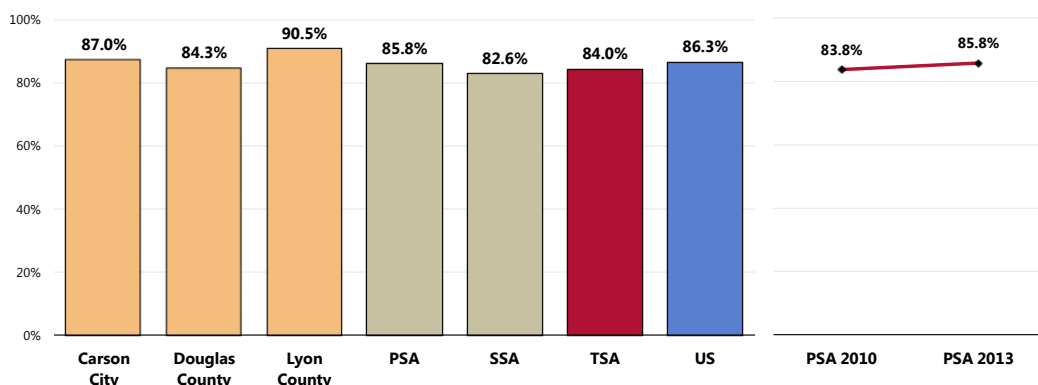
– National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

## Total Cardiovascular Risk

**A total of 84.0% of Total 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.**

- Comparable to national findings.
- Highest in Lyon County; statistically similar by service area.
- Primary Service Area: Statistically similar to 2010 findings.

### Present One or More Cardiovascular Risks or Behaviors



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 147]

• 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:

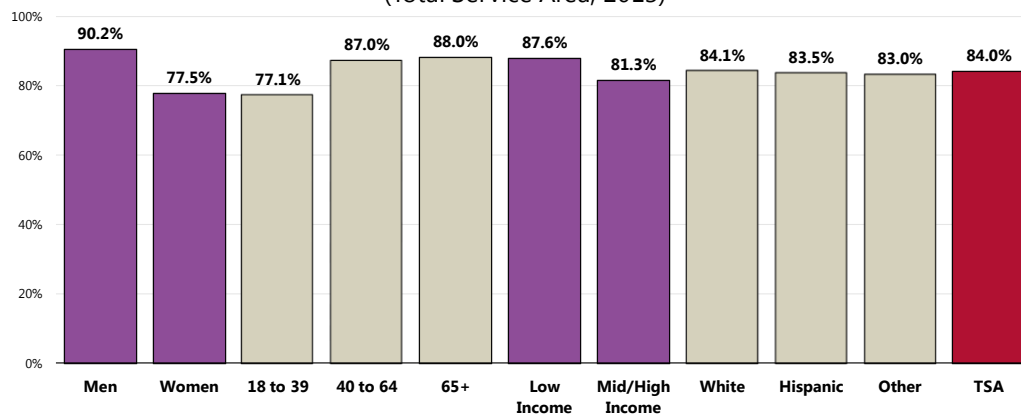
- Men.
- Adults age 40 and older.
- Residents in lower-income households.

#### RELATED ISSUE:

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

### Present One or More Cardiovascular Risks or Behaviors

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 147]

Notes: • Asked of all respondents.

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

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).

• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

# 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)

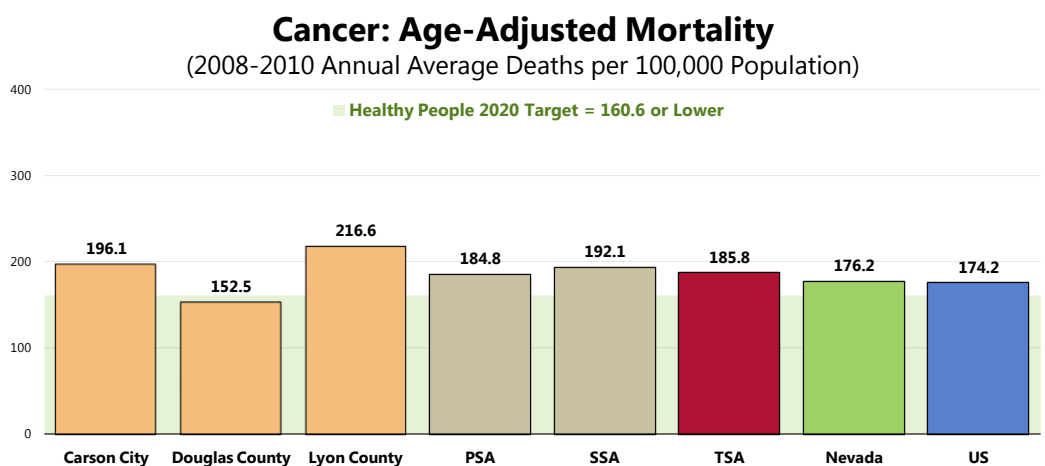
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Age-Adjusted Cancer Deaths


### All Cancer Deaths

**Between 2008 and 2010, there was an annual average age-adjusted cancer mortality rate of 185.8 deaths per 100,000 population in the Total Service Area.**

- Less favorable than the statewide rate.
- Less favorable than the national rate.
- Fails to satisfy the Healthy People 2020 target of 160.6 or lower.
- Unfavorably high in Lyon County; similar by service area.

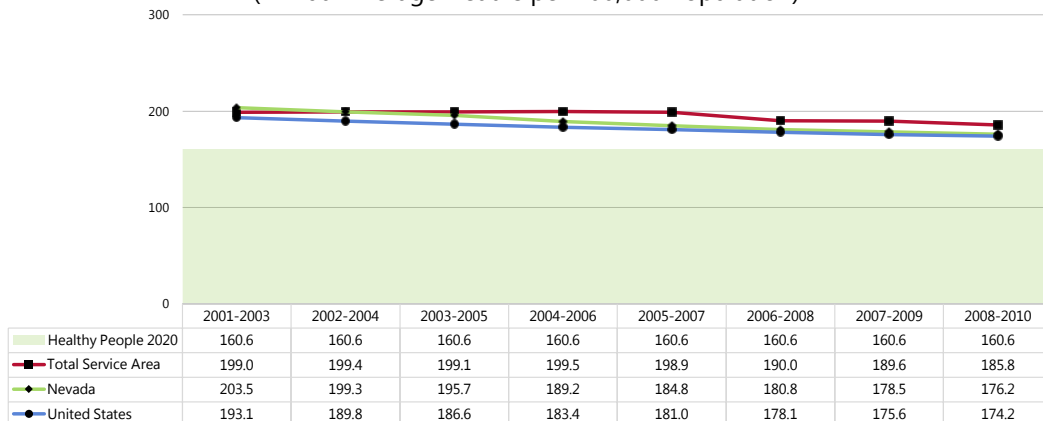


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>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

-  Cancer mortality has decreased over the past decade in the Total Service Area; the same trend is apparent both statewide and nationwide.

## Cancer: Age-Adjusted Mortality Trends

(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 June 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-1]

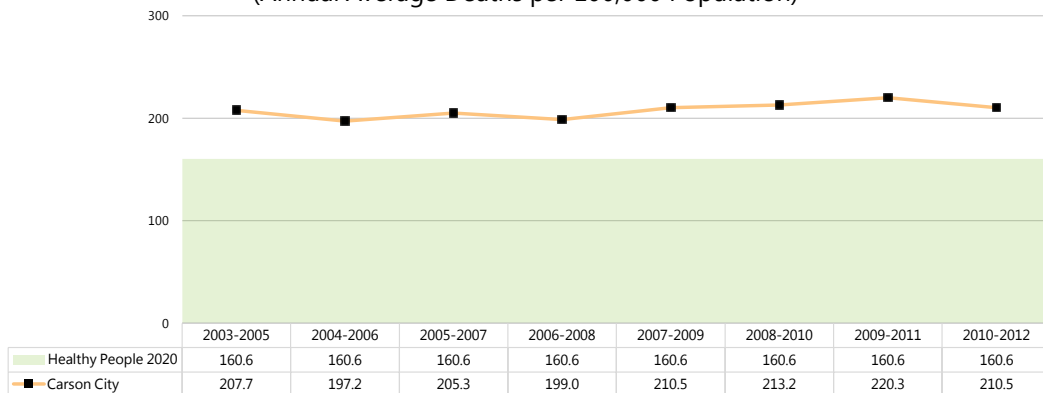
 Notes:
 

- 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.
- State and national data are simple three-year averages.

-  In Carson City, cancer mortality has not followed the downward trend seen regionally, statewide and nationally.

## Cancer: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



Sources:
 

- Office of Public Health Informatics and Epidemiology.
- 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.
- Rates are simple three-year averages of individual year rates.
- 2011 and 2012 data reflect preliminary rates and subject to change.

## Cancer Deaths by Site

**Lung cancer is by far the leading cause of cancer deaths in the Total Service Area (and in Carson City specifically).**

**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 2008-2010 annual average age-adjusted death rates):

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

Note that each of the Total Service Area cancer death rates detailed below fails to satisfy the related Healthy People 2020 target, with the exception of female breast cancer (for which the TSA rate is similar).

### Age-Adjusted Cancer Death Rates by Site

(2008-2010 Annual Average Deaths per 100,000 Population)

	Carson City*	TSA	NV	US	HP2020
<b>Lung Cancer</b>	<b>59.4</b>	<b>54.3</b>	<b>50.7</b>	<b>48.5</b>	<b>45.5</b>
<b>Prostate Cancer</b>	<b>32.3</b>	<b>29.1</b>	<b>22.4</b>	<b>22.3</b>	<b>21.2</b>
<b>Female Breast Cancer</b>	<b>25.5</b>	<b>20.4</b>	<b>23.8</b>	<b>22.3</b>	<b>20.6</b>
<b>Colorectal Cancer</b>	<b>16.2</b>	<b>17.9</b>	<b>17.4</b>	<b>16.1</b>	<b>14.5</b>

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>  
• Office of Public Health Informatics and Epidemiology  
Notes: • \*Carson City rates reflect 2010-2012 data.

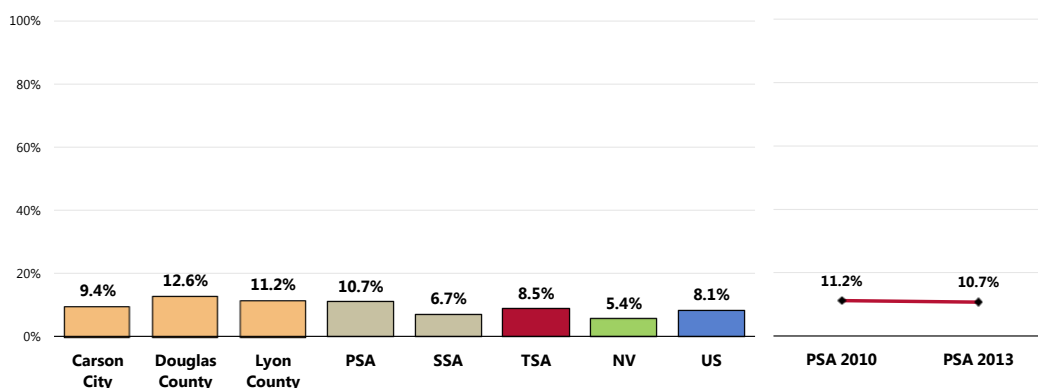
## Prevalence of Cancer

### Skin Cancer

**A total of 8.5% of surveyed Total Service Area adults report having been diagnosed with skin cancer.**

- Higher than the Nevada prevalence.
- Similar to the national prevalence.
- No significant difference by geography.
- ☒ The prevalence of skin cancer has remained statistically unchanged over time in the Primary Service Area.

#### Prevalence of Skin Cancer



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 33]  
• 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 Nevada data.

Notes: • Asked of all respondents.

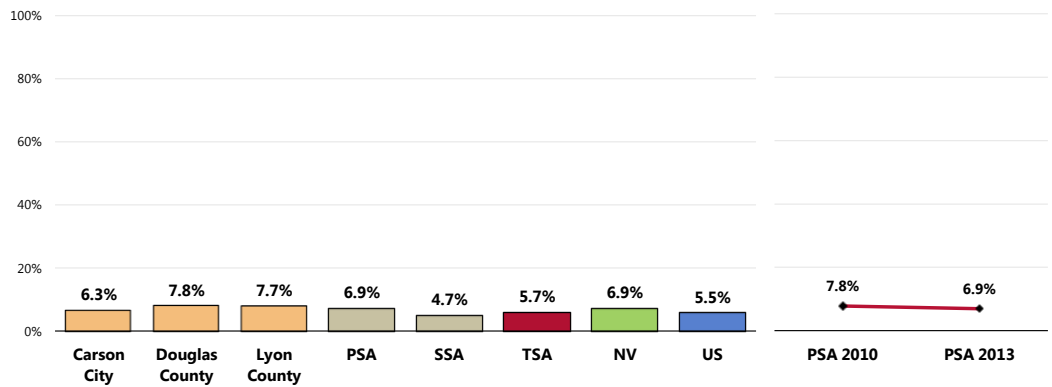
### Other Cancer

**A total of 5.7% of respondents have been diagnosed with some type of other (non-skin) cancer.**

- Similar to the state prevalence.
- Similar to the national prevalence.
- Similar by geography.
- ☒ The prevalence of cancer in the Primary Service Area has remained unchanged over time.



## Prevalence of Cancer (Other Than Skin Cancer)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 32]  
 • 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 Nevada data.

Notes: • Asked of all respondents.

### Cancer Risk

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

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

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

### Cancer Screenings

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

Screening levels in the community were measured in the PRC Community Health Survey relative to 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).

#### RELATED ISSUE:

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

## 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.

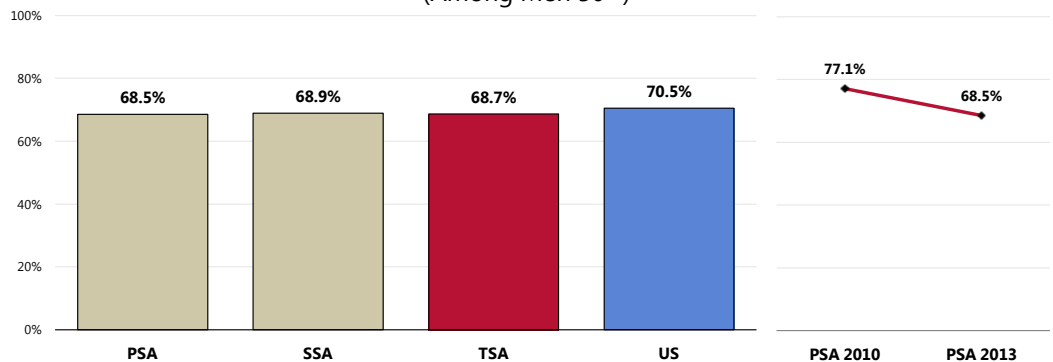
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

### PSA Testing and/or Digital Rectal Examination

**Among men age 50 and older, more than two-thirds (68.7%) 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.
- Similar by service area.
- ▣ Statistically unchanged since 2010 among Primary Service Area men aged 50+.

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



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 151]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all male respondents 50 and older.

Note: Since 2008 changes in clinical recommendations against routine PSA testing, most communities are seeing prevalence decline.

## 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

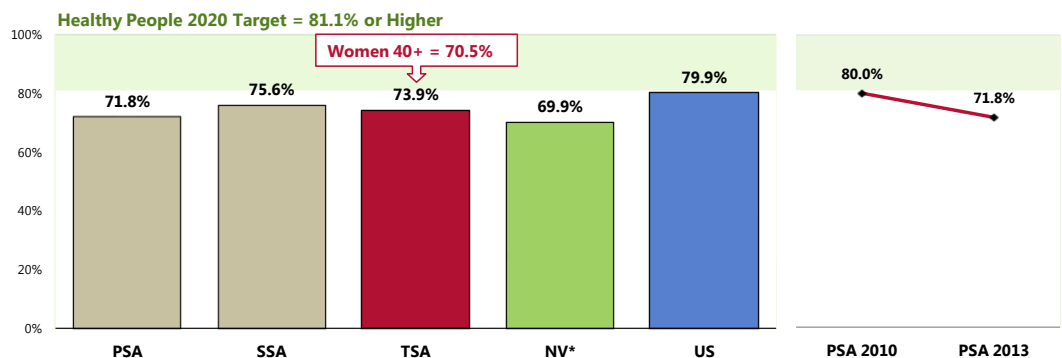
#### Among women age 50-74, 73.9% had a mammogram within the past two years.

- Similar to statewide findings (which represent all women 50+).
- Similar to national findings.
- Fails to satisfy the Healthy People 2020 target (81.1% or higher).
- Similar by service area.

📉 Marks a significant decrease over time in the Primary Service Area.

👥 Among women 40+, 70.5% had a mammogram in the past two years.

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



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 148-149]
- 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 Nevada 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 50-74.
- \*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.

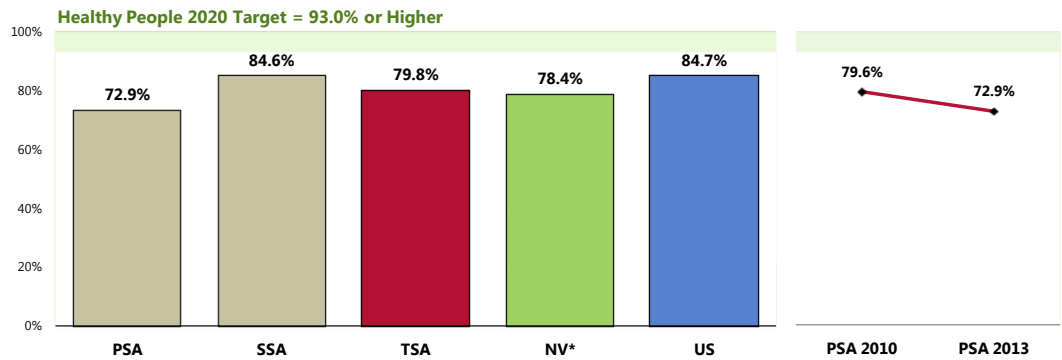
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

### Pap Smear Testing

**Among women age 21 to 65, 79.8% had a Pap smear within the past three years.**

- Comparable to Nevada findings (which represents all women 18+).
  - Comparable to national findings.
  - Fails to satisfy the Healthy People 2020 target (93% or higher).
  - Lower among women in the Primary Service Area.
-  In the Primary Service Area, the decline noted since 2010 is not statistically significant.

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



Sources: • PRC Community Health Surveys, 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 Nevada 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 to 65.  
 • \*Note that the Nevada percentage represents all women age 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.

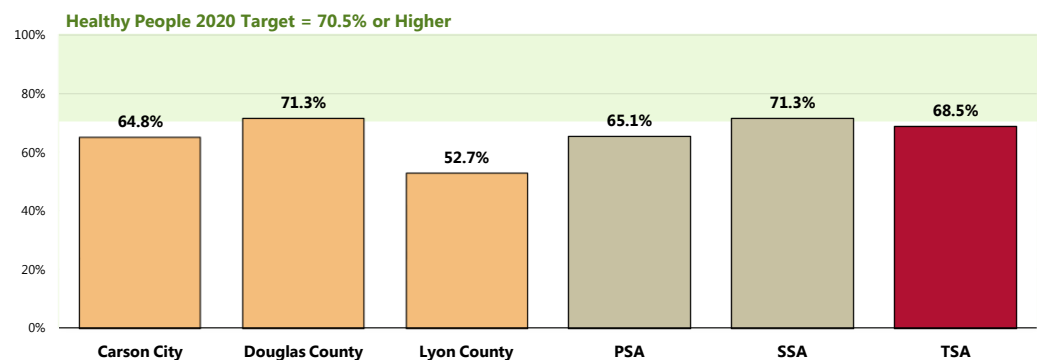
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

### Colorectal Cancer Screening

**Among adults age 50-75, 68.5% 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).

- Similar to the Healthy People 2020 target (70.5% or higher).
- Particularly low in Lyon County; statistically similar by service area.

## Have Had a Colorectal Cancer Screening (Among Total Service Area Adults 50-75; 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-16]

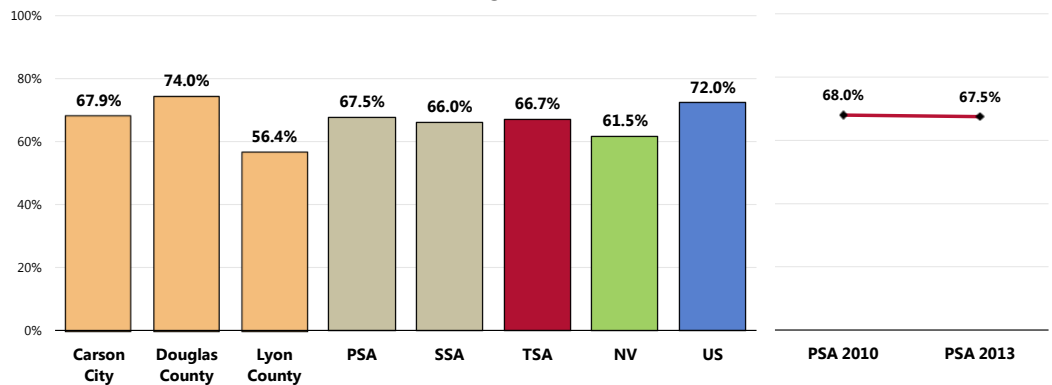
Notes: • Asked of all respondents age 50 through 75.  
 • In this case, the term "colorectal screening" refers to adults age 50-75 receiving a FOBT (fecal occult blood test) in the past year and/or a lower endoscopy (sigmoidoscopy/colonoscopy) in the past 10 years.

## Lower Endoscopy

**Among adults age 50 and older, two-thirds (66.7%) have had a lower endoscopy (sigmoidoscopy or colonoscopy) at some point in their lives.**

- More favorable than Nevada findings.
- Similar to national findings.
- Favorably high in Douglas County; similar by service area.
- 📊 In the Primary Service Area, statistically unchanged since 2010.

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 152]  
 • 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 Nevada data.  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

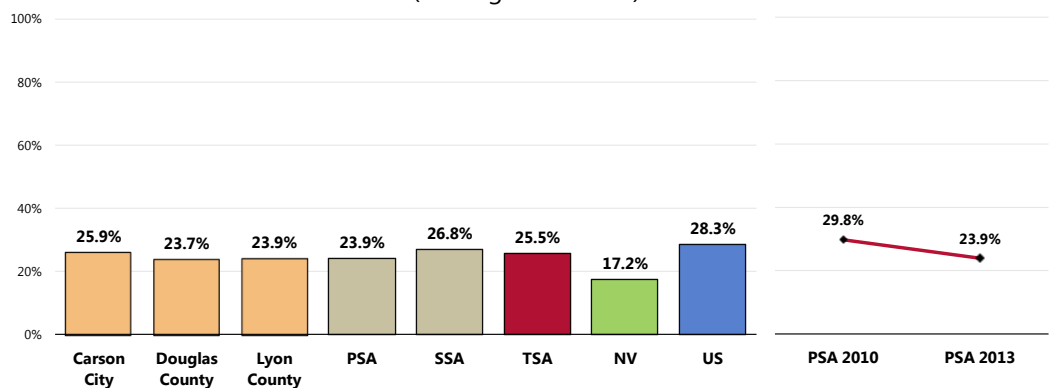
Notes: • Asked of all respondents 50+.  
 • Lower endoscopy includes either sigmoidoscopy or colonoscopy.

## Blood Stool Testing

**Among adults age 50 and older, 25.5% have had a blood stool test (aka "fecal occult blood test") within the past two years.**

- Higher than Nevada findings.
- Comparable to national findings.
- No significant difference among geographies.
- 📊 In the Primary Service Area, this marks a significant decrease since 2010.

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 153]  
 • 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 Nevada 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](http://www.healthypeople.gov))

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

## Age-Adjusted Respiratory Disease Deaths

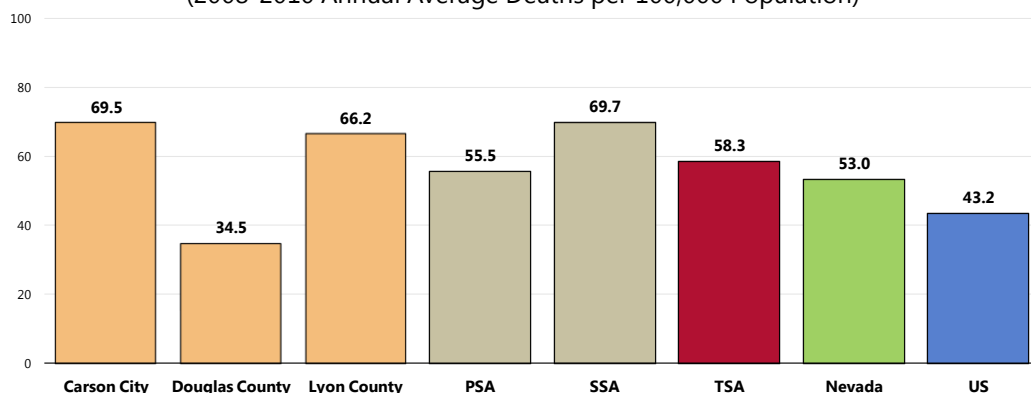
### Chronic Lower Respiratory Disease Deaths (CLRD)

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.

Between 2008 and 2010, there was an annual average age-adjusted CLRD mortality rate of 58.3 deaths per 100,000 population in the Total Service Area.

- Higher than found statewide.
- Higher than found nationally.
- Favorably low in Douglas County; higher in the Secondary Service Area than in the Primary Service Area.

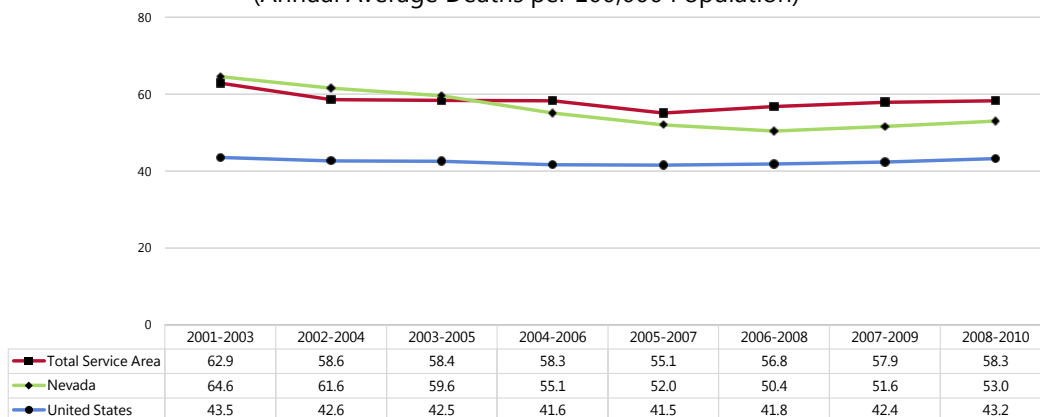
**CLRD: Age-Adjusted Mortality**  
(2008-2010 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 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.  
• Local, state and national data are simple three-year averages.  
• CLRD is chronic lower respiratory disease.

CLRD mortality in the Total Service Area decreased in the early 2000s, but has since begun to rise.

**CLRD: Age-Adjusted Mortality Trends**  
(Annual Average Deaths per 100,000 Population)



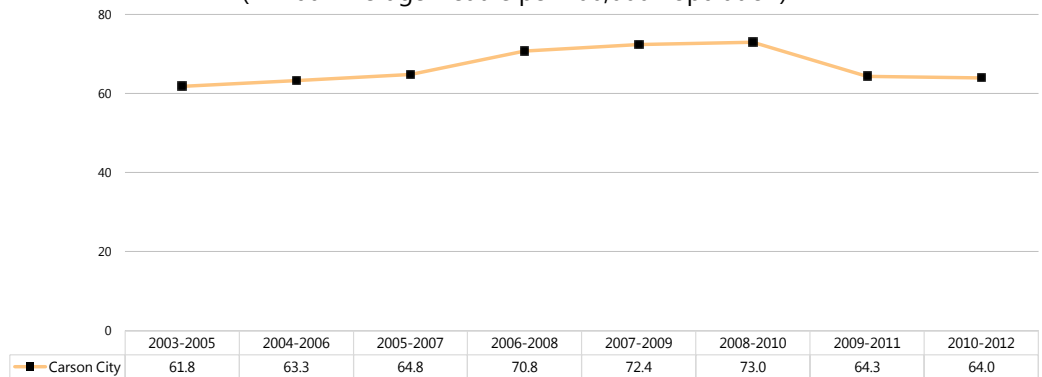
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of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



- In Carson City, the CLRD death rate (higher than found regionally) has generally increased over the past decade.

## CLRD: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



Sources: • Office of Public Health Informatics and Epidemiology.  
 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.  
 • Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.  
 • State and national data are simple three-year averages.  
 • Rates are simple three-year averages of individual year rates.  
 • 2011 and 2012 rates reflect preliminary data and are subject to change.

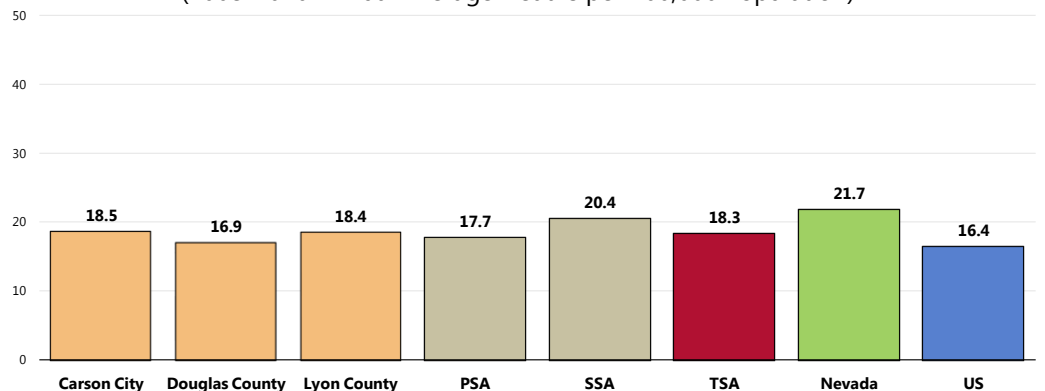
## Pneumonia/Influenza Deaths

**Between 2008 and 2010, there was an annual average age-adjusted pneumonia influenza mortality rate of 18.3 deaths per 100,000 population in the Total Service Area.**

- Lower than found statewide.
- Higher than found nationally.
- Favorably low in Douglas County; lower in the PSA than in the SSA.


## Pneumonia/Influenza: Age-Adjusted Mortality

(2008-2010 Annual Average Deaths per 100,000 Population)

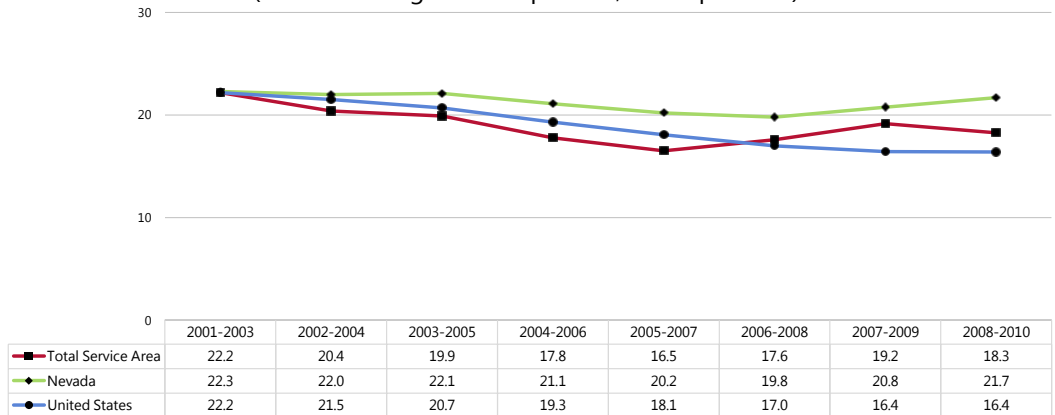


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics.  
 Data extracted June 2013.  
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification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


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

-  The Total Service Area pneumonia/influenza mortality rate decreased overall over the past decade, although increases were noted in some recent years.

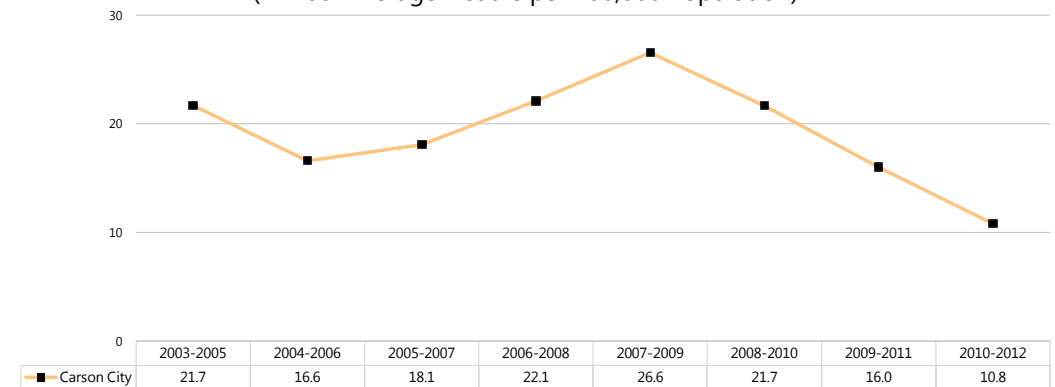
### Pneumonia/Influenza: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 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.  
 • State and national data are simple three-year averages.

-  In Carson City, the pneumonia/influenza death rate has fluctuated more widely, most recently decreasing considerably.

### Pneumonia/Influenza: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



Sources: • Office of Public Health Informatics and Epidemiology.  
 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.  
 • Rates are simple three-year averages of individual year rates.  
 • 2011 and 2012 rates reflect preliminary data and are subject to change.

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.

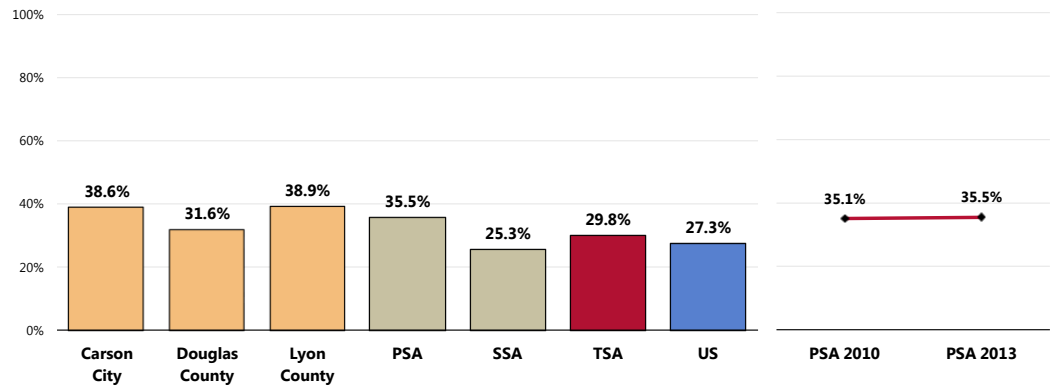
## Prevalence of Respiratory Conditions

### Nasal/Hay Fever Allergies

**A total of 29.8% of Total Service Area adults currently suffer from or have been diagnosed with nasal/hay fever allergies.**

- Similar to the national prevalence.
- Statistically high in Carson City and in the Primary Service Area overall.
- 📊 In the Primary Service Area, there has been no significant change since 2010.

### Prevalence of Nasal/Hay Fever Allergies



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 37]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

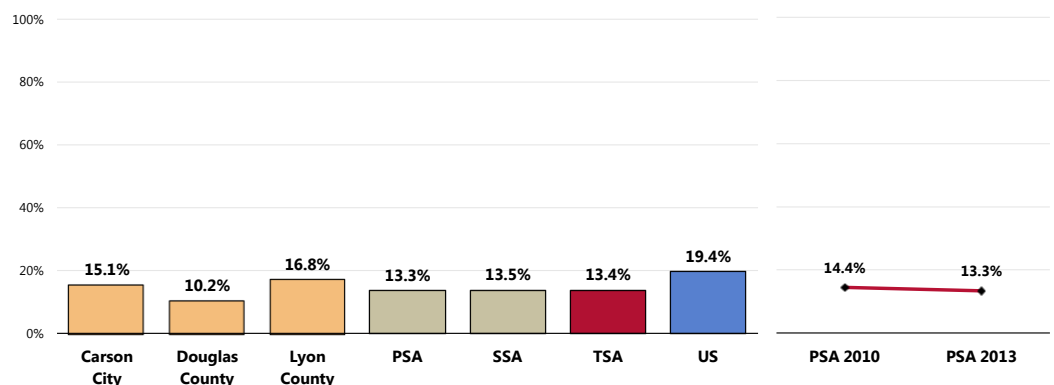
Notes: • Asked of all respondents.

### Sinusitis

**A total of 13.4% of Total Service Area adults suffer from sinusitis.**

- More favorable than the national prevalence.
- Statistically comparable by area.
- 📊 In the Primary Service Area, similar to 2010 survey findings.

### Prevalence of Sinusitis



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

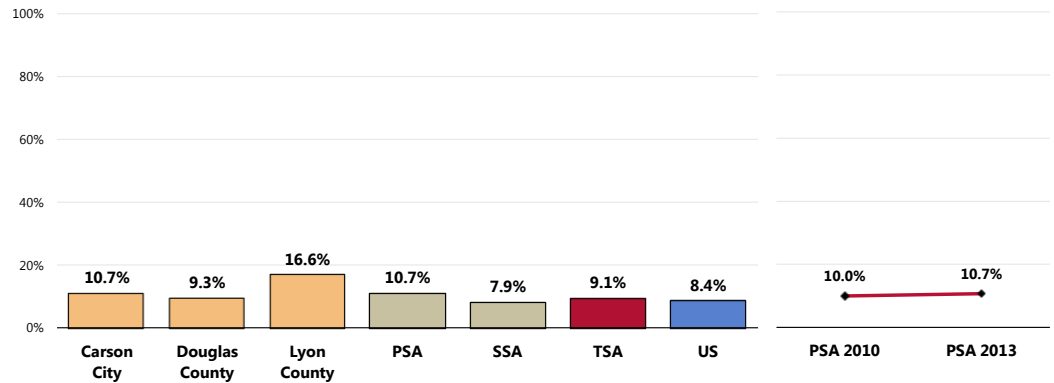
Notes: • Asked of all respondents.

## Chronic Lung Disease

**A total of 9.1% of Total Service Area adults suffer from chronic lung disease.**

- Similar to the national prevalence.
- More prevalent in Lyon County; similar by service area.
- 📊 In the Primary Service Area, statistically unchanged over time.

### Prevalence of Chronic Lung Disease



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

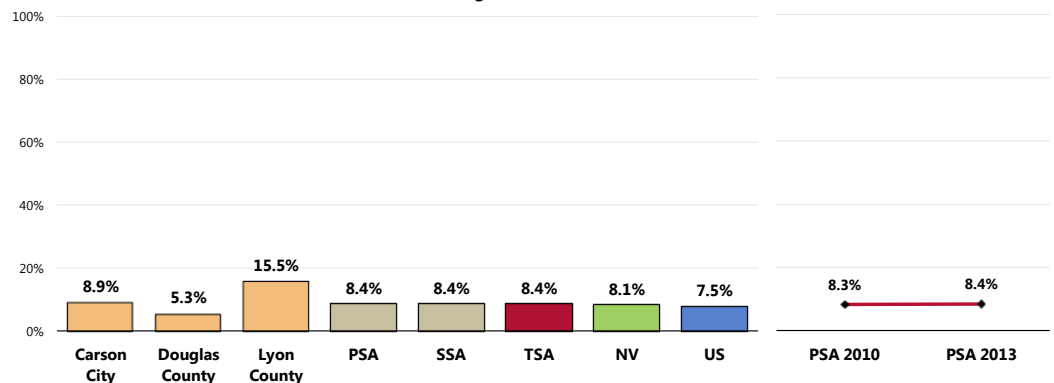
## Asthma

### Adults


**A total of 8.4% of Total Service Area adults currently suffer from asthma.**

- Similar to the statewide prevalence.
- Similar to the national prevalence.
- Unfavorably high in Lyon County; identical between service areas.
- 📊 In the Primary Service Area, this remains unchanged since 2010.

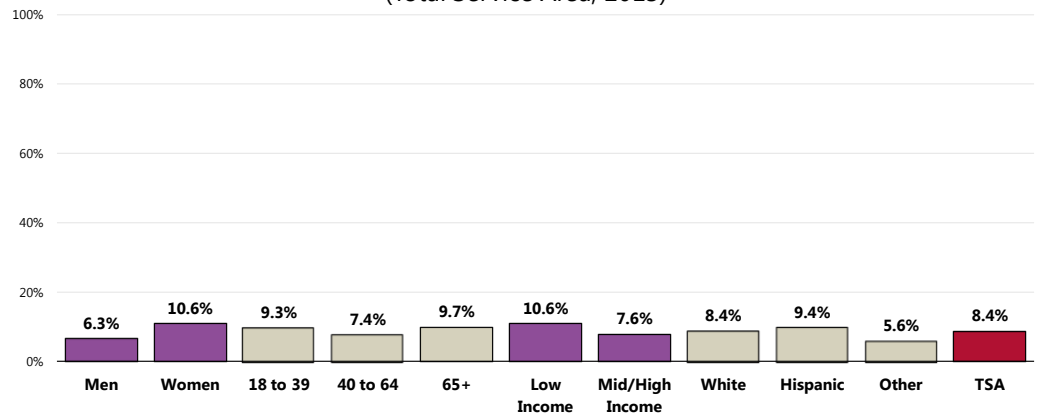
### Currently Have Asthma



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 155]  
 • 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 Nevada data.  
 Notes: • Asked of all respondents.

 Women in the Total Service Area are more likely to suffer from asthma.

## Currently Have Asthma (Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 155]


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.

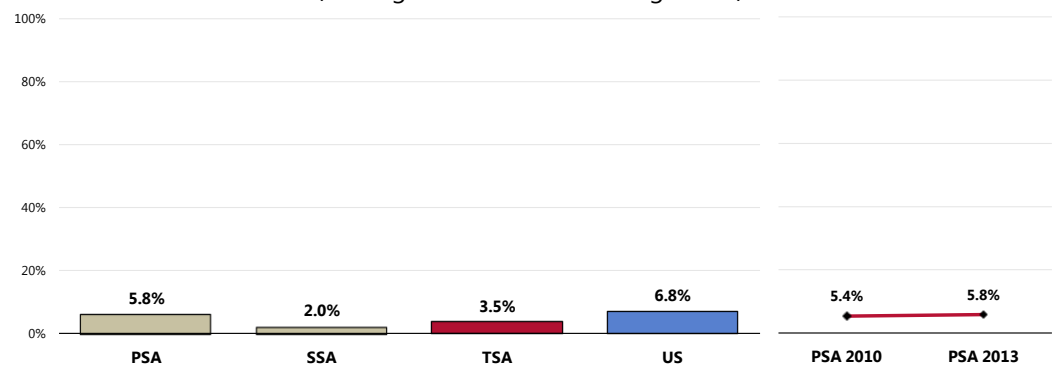
## Children

**Among Total Service Area children under age 18, 3.5% currently have asthma.**

- Statistically comparable to national findings.
- Statistically comparable by service area.
-  The prevalence of Primary Service Area children with asthma has not changed significantly since 2010.

## Child Has Asthma

(Among Parents of Children Age 0-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 156]

• 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:

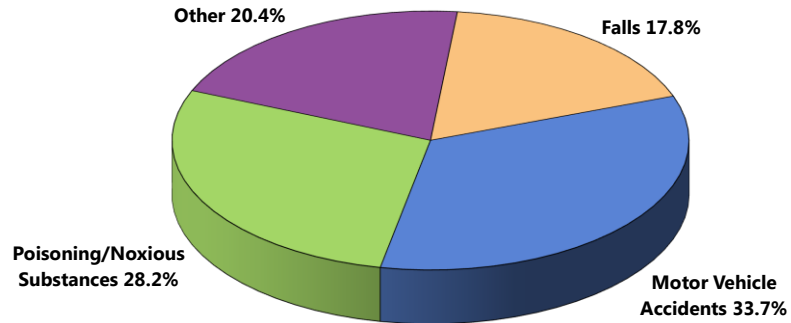
- Changing social norms about the acceptability of violence
- Improving problem-solving skills (for example, parenting, conflict resolution, coping)
- Changing policies to address the social and economic conditions that often give rise to violence

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Leading Causes of Accidental Death

**Motor vehicle accidents, poisoning, and falls accounted for nearly 80% of accidental deaths in the Total Service Area between 2008 and 2010.**

## Leading Causes of Accidental Death (Total Service Area, 2008-2010)



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

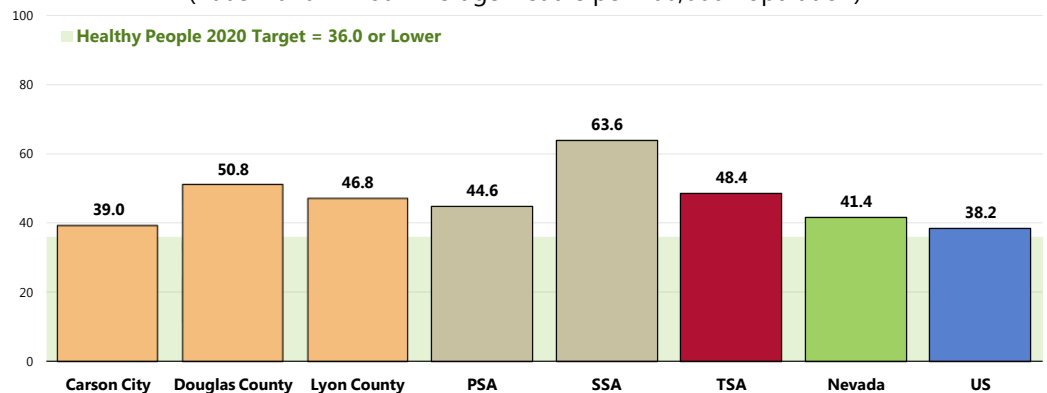
## Unintentional Injury

### Age-Adjusted Unintentional Injury Deaths

**Between 2008 and 2010, there was an annual average age-adjusted unintentional injury mortality rate of 48.4 deaths per 100,000 population in the Total Service Area.**

- Less favorable than the Nevada rate.
- Less favorable than the national rate.
- Far from satisfying the Healthy People 2020 target (36.0 or lower).
- Higher in Douglas County; much higher in the SSA than in the PSA.

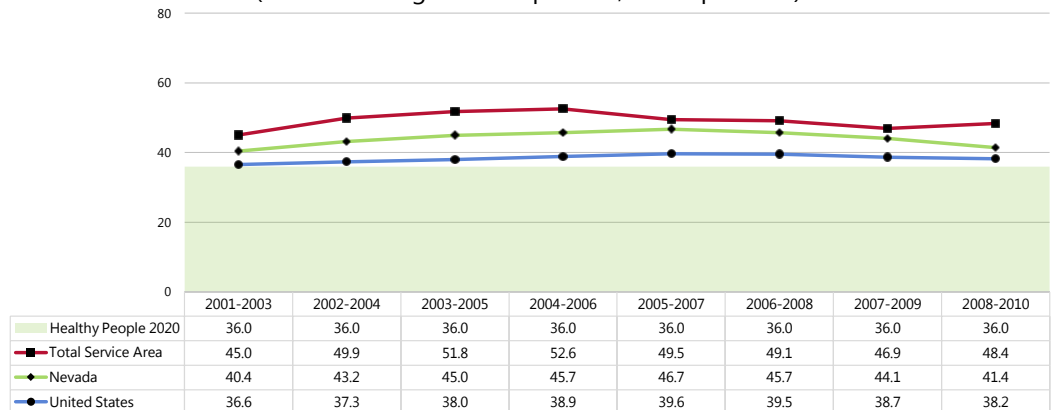
### Unintentional Injuries: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)



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

- The unintentional injury mortality rate in the Total Service Area has shown no clear trend over the past decade.

## Unintentional Injuries: Age-Adjusted Mortality Trends (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 June 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.  
 • Local, state and national data are simple three-year averages.

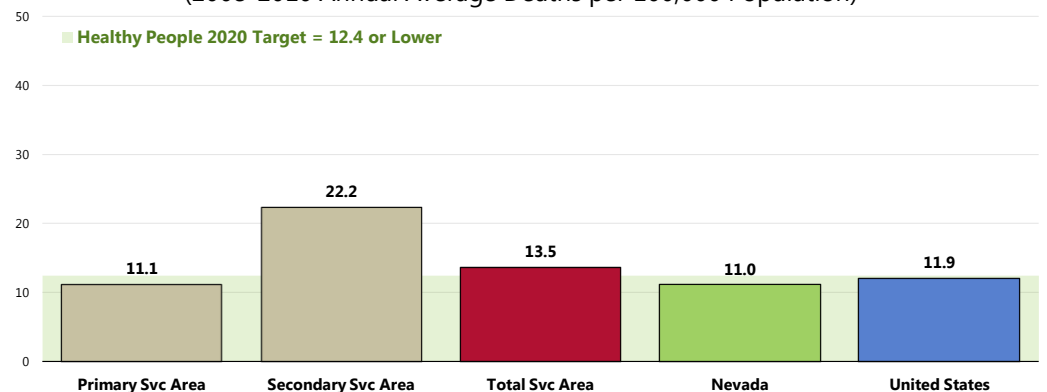
## Motor Vehicle Safety

### Age-Adjusted Motor-Vehicle Related Deaths

**Between 2008 and 2010, there was an annual average age-adjusted motor vehicle crash mortality rate of 13.5 deaths per 100,000 population in the Total Service Area.**


- Higher than found statewide.
- Higher than found nationally.
- Fails to satisfy the Healthy People 2020 target (12.4 or lower).
- Particularly high in the Secondary Service Area.

## Motor Vehicle Crashes: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)



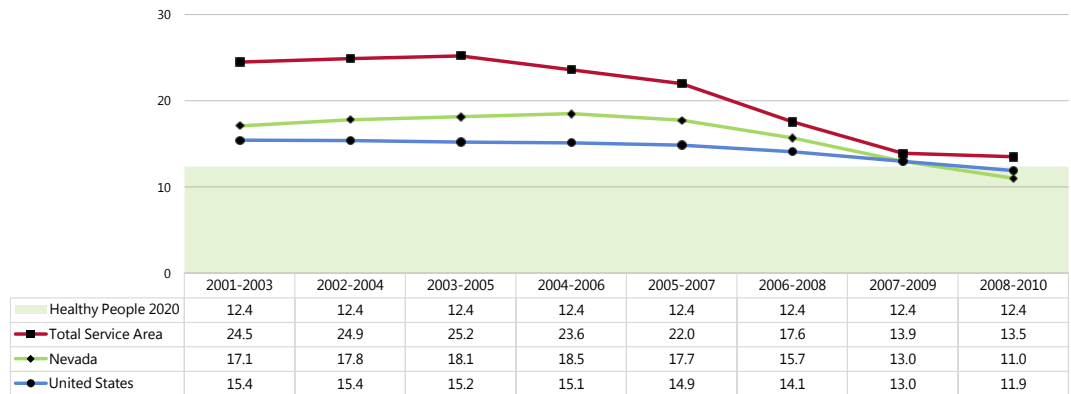
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>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



-  The mortality rate in the Total Service Area has decreased considerably over the past decade. Rates decreased both statewide and nationwide as well, although less significantly.

## Motor Vehicle Crashes: Age-Adjusted Mortality Trends

(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 June 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.
- Local, state and national data are simple three-year averages.

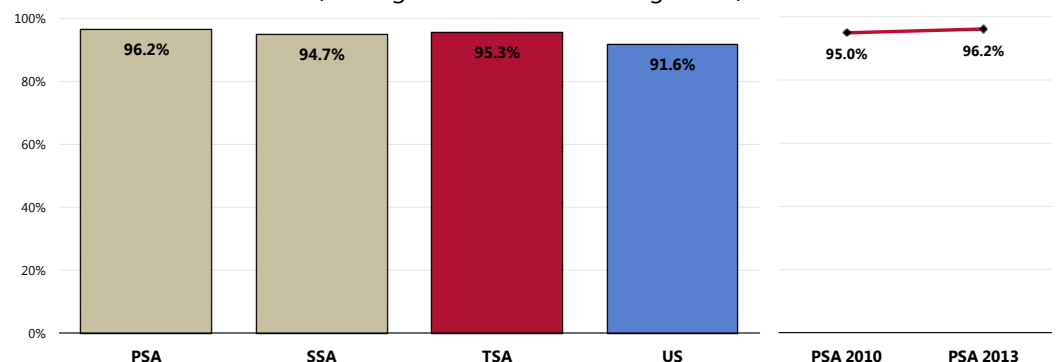
## Seat Belt Usage

**A full 95.3% of Total 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.
-  Similar by service area.
-  In the Primary Service Area, there has been no significant change since 2010.

## Child “Always” Wears a Seat Belt or Appropriate Restraint When Riding in a Vehicle

(Among Parents of Children Age 0-17)



Sources:
 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 139]
- 2011 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes:
 

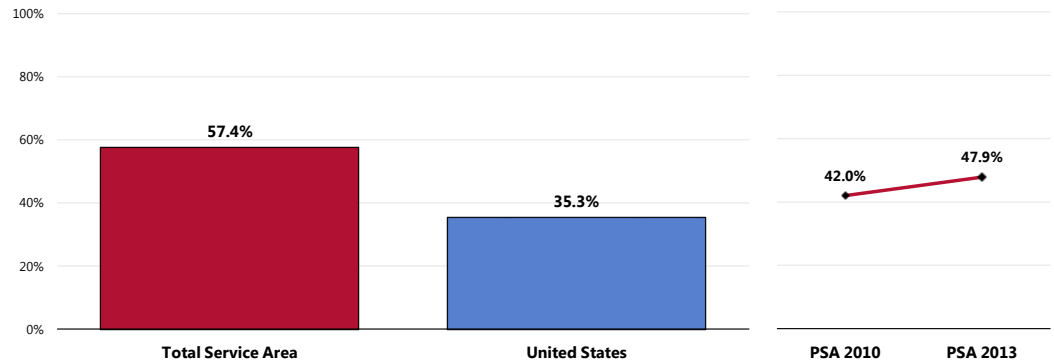
- Asked of all respondents with children 0 to 17 in the household.

## Bicycle Safety

**A total of 57.4% of Total Service Area children age 5 to 17 are reported to “always” wear a helmet when riding a bicycle.**

- Much higher than the national prevalence.
- Statistically unchanged over time in the Primary Service Area.

### Child “Always” Wears a Helmet When Riding a Bicycle (Among Parents of Children Age 5-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 140]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents with children age 5 to 17 at home.

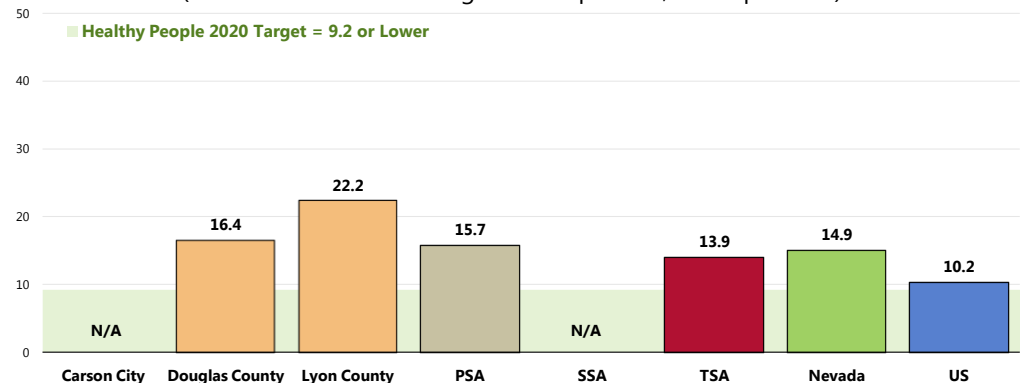
## Firearm Safety

### Age-Adjusted Firearm-Related Deaths

**Between 2008 and 2010, there was an annual average age-adjusted rate of 13.9 deaths per 100,000 population due to firearms in the Total Service Area.**

- Lower than found statewide.
- Higher than found nationally.
- Fails to satisfy the Healthy People 2020 objective (9.2 or lower).
- Higher in Lyon County (reliable area-specific rates are not available for Carson City or the SSA).

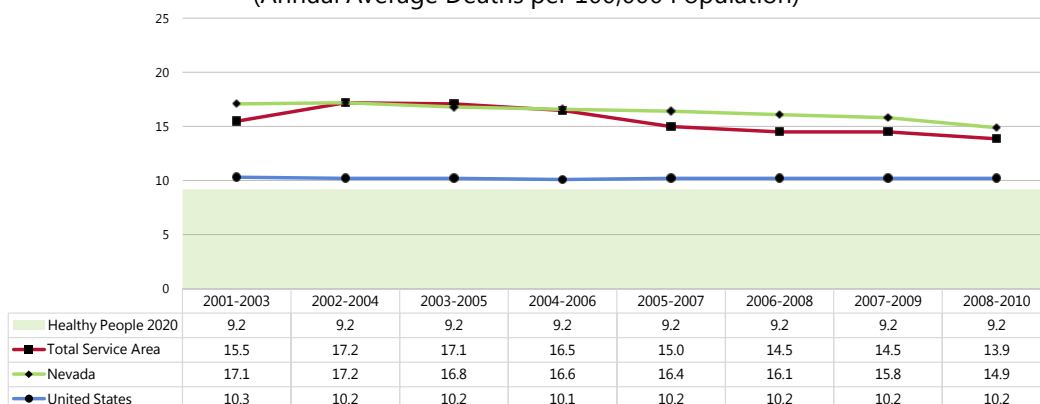
### Firearms-Related Deaths: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)



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

- ✘ The mortality rate in the Total Service Area decreased over the past decade, as did statewide rates (national rates were relatively unchanged).

## Firearms-Related Deaths: Age-Adjusted Mortality Trends (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 June 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.  
• Local, state and national data are simple three-year averages.

## Intentional Injury (Violence)

### Violent Crime

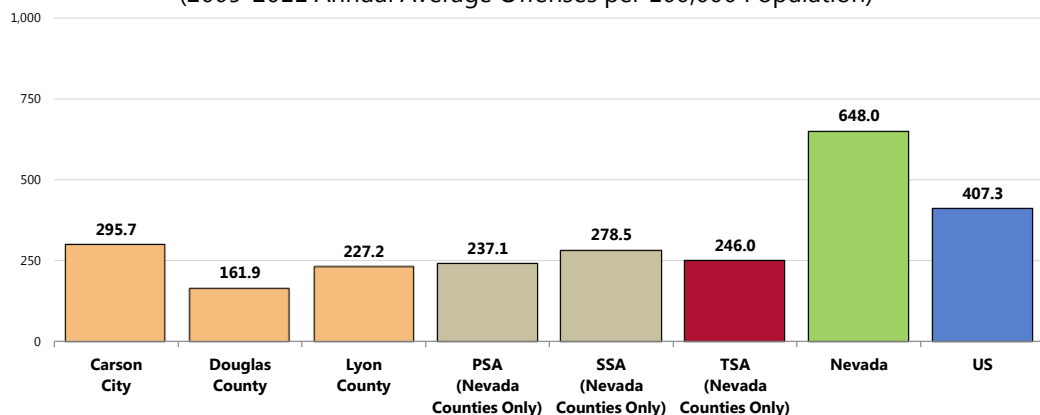
#### Violent Crime Rates

**Between 2009 and 2011, there was an annual average violent crime rate of 246.0 offenses per 100,000 population in the Total Service Area** (in this case, representing only those service area counties within the State of Nevada).

- Well below the Nevada rate for the same period.
- Below the national rate.
- Higher in Carson City; higher in the Secondary Service Area (Nevada counties only).

### Violent Crime Rates

(2009-2011 Annual Average Offenses per 100,000 Population)



Sources: • Nevada Department of Public Safety.  
• US Department of Justice, Federal Bureau of Investigation  
Notes: • Rates are offenses per 100,000 population among agencies reporting.  
• California counties not included.

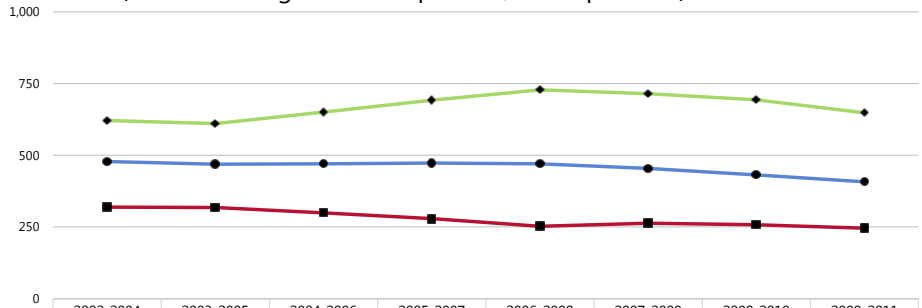
Violent crime is composed of four offenses (FBI Index offenses): murder and non-negligent manslaughter; forcible rape; robbery; and aggravated assault.

Note that the quality of crime data can vary widely from location to location, depending on the consistency and completeness of reporting among various jurisdictions.

- ✎ The crime rate has declined in recent years, echoing the national trend. In contrast, the Nevada crime rate has increased over time.

## Violent Crime Rates

(Annual Average Offenses per 100,000 Population)



	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011
■ Total Service Area (NV Counties Only)*	319.1	318.3	299.2	278.7	253.1	263.0	258.6	246.0
◆ Nevada	621.8	610.0	650.0	692.4	728.1	714.3	692.9	648.0
● United States	477.8	469.3	470.5	473.4	469.9	454.1	431.4	407.3

Sources: • Nevada Department of Public Safety.  
• US Department of Justice, Federal Bureau of Investigation  
Notes: • Rates are offenses per 100,000 population among agencies reporting.  
• \*California counties not included.

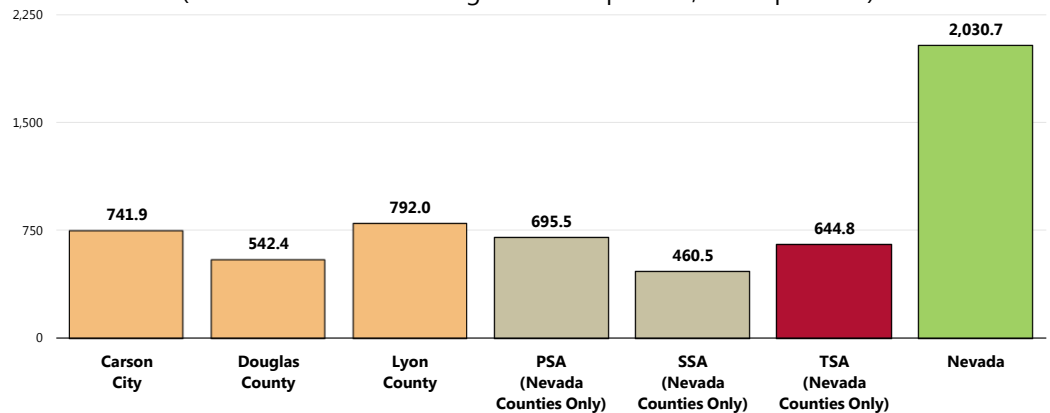
## Family Violence

**Between 2009 and 2011, there was an annual average domestic violence rate of 644.8 offenses per 100,000 population in the Total Service Area** (in this case, representing only those service area counties within the State of Nevada).

- Dramatically lower than the Nevada rate for the same period.
- Higher in Carson City and Lyon County; favorably low in the SSA (Nevada counties only).


## Domestic Violence Rates

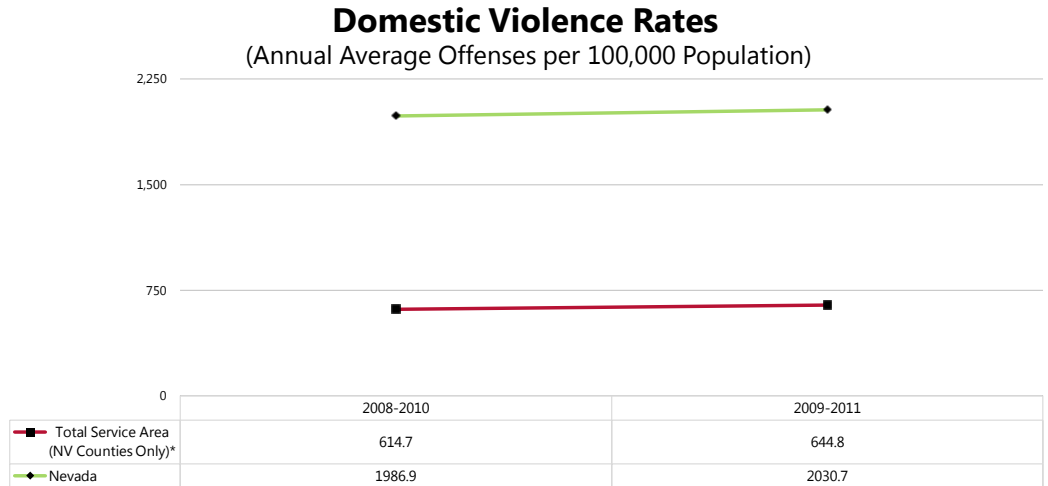
(2009-2011 Annual Average Offenses per 100,000 Population)



Sources: • Nevada Department of Public Safety.  
Notes: • Rates are domestic calls for assistance per 100,000 population.  
• California counties not included.

Keep in mind that these data only reflect those incidents reported to law enforcement (offenses).

-  The Total Service Area domestic violence offense rate increased slightly in recent years, as it did statewide.



Sources:
 

- Nevada Department of Public Safety.

 Notes:
 

- Rates are domestic calls for assistance per 100,000 population.
- \*California counties not included.

## Related Focus Group Findings: Domestic Violence

Many focus group participants are concerned with domestic violence in the community, with discussion centering on:

- Domestic violence
- Impact of trauma

Participants have concern about the **domestic violence** occurring in the community and its impact on residents' overall health and quality of life. Focus group attendees worry about the **impact of trauma** on families. The outcomes from this trauma, or stress, are multi-fold and may manifest in a variety of ways. A respondent explains:

*"Domestic violence in the home and trauma (people having numerous traumatic events, whether it's sexual assault, sexual abuse as a child, being exposed to domestic violence as a child or being a victim of domestic violence), we see it, the intergenerational violence just keeps going and that definitely does affect their health. So we work with a lot of women that come in and they say they have PTSD, bipolar, children have ADHD. That's really common...They have a hard time holding down a job because of the trauma." — Community Leader*

# 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](http://www.healthypeople.gov))

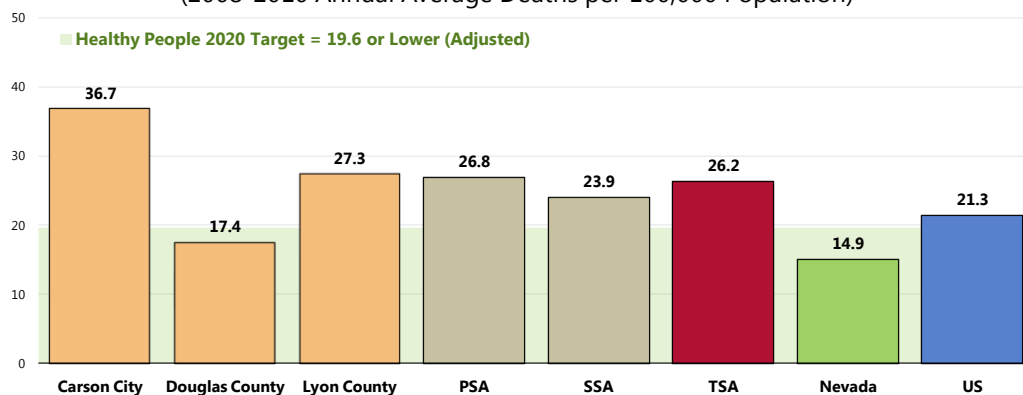
## Age-Adjusted Diabetes Deaths

**Between 2008 and 2010, there was an annual average age-adjusted diabetes mortality rate of 26.2 deaths per 100,000 population in the Total Service Area.**

- Less favorable than that found statewide.
- Less favorable than the national rate.
- Fails to satisfy the Healthy People 2020 target (19.6 or lower).
- Highest in Carson City; overall lower in the Secondary Service Area than in the Primary Service Area.

## Diabetes: Age-Adjusted Mortality

(2008-2010 Annual Average Deaths per 100,000 Population)

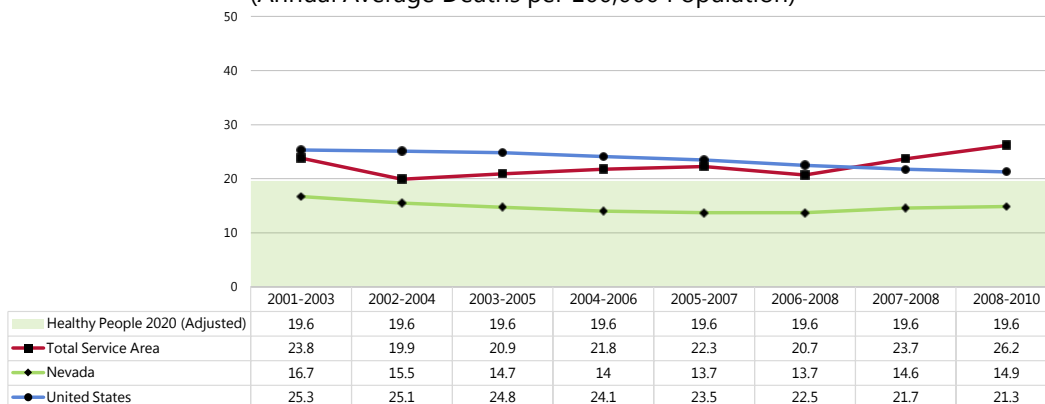


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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.  
 • Local, state and national data are simple three-year averages.  
 • The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.


The overall trend in diabetes deaths over the past decade in the Total Service Area has been upward, in contrast with the decreasing trends reported nationwide.

## Diabetes: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

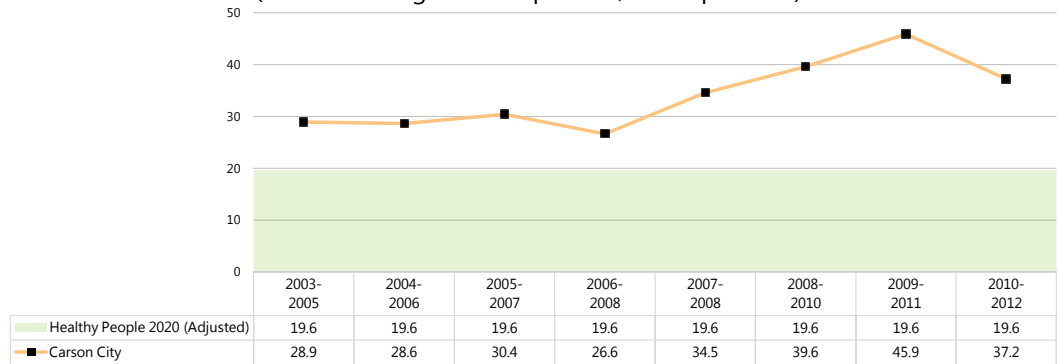


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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.  
 • Local, state and national data are simple three-year averages.  
 • The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

-  The Carson City diabetes mellitus death rate increased during much of the past decade.

## Diabetes: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



Sources:
 


- Office of Public Health Informatics and Epidemiology.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective D-3]

 Notes:
 

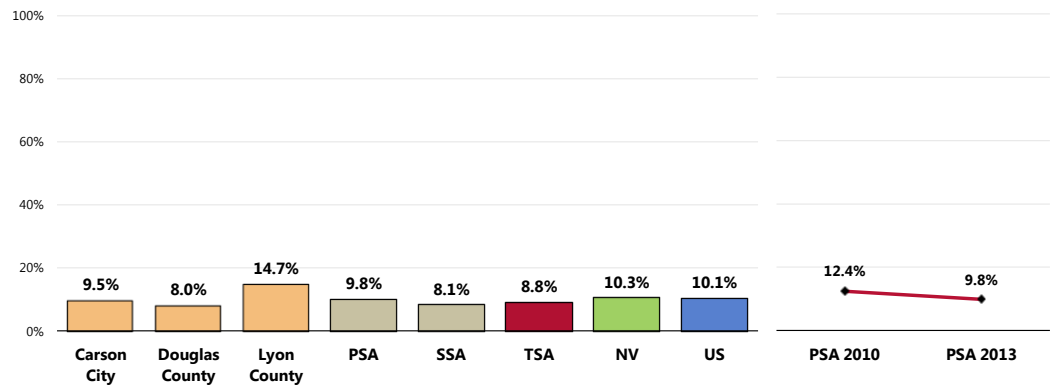
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
- Rates are simple three-year averages of individual year rates.
- 2011 and 2012 rates reflect preliminary data and are subject to change.
- The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

## Prevalence of Diabetes

**A total of 8.8% of Total Service Area adults report having been diagnosed with diabetes.**

- Similar to the proportion statewide.
- Similar to the national proportion.
- Statistically similar by area.
-  Statistically unchanged in the Primary Service Area since 2010.

## Prevalence of Diabetes



Sources:
 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 45]
- 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 Nevada data.

 Notes:
 

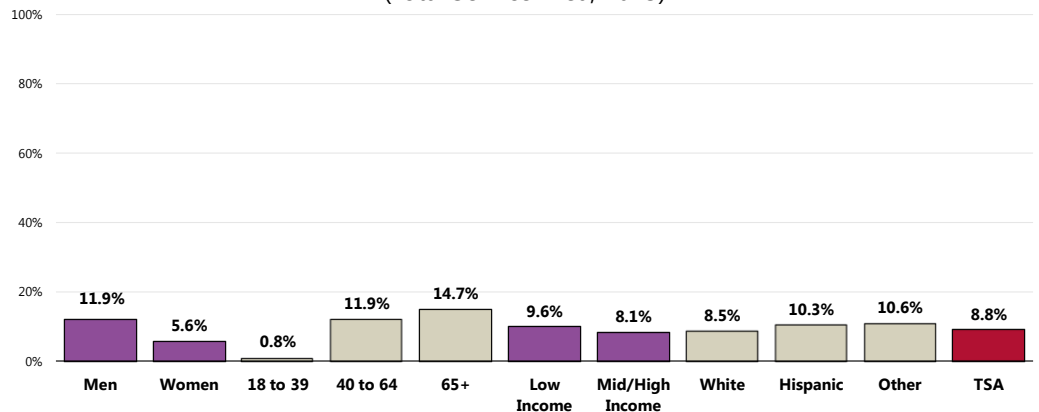
- Asked of all respondents.
- Local and national data exclude gestation diabetes (occurring only during pregnancy).



👤 A higher prevalence of diabetes is reported among men in the Total Service Area.

👤 Adults age 40 and older are much more likely than younger adults to be diabetic.

### Prevalence of Diabetes (Total Service Area, 2013)



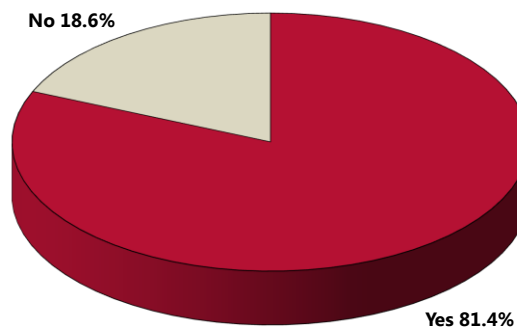
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 45]

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

## Diabetes Treatment

**Among adults with diabetes, most (81.4%) are currently taking insulin or some type of medication to manage their condition.**

### Taking Insulin or Other Medication for Diabetes (Among Total Service Area Diabetics)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 46]

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 6<sup>th</sup> 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.

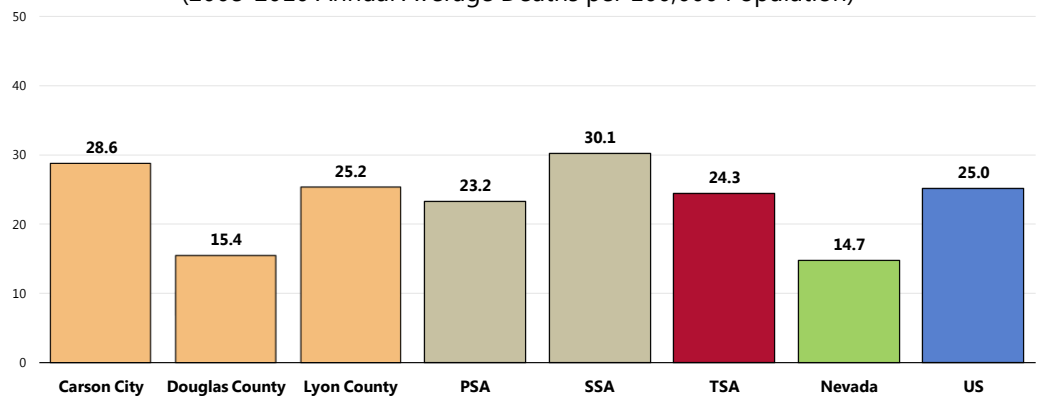
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Age-Adjusted Alzheimer's Disease Deaths


**Between 2008 and 2010, there was an annual average age-adjusted Alzheimer's disease mortality rate of 24.3 deaths per 100,000 population in the Total Service Area.**

- Less favorable than the statewide rate.
- Comparable to the national rate.
- Higher in Carson City; higher in the Secondary Service Area.

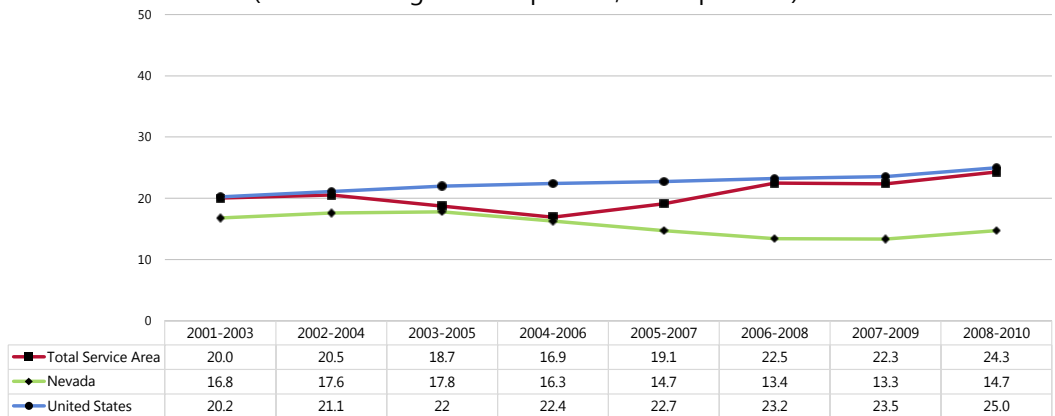
### Alzheimer's Disease: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)



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


-  The Alzheimer's disease mortality rate has increased in the Total Service Area, in keeping with the national trend. Across Nevada, the rate generally decreased over the past decade.

### Alzheimer's Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

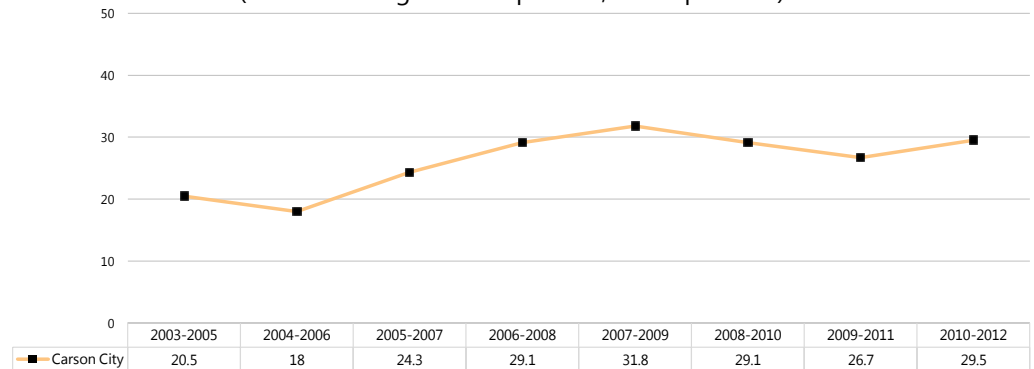


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics.  
Data extracted June 2013.

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.

-  Alzheimer's disease mortality is on the rise in Carson City, as shown below.

### Alzheimer's Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



Sources: • Office of Public Health Informatics and Epidemiology.

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.  
• Rates are simple three-year averages of individual year rates.  
• 2011 and 2012 rates are preliminary and subject to change.

# 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.

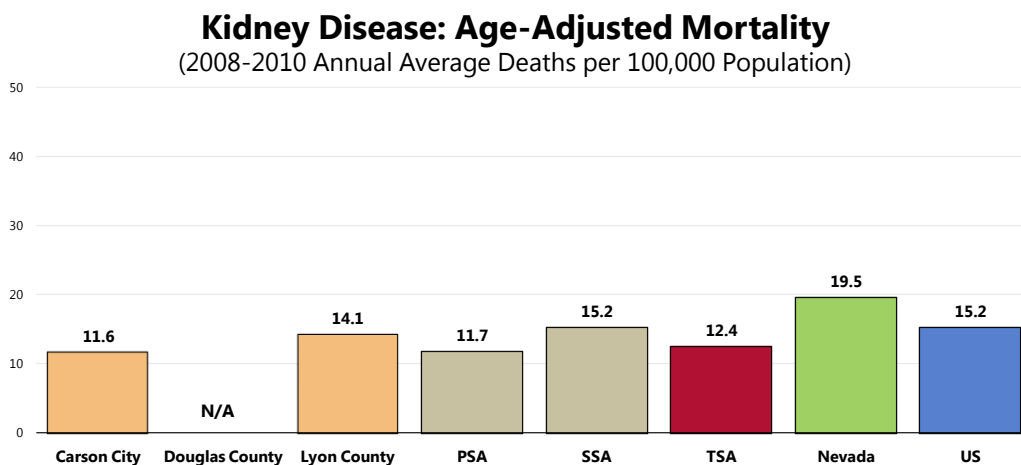
Diabetes is the most common cause of kidney failure. The results of the Diabetes Prevention Program (DPP) funded by the national Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) show that moderate exercise, a healthier diet, and weight reduction can prevent development of type 2 diabetes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

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Age-Adjusted Kidney Disease Deaths

**Between 2008 and 2010 there was an annual average age-adjusted kidney disease mortality rate of 12.4 deaths per 100,000 population in the Total Service Area.**

- Better than the rate found statewide.
- Better than the national rate.
- Higher in Lyon County; higher in the SSA versus the PSA.

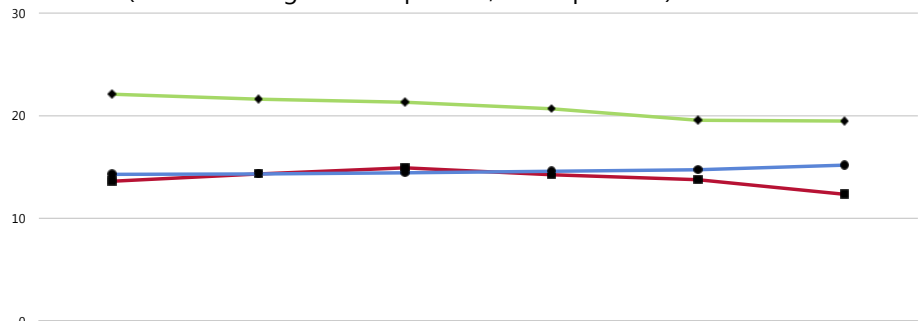


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.

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.  
• Local, state and national data are simple three-year averages.

- Most recently, kidney disease mortality has decreased decade in the TSA; statewide mortality has likewise decreased. The US mortality rate, on the other hand, increased over time.

### Kidney Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

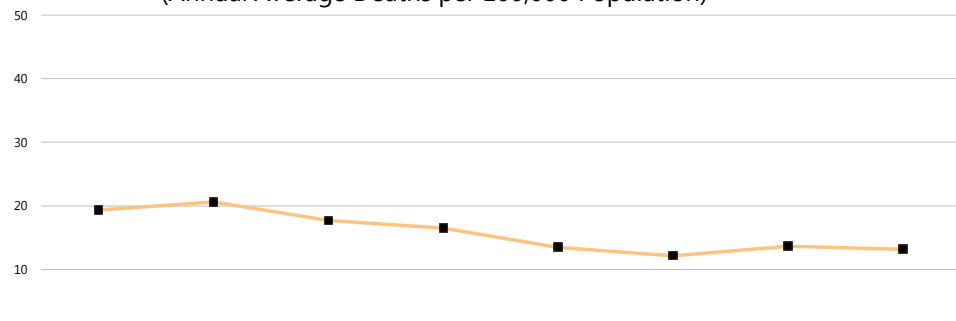


	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010
Total Service Area	13.6	14.3	14.9	14.3	13.8	12.4
Nevada	22.1	21.6	21.3	20.7	19.6	19.5
United States	14.3	14.3	14.4	14.6	14.7	15.2

- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 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.
  - State and national data are simple three-year averages.

- In Carson City, kidney disease mortality has decreased over the past decade.

### Kidney Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
Carson City	19.4	20.6	17.7	16.5	13.5	12.1	13.7	13.2

- Sources:
- Office of Public Health Informatics and Epidemiology.
- 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.
  - Rates are simple three-year averages of individual year rates.
  - 2011 and 2012 rates are preliminary and subject to change.

# Potentially Disabling Conditions

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

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

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

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

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

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

- 2<sup>nd</sup> leading cause of lost work time (after the common cold).
- 3<sup>rd</sup> most common reason to undergo a surgical procedure.
- 5<sup>th</sup> 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](http://www.healthypeople.gov))

## Arthritis, Osteoporosis, & Chronic Pain

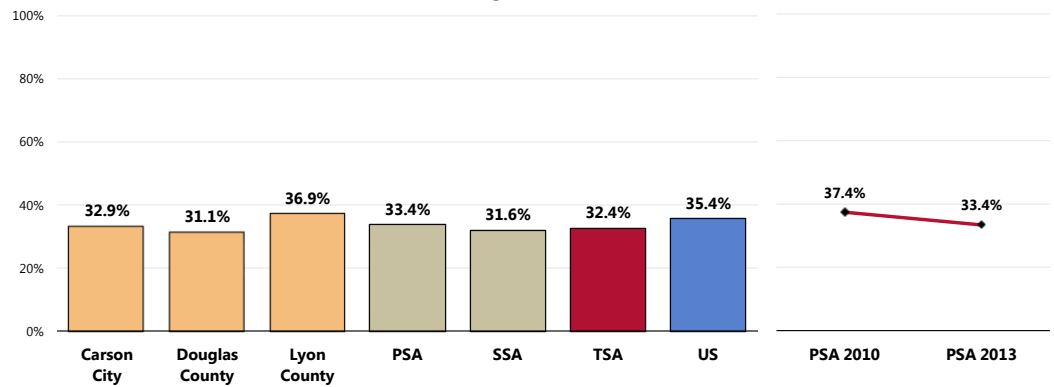
### Prevalence of Arthritis/Rheumatism

**Nearly one-third (32.4%) of Total Service Area adults age 50 and older reports suffering from arthritis or rheumatism.**

- Comparable to that found nationwide.
- Comparable by area.
- The prevalence of arthritis/rheumatism is similar to that reported among Primary Service Area respondents (age 50+) in 2010.

## Prevalence of Arthritis/Rheumatism

(Among Adults 50+)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 161]

• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Reflects respondents 50 and older.

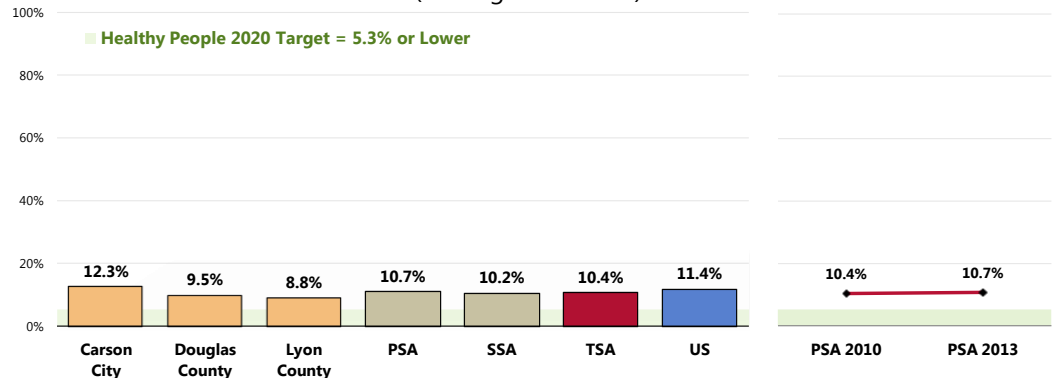
## Prevalence of Osteoporosis

**A total of 10.4% 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.
- No significant differences by area.
- 📊 In the Primary Service Area, there has been no significant change since 2010.

## Prevalence of Osteoporosis

(Among Adults 50+)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 162]

• 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]

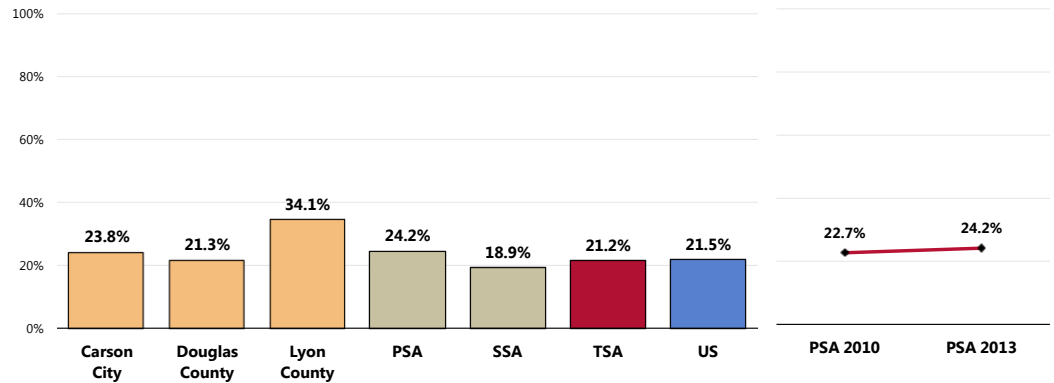
Notes: • Reflects respondents 50 and older.

## Prevalence of Sciatica/Chronic Back Pain

**A total of 21.2% of survey respondents suffer from chronic back pain or sciatica.**

- Almost identical to the national prevalence.
- Higher in Lyon County; similar by service area.
- 📊 Statistically unchanged in the Primary Service Area over time.

### Prevalence of Sciatica/Chronic Back Pain



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 31]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

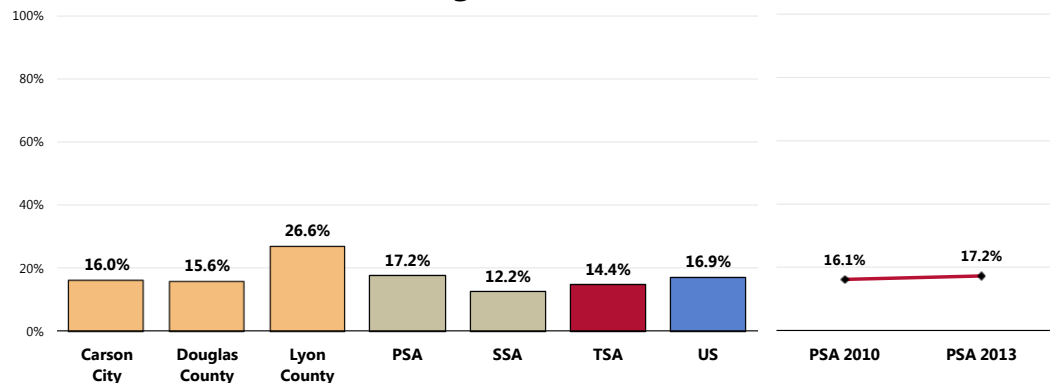
Notes: • Asked of all respondents.

## Prevalence of Migraines/Severe Headaches

**A total of 14.4% of survey respondents report suffering from migraines or severe headaches.**

- Similar to that found nationwide.
- Higher in Lyon County; similar by service area.
- 📊 In the Primary Service Area, unchanged from 2010.

### Prevalence of Migraines/Severe Headaches



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 38]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

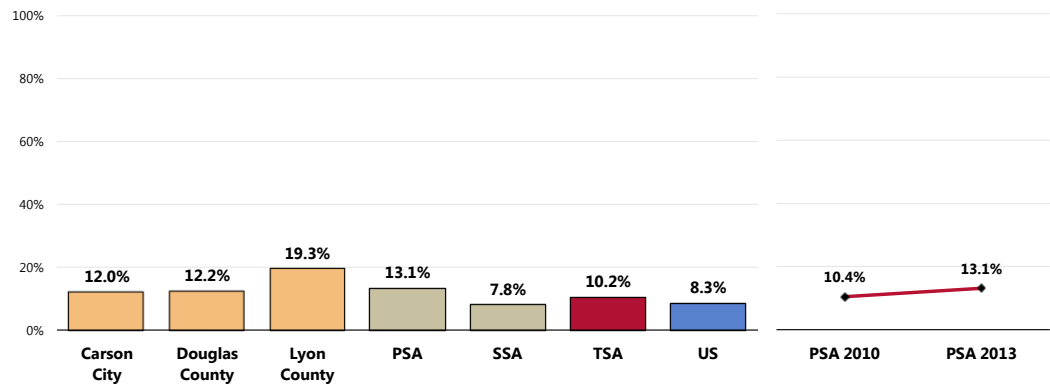


## Prevalence of Chronic Neck Pain

**A total of 10.2% of survey respondents currently suffer from chronic neck pain.**

- Comparable to that found nationwide.
- Unfavorably high in Lyon County; much higher in the PSA than in the SSA.
- 📊 In the Primary Service Area, there has been no significant change since 2010.

### Prevalence of Chronic Neck Pain



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 39]  
• 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](http://www.healthypeople.gov))

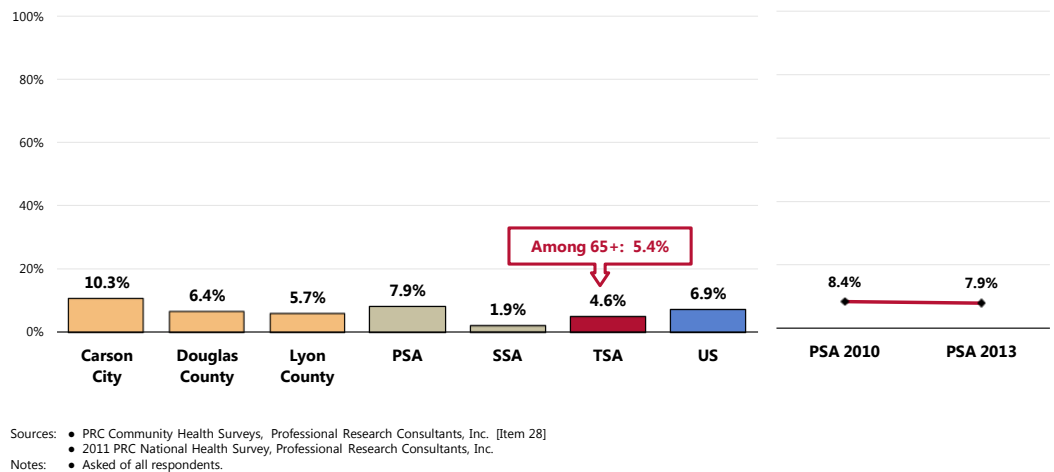
## Vision Trouble

**A total of 4.6% of Total Service Area adults are blind, or have trouble seeing even when wearing corrective lenses.**

- More favorable than found nationwide.
- Highest in Carson City; much higher in the PSA than in the SSA.
- 📊 Statistically unchanged over time in the Primary Service Area.
- 👥 Among Total Service Area adults age 65 and older, 5.4% have vision trouble.

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

## Prevalence of Blindness/Trouble Seeing



## 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 as 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.

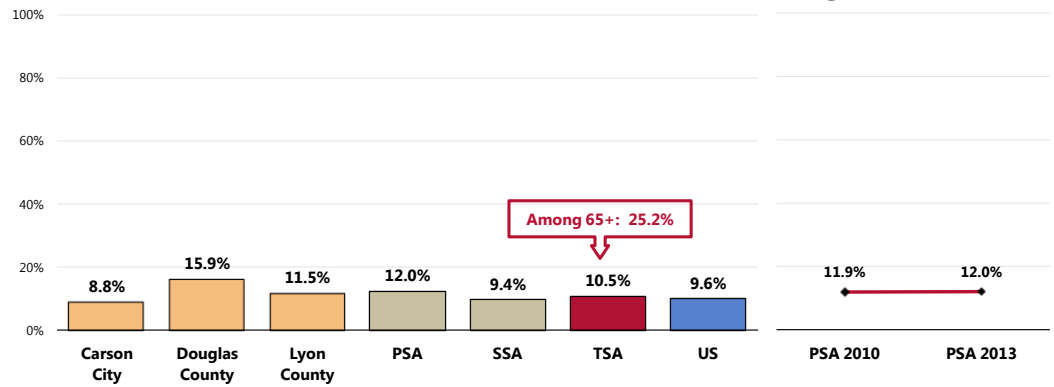
As the nation's population ages and survival rates for medically fragile infants and for people with severe injuries and acquired diseases improve, the prevalence of sensory and communication disorders is expected to rise.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### In all, 10.5% of Total Service Area adults report being deaf or having difficulty hearing.

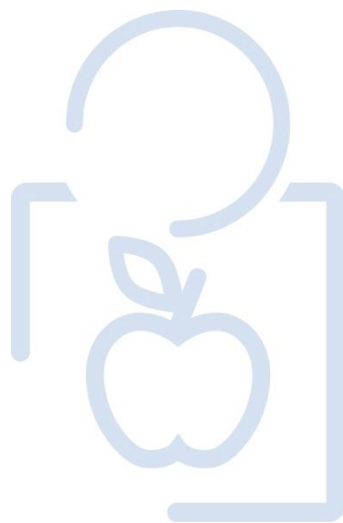
- Similar to that found nationwide.
- Unfavorably high in Douglas County; similar by service area.
- 📊 Unchanged over time in the Primary Service Area.
- 👥 Among Total Service Area adults age 65 and older, 25.2% have partial or complete hearing loss.

## Prevalence of Deafness/Trouble Hearing



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 29]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

# INFECTIOUS DISEASE



# Vaccine-Preventable Conditions

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

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

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

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

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

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

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Pertussis

“Incidence rate” or “case rate” is the number of new cases of a disease occurring during a given period of time.

It is usually expressed as cases per 100,000 population per year.

**Between 2003 and 2012, the annual average pertussis incidence rate (new cases per year) was 1.6 cases per 100,000 population in the Region** (including Carson City and Douglas, Lyon, Mineral and Storey counties).

- Below the Nevada incidence rate.
- Below the national incidence rate for the 2006-2008 reporting period.

**Reported Case Rates for Pertussis**  
(2003-2012 Annual Average Cases per 100,000 Population)

	Region*	Nevada	US
<b>Pertussis</b>	<b>1.6</b>	<b>1.9</b>	<b>5.3</b>

Sources: 


- National Electronic Diseases Surveillance System, (Nevada) from 2009 to 2012; Release date: May 2013.
- Centers for Disease Control and Prevention, Division of Public Health Surveillance and Informatics. Epidemiology Program Office.

Notes: 

- \*Region includes Carson City and Douglas, Lyon, Mineral, and Storey Counties.
- US rate represents 2001-2010 data.

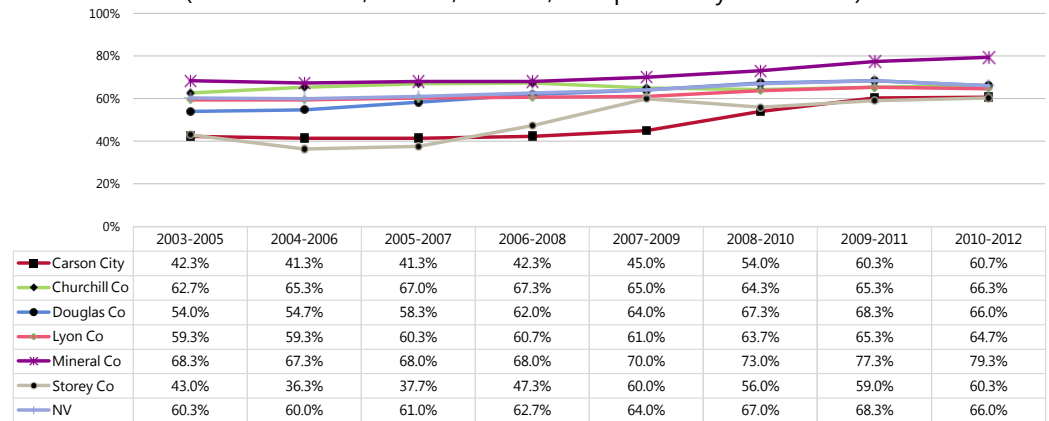
## Childhood Vaccinations

The following chart provides an illustration of immunization compliance among 35-month-old children in the area, as well as the State of Nevada.

 In general, rates appear to have increased over the past decade.

### % of Immunization Compliance Among 3-Year-Olds

(Includes 4 DTaP, 3 Polio, 1 MMR; Compliance by 35 months)



Sources: • Nevada Department of Health and Human Services.  
 Note: • Numbers are a percentage of all 35-month-old children.

# 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](http://www.healthypeople.gov))

## Flu Vaccinations

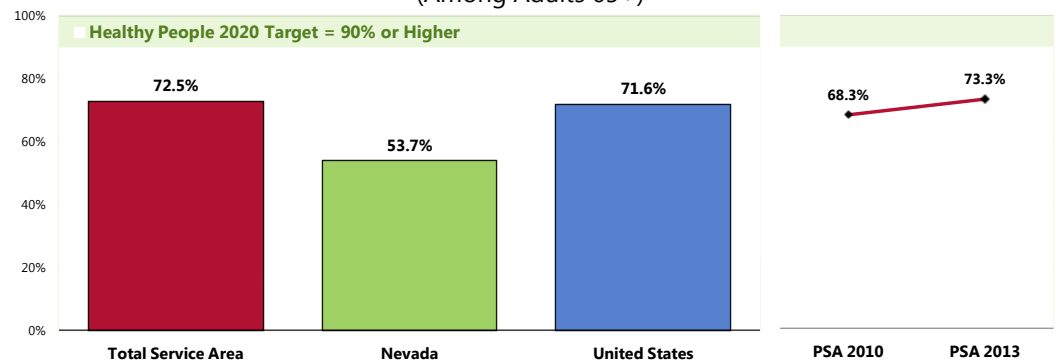
**Among Total Service Area seniors, 72.5% received a flu shot (or FluMist®) within the past year.**

- Higher than the Nevada finding.
  - Similar to the national finding.
  - Fails to satisfy the Healthy People 2020 target (90% or higher).
- 📊 In the Primary Service Area, there has been no significant change since 2010.

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

### Have Had a Flu Vaccination in the Past Year

(Among Adults 65+)



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 163]
- 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 Nevada 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.

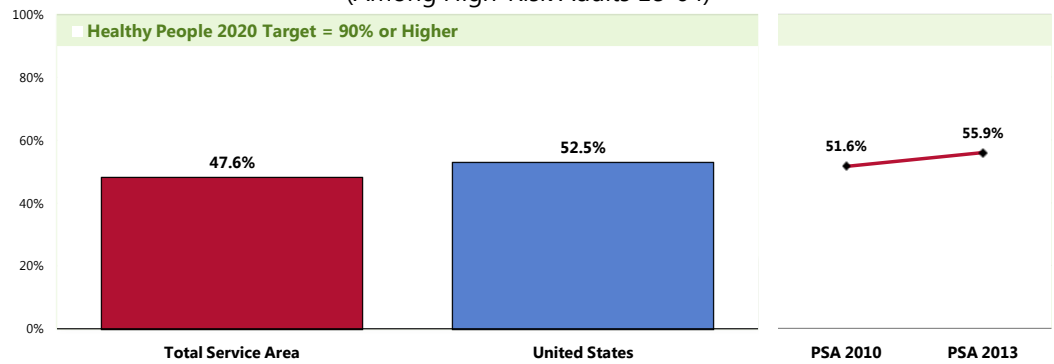
## High-Risk Adults

**A total of 47.6% 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).
- 📊 No significant change in the Primary Service Area since 2010.

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

## Have Had a Flu Vaccination in the Past Year (Among High-Risk Adults 18-64)



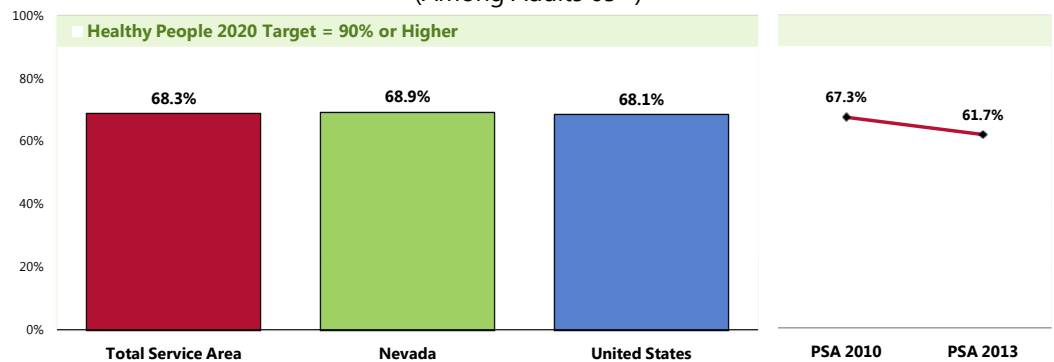
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 164]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-12.6]  
 Notes: • Reflects high-risk respondents age 18-64.  
 • "High-Risk" includes adults age 18 to 64 who have been diagnosed with heart disease, diabetes or respiratory disease.  
 • Includes FluMist as a form of vaccination.

## Pneumonia Vaccination

**Among adults age 65 and older, 68.3% have received a pneumonia vaccination at some point in their lives.**

- Comparable to the Nevada finding.
- Comparable to the national finding.
- Fails to satisfy the Healthy People 2020 target of 90% or higher.
- ☒ Statistically unchanged over time in the Primary Service Area.

## Have Ever Had a Pneumonia Vaccine (Among Adults 65+)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 165]  
 • 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 Nevada 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.

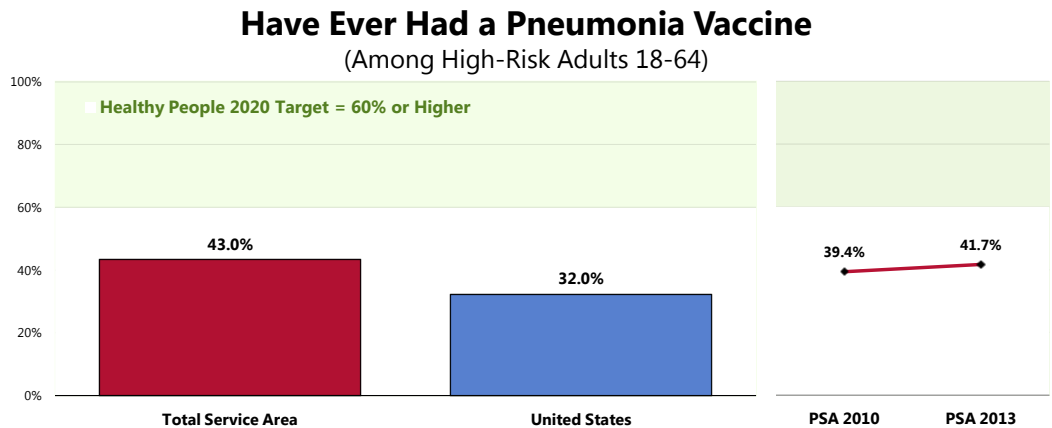


## High-Risk Adults

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

**A total of 43.0% of high-risk adults age 18 to 64 have ever received a pneumonia vaccination.**

- More favorable than national findings.
- Fails to satisfy the Healthy People 2020 target (60% or higher).
- 📊 Statistically unchanged since 2010 in the Primary Service Area.



Sources:

- PRC Community Health Surveys, 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 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.

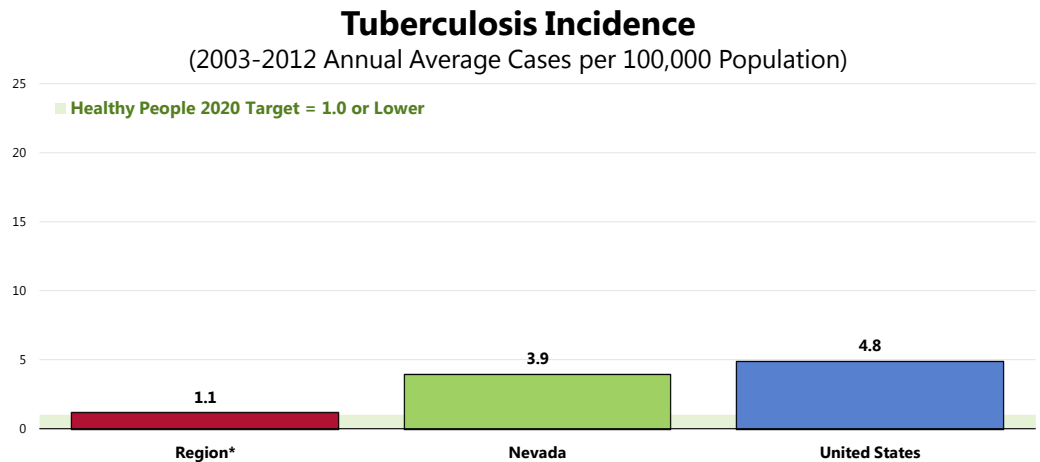
# Tuberculosis

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](http://www.healthypeople.gov))

**Between 2003 and 2012, the annual average tuberculosis incidence rate (new cases per year) was 1.1 cases per 100,000 population in the Region (including Carson City and Douglas, Lyon, Mineral and Storey counties).**

- Below the Nevada incidence rate.
- Below the national incidence rate.
- Fails to satisfy the Healthy People 2020 target (1.0 or lower).



Sources: • Nevada Tuberculosis Information Management System (TIMS) from 2003 to 2008; and National Electronic Diseases Surveillance System, (Nevada) from 2009 to 2012; Release date: May 2013.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-29]  
• Centers for Disease Control and Prevention, Division of Public Health Surveillance and Informatics. Epidemiology Program Office.

Notes: • Rates are annual average new cases per 100,000 population.  
• \*Region includes Carson City and Douglas, Lyon, Mineral, and Storey Counties.  
• US rate represents 2001-2010 data.

# 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:

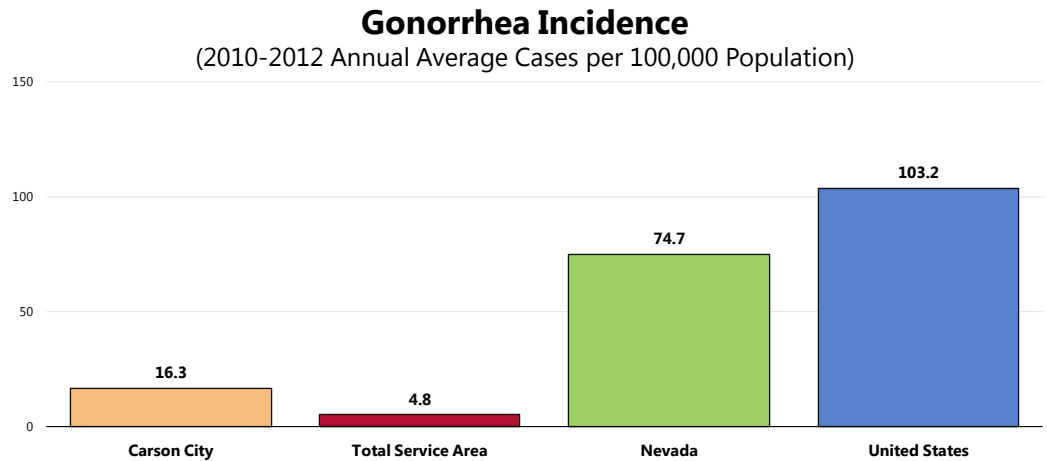
- **Racial and ethnic disparities.** Certain racial and ethnic groups (mainly African American, Hispanic, and American Indian/Alaska Native populations) have high rates of STDs, compared with rates for whites.
- **Poverty and marginalization.** STDs disproportionately affect disenfranchised people and 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](http://www.healthypeople.gov))

## Gonorrhea

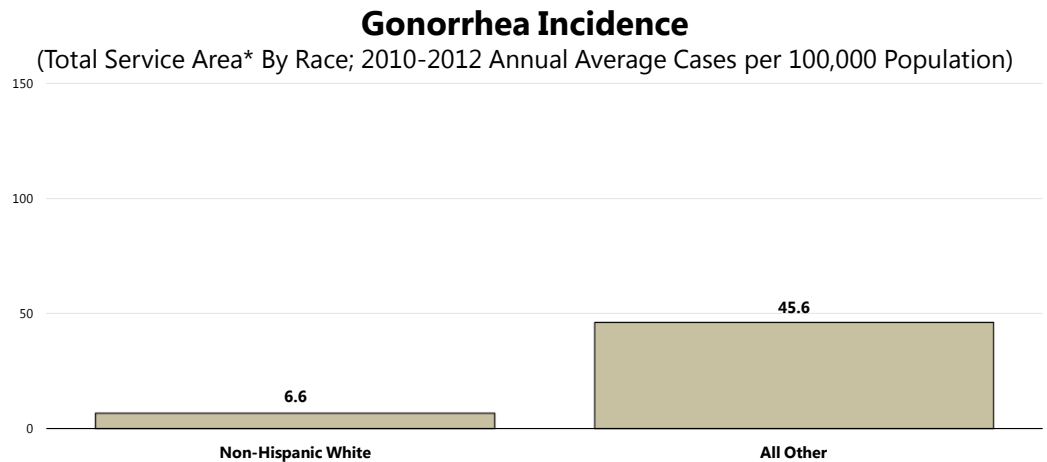
Between 2010 and 2012, the annual average gonorrhea incidence rate was 4.8 cases per 100,000 population in the Total Service Area.

- Notably lower than the Nevada incidence rate.
- Notably lower than the national incidence rate.
- Carson City reported a rate of 16.3 per 100,000 population.



Sources: • Nevada State Health Division STD Reporting System.  
• Centers for Disease Control and Prevention, National Center for Health Statistics.  
Notes: • Rates are annual average new cases per 100,000 population; rates were calculated using 2003-2009 intercensal estimates, 2010-2011 estimates, and 2012 population projections from the Nevada State Demographer.  
• US rate represents 2008-2010 data.

👤 The gonorrhea rate is higher among Non-Whites in the Total Service Area.



Sources: • Nevada State Health Division STD Reporting System.  
• Centers for Disease Control and Prevention, National Center for Health Statistics.  
Notes: • Rates are annual average new cases per 100,000 population; rates were calculated using 2003-2009 intercensal estimates, 2010-2011 estimates, and 2012 population projections from the Nevada State Demographer.  
• \*Rates include Nevada counties only.

## Syphilis

Between 2003 and 2012, there were only 6 total primary/secondary syphilis cases reported in Carson City, Douglas, Lyon, Churchill, Mineral, and Storey counties. (Due to this low number, additional information about these cases is not available.)

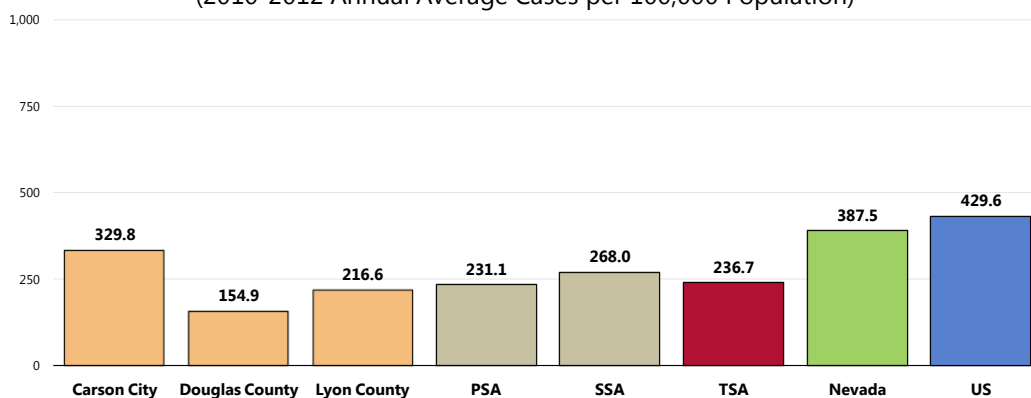
## Chlamydia

Between 2010 and 2012, the annual average chlamydia incidence rate was 236.7 cases per 100,000 population in the Total Service Area.

- More favorable than the Nevada incidence rate.
- More favorable than the national incidence rate.
- Higher in Carson City; higher in the Secondary Service Area.

### Chlamydia Incidence

(2010-2012 Annual Average Cases per 100,000 Population)



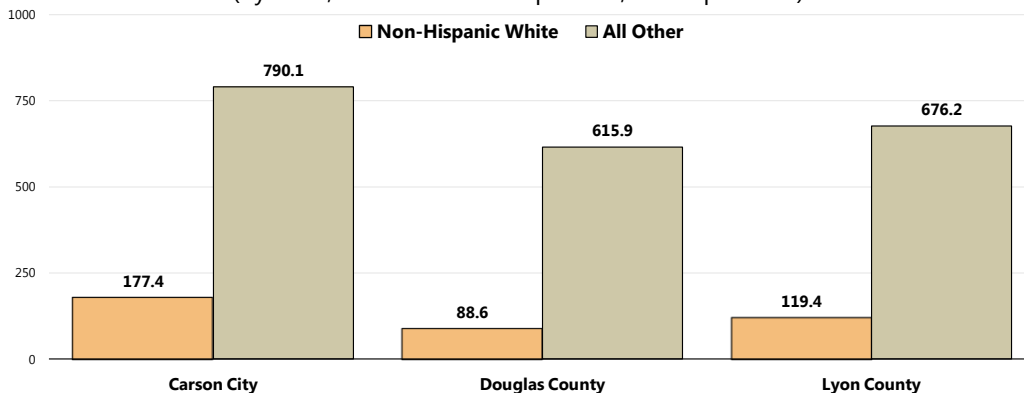
Sources: • Nevada State Health Division STD Reporting System.  
• Centers for Disease Control and Prevention, National Center for Health Statistics.  
Notes: • Rates are annual average new cases per 100,000 population.  
• Rates do not include Storey County (counts are too low).  
• The US rate represents 2008-2010 data.



Chlamydia rates are dramatically higher among Non-Whites when viewed by race in Carson City, Douglas County, and Lyon County.

### Chlamydia Incidence

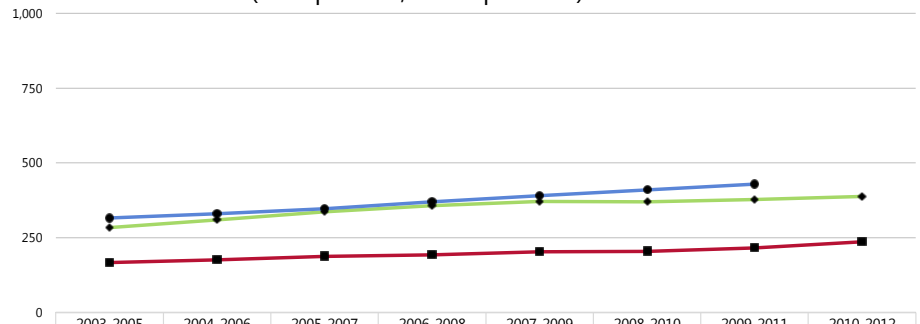
(By Race; 2010-2012 Rates per 100,000 Population)



Sources: • Nevada State Health Division STD Reporting System.  
• Centers for Disease Control and Prevention, National Center for Health Statistics.  
Notes: • Rates are annual average new cases per 100,000 population.

- Chlamydia incidence increased steadily between the 2003-2005 and 2010-2012 reporting periods in the Total Service Area, as did the state and national incidence rates.

### Chlamydia Incidence (Rate per 100,000 Population)



	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
Total Service Area	166.9	175.5	187.2	193.0	202.3	203.5	215.8	236.7
Nevada	284.0	309.1	336.4	357.2	370.7	369.4	377.6	387.5
United States	315.9	330.1	347.1	370.0	390.3	409.8	429.6	

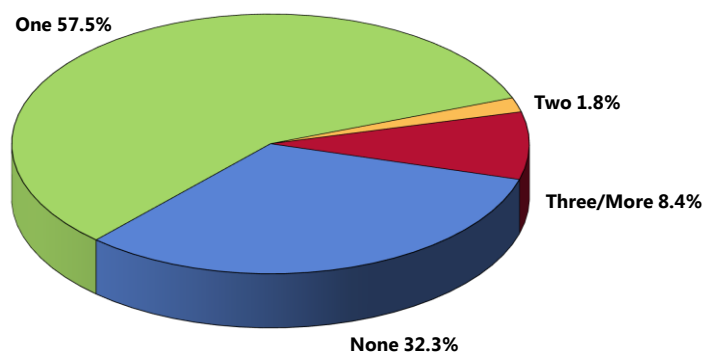
Sources: • Nevada State Health Division STD Reporting System.  
 • Centers for Disease Control and Prevention, National Center for Health Statistics.  
 Notes: • Rates are annual average new cases per 100,000 population.  
 • Rates do not include Storey County (counts are too low).

## Safe Sexual Practices

### Sexual Partners

Among unmarried Total Service Area adults under 65, the vast majority cites having one (57.5%) or no (32.3%) sexual partners in the past 12 months.

### Number of Sexual Partners in Past 12 Months (Among Unmarried Adults 18-64; Total Service Area, 2013)

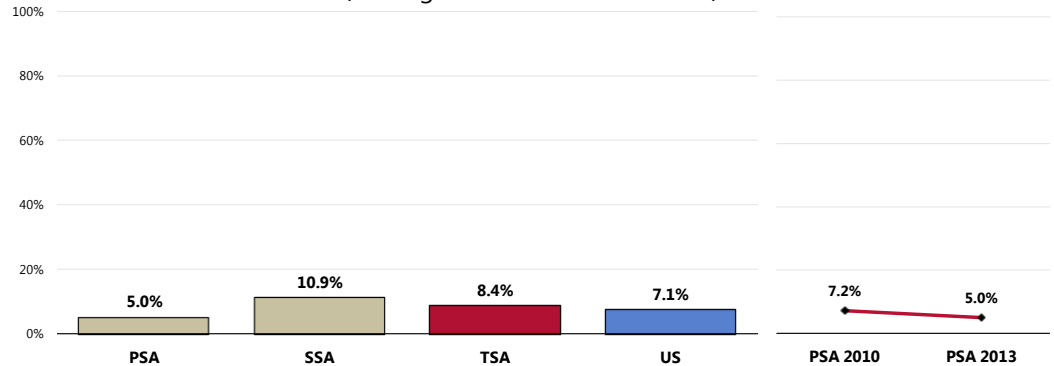


Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 93]  
 Notes: • Asked of all unmarried respondents under the age of 65.

However, 8.4% report three or more sexual partners in the past year.

- Comparable to that reported nationally.
- Comparable by service area.
- No significant change in the Primary Service Area since 2010.

### Had Three or More Sexual Partners in the Past Year (Among Unmarried Adults 18-64)

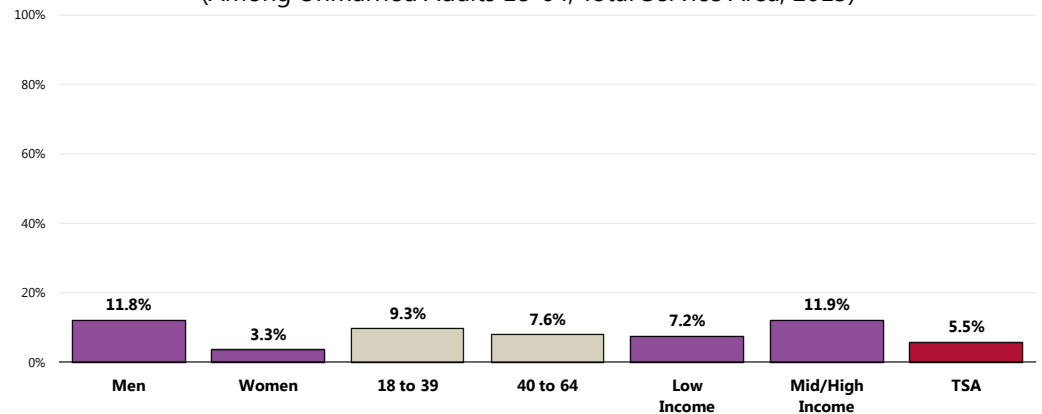


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 93]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all unmarried respondents under the age of 65.

Unmarried respondents (age 18 to 64) more likely to report three or more sexual partners in the past year include:

Men.

### Had Three or More Sexual Partners in the Past Year (Among Unmarried Adults 18-64; Total Service Area, 2013)



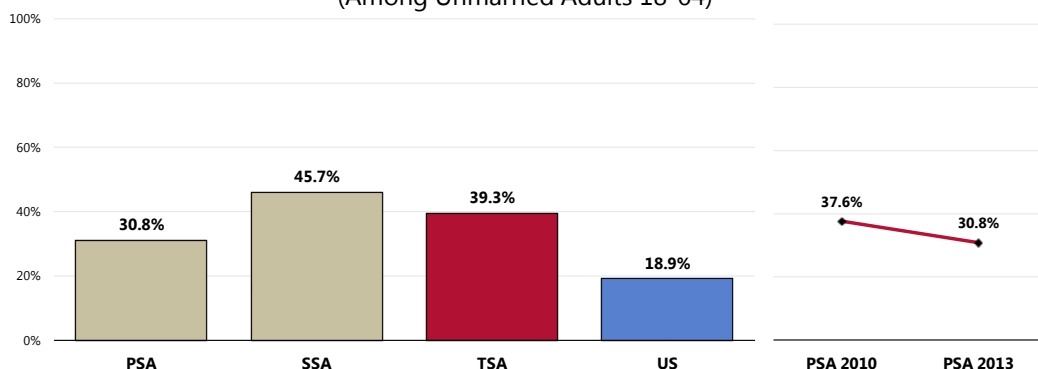
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 93]  
 Notes: • Asked of all unmarried respondents under the age of 65.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Condom Use

**Among Total Service Area adults who are under age 65 and unmarried, 39.3% report that a condom was used during their last sexual intercourse.**

- Much higher than national findings.
- Higher in the Secondary Service Area than in the Primary Service Area.
- Statistically unchanged since 2010 in the Primary Service Area.

### Condom Was Used During Last Sexual Intercourse (Among Unmarried Adults 18-64)



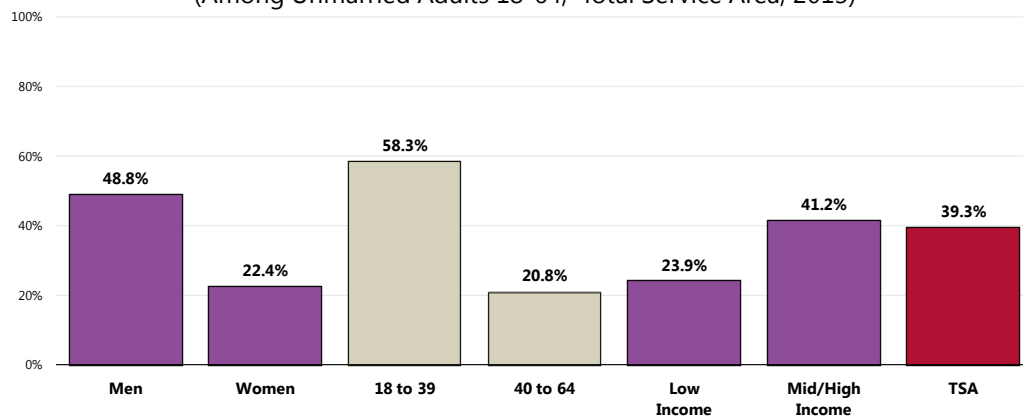
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 94]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

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

Those less likely to report that a condom was used during their last sexual intercourse include:

- Women.
- Residents age 40 through 64.
- Respondents with lower incomes.

### Condom Was Used During Last Sexual Intercourse (Among Unmarried Adults 18-64; Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 94]

Notes: • Asked of all unmarried respondents under the age of 65.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.



## HIV Testing

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.

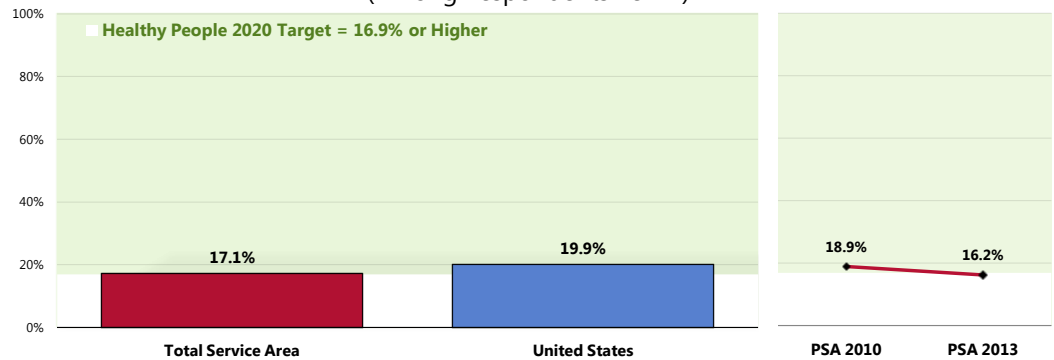
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**Among Total Service Area adults age 18-44, 17.1% 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.
- 📊 No significant change in the Primary Service Area since 2010.

### Tested for HIV in the Past Year

(Among Respondents 18-44)

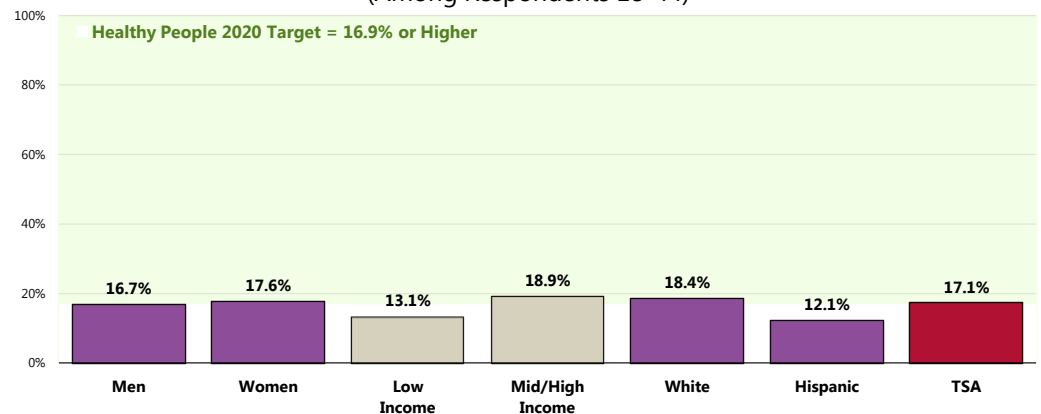


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 169]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HIV-14.1]
- Notes:
- Reflects respondents age 18 to 44.
  - Note that the Healthy People 2020 objective is for ages 15-44.

👤 By demographic characteristics, no significant differences to report.

### Tested for HIV in the Past Year

(Among Respondents 18-44)



- Sources:
- 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective 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. 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.

# Hepatitis

## Hepatitis A

**Between 2003 and 2012, the Region** (including Carson City and Douglas, Lyon, Mineral and Storey counties) **reported a hepatitis A rate of 1.2 per 100,000 population.**

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

### Reported Case Rates for Acute Hepatitis A

(2003-2012 Annual Average Cases per 100,000 Population)

	Region*	Nevada	US
Acute Hepatitis A	1.2	0.7	2.0

Sources: • National Electronic Diseases Surveillance System, (Nevada): Release date: May 2013.  
• Centers for Disease Control and Prevention, Division of Public Health Surveillance and Informatics. Epidemiology Program Office.  
Notes: • \*Region includes Carson City and Douglas, Lyon, Mineral, and Storey Counties.  
• US rate represents 2001-2010 data.

## Hepatitis B

### Acute Hepatitis B Incidence

**The Region reported a hepatitis B rate of 1.6 between 2003 and 2012.**

- Better than the statewide rate.
- Better than the national rate.

### Reported Case Rates for Acute Hepatitis B

(2003-2012 Annual Average Cases per 100,000 Population)

	Region*	Nevada	US
Acute Hepatitis B	1.6	2.0	2.0

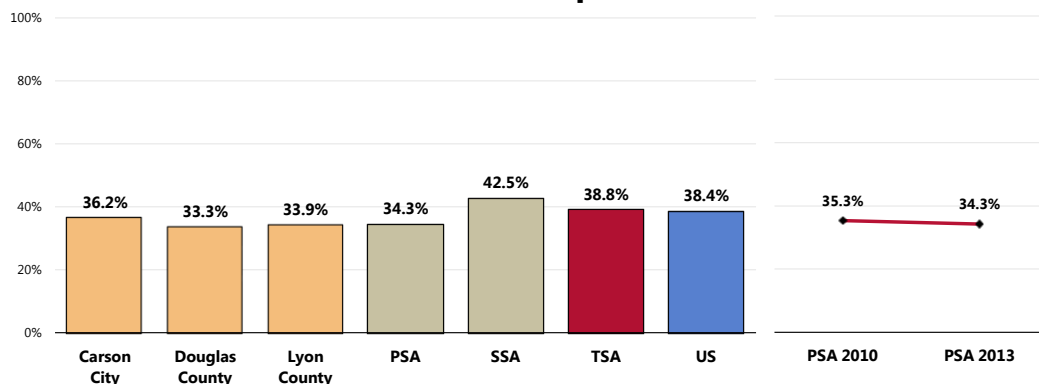
Sources: • National Electronic Diseases Surveillance System, (Nevada): Release date: May 2013.  
• Centers for Disease Control and Prevention, Division of Public Health Surveillance and Informatics. Epidemiology Program Office.  
Notes: • \*Region includes Carson City and Douglas, Lyon, Mineral, and Storey Counties.  
• US rate represents 2001-2010 data.

## Hepatitis B Vaccination

**Based on survey data, 38.8% of adults report having received the hepatitis B vaccine.**

- Almost identical to what is reported nationwide.
- Similar by area; lower in the PSA than in the SSA.
- 📊 No significant change in the Primary Service Area since 2010.

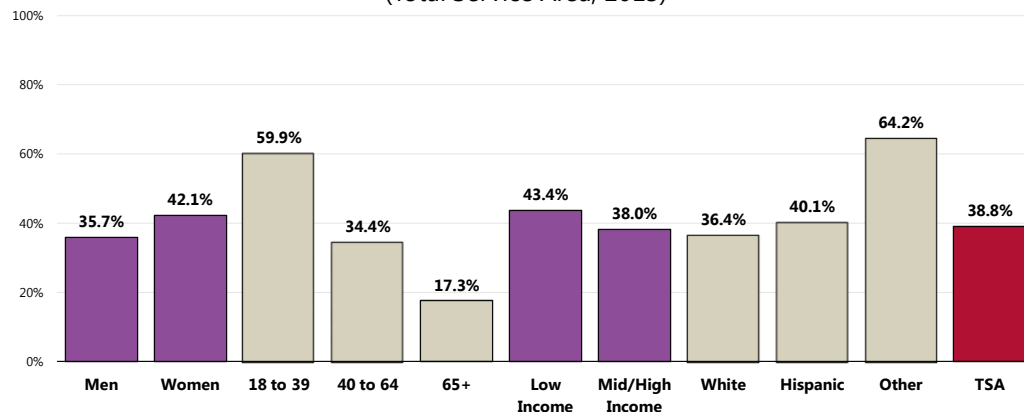
### Have Ever Received the Hepatitis B Vaccination



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 71]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

- 👥 Note the negative correlation between age and hepatitis B vaccination.
- 👥 In addition, residents of "Other" racial backgrounds are much more likely than Whites and Hispanics to have received the hepatitis B vaccine.

### Have Ever Received the Hepatitis B Vaccination (Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 71]  
 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.

## Hepatitis C

**Between 2003 and 2012, the annual average acute hepatitis C incidence rate was 0.5 cases per 100,000 population in the Region** (including Carson City and Douglas, Lyon, Mineral and Storey counties).

- Identical to the statewide rate.
- Identical to the national rate.

### Reported Case Rates for Acute Hepatitis C

(2003-2012 Annual Average Cases per 100,000 Population)

	Region*	Nevada	US
<b>Acute Hepatitis C</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>

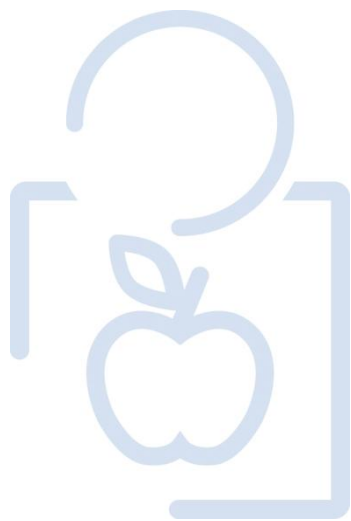
Sources: 

- National Electronic Diseases Surveillance System, (Nevada): Release date: May 2013.
- Centers for Disease Control and Prevention, Division of Public Health Surveillance and Informatics. Epidemiology Program Office.

Notes: 

- \*Region includes Carson City and Douglas, Lyon, Mineral, and Storey Counties.
- US rate represents 2001-2010 data.

# 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](http://www.healthypeople.gov))

## Between 2010 and 2012, three in 10 Total Service Area births did not receive adequate prenatal care.

- More favorable than the Nevada proportion.
- Fails to satisfy the Healthy People 2020 target (22.1% or lower).
- Lower in Douglas County; unfavorably high in the Secondary Service Area.

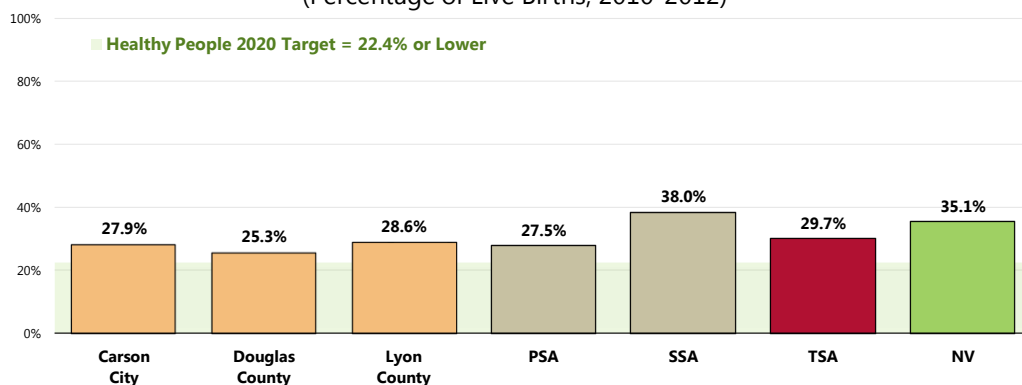
Early and continuous prenatal care is the best assurance of infant health.

“Adequate prenatal care” is defined by the Kotelchuck Index, also called the Adequacy of Prenatal Care Utilization.

Kotelchuck index is calculated based on the initiation date of the prenatal care versus the number of visits. These factors are then used to create a ratio of observed to expected visits.

### Did Not Receive Adequate Prenatal Care

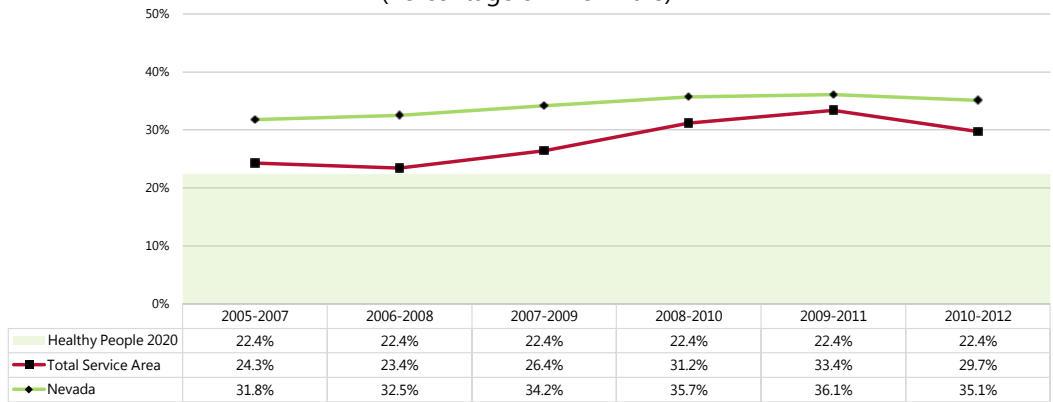
(Percentage of Live Births, 2010-2012)



Sources: • Office of Public Health Informatics and Epidemiology, Nevada State Health Division. Electronic Birth Registry System. [unpublished data.] Carson City, Nevada. May 2013.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-10.2]  
 Notes: • “Adequate prenatal care” is defined by the Kotelchuck Index also called the Adequacy of Prenatal Care Utilization. Kotelchuck index is calculated based on the initiation date of the prenatal care versus the number of visits. These factors are then used to create a ratio of observed to expected visits.  
 • California data not included.

- Receipt of prenatal care has worsened overall in the Total Service Area; across Nevada, a similar trend is reported.

### Did Not Receive Adequate Prenatal Care (Percentage of Live Births)



- Sources:
- Office of Public Health Informatics and Epidemiology. Nevada State Health Division. Electronic Birth Registry System. [unpublished data.] Carson City, Nevada. May 2013.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-10.2]
- Notes:
- "Adequate prenatal care" is defined by the Kotelchuck Index also called the Adequacy of Prenatal Care Utilization. Kotelchuck index is calculated based on the initiation date of the prenatal care versus the number of visits. These factors are then used to create a ratio of observed to expected visits.
  - California data not included.



# 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.

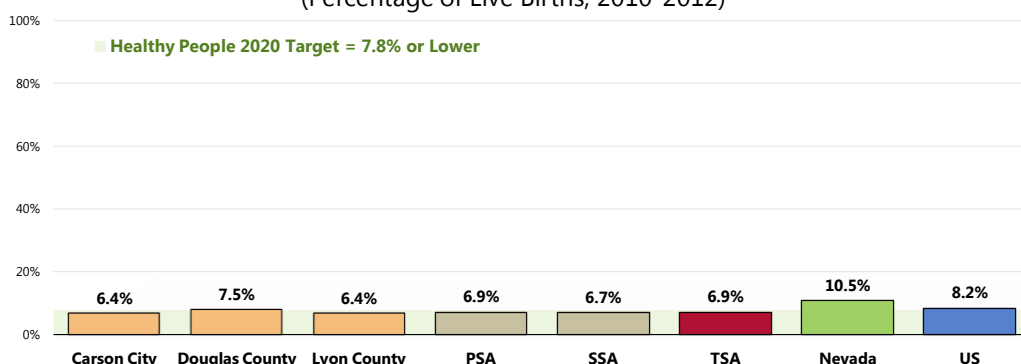
Largely a result of receiving poor or inadequate prenatal care, many low-weight births and the consequent health problems are preventable.

**A total of 6.9% of 2010-2012 Total Service Area births were low-weight.**

- Better than the Nevada proportion.
- Better than the national proportion.
- Satisfies the Healthy People 2020 target (7.8% or lower).
- Higher in Douglas County; similar by service area.

### Low-Weight Births

(Percentage of Live Births, 2010-2012)

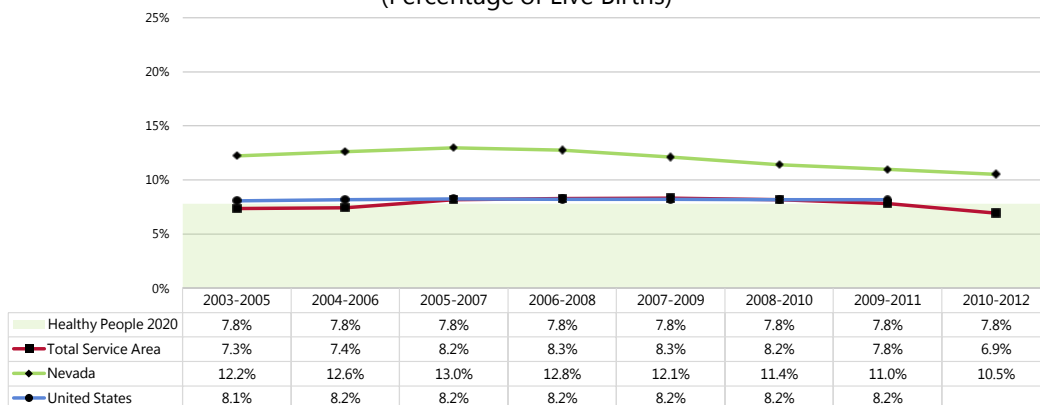


Sources: • Office of Public Health Informatics and Epidemiology, Nevada State Health Division. Electronic Birth Registry System. [unpublished data.] Carson City, Nevada. May 2013.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
• US Department of Health and Human Services. 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.  
• California data not included for 2011 and 2012.

The proportion of low-weight births has not shown a clear trend in the Total Service Area in recent years.

### Low-Weight Births

(Percentage of Live Births)



Sources: • Office of Public Health Informatics and Epidemiology, Nevada State Health Division. Electronic Birth Registry System. [unpublished data.] Carson City, Nevada. May 2013.  
• 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.  
• California data not included for 2011 and 2012.

## Infant Mortality

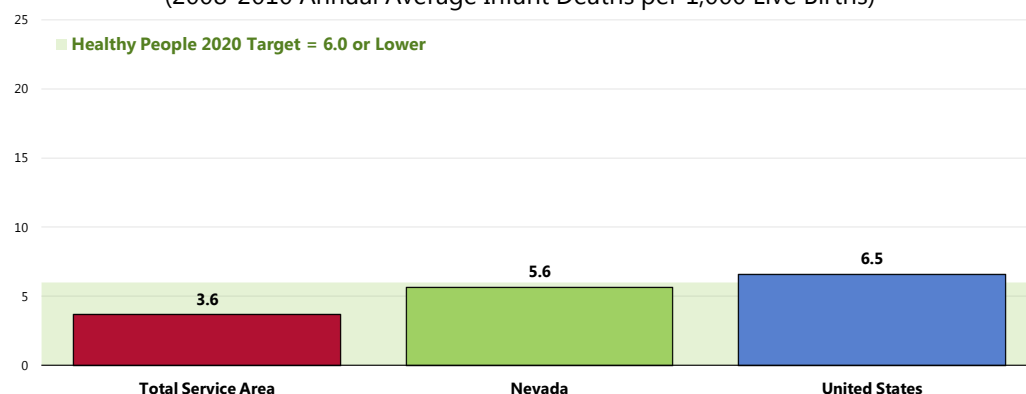
Infant mortality rates reflect deaths of children less than one year old per 1,000 live births.

**Between 2008 and 2010, there was an annual average of 3.6 infant deaths per 1,000 live births.**


- More favorable than the Nevada rate.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target of 6.0 per 1,000 live births.

### Infant Mortality Rate

(2008-2010 Annual Average Infant Deaths per 1,000 Live Births)

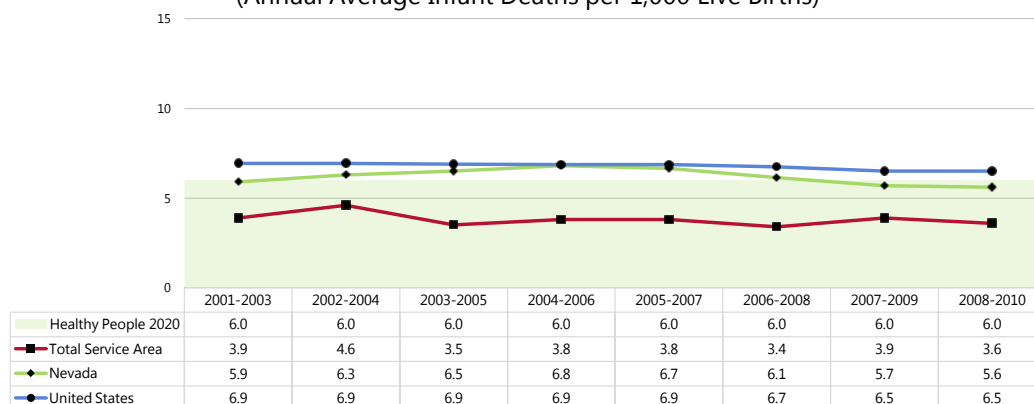


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
• Centers for Disease Control and Prevention, National Center for Health Statistics.  
• US Department 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 has been fairly steady in the Total Service Area over the past decade.

### Infant Mortality Rate

(Annual Average Infant Deaths 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 June 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.

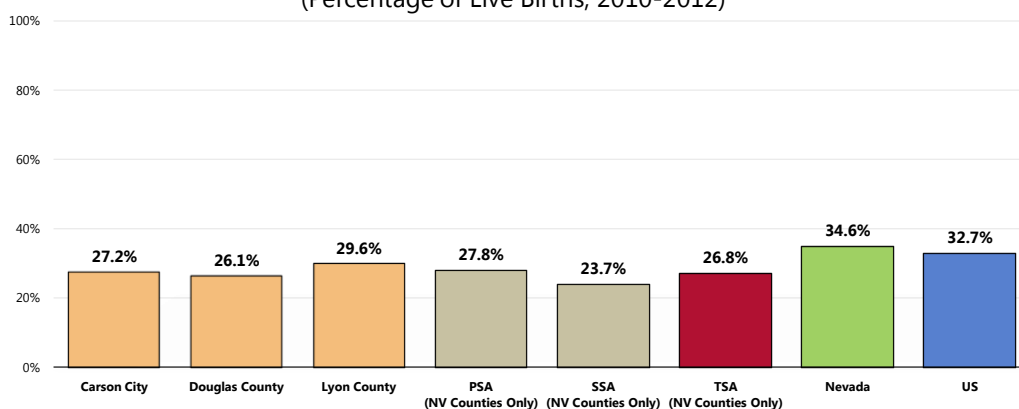
## C-Sections

Over one-fourth of 2010-2012 live births in the Total Service Area was a delivery by caesarean section ("c-section").

- Lower than the Nevada rate.
- Lower than the national rate.
- Higher in Lyon County; higher in the Primary Service Area.

### C-Section Births

(Percentage of Live Births, 2010-2012)

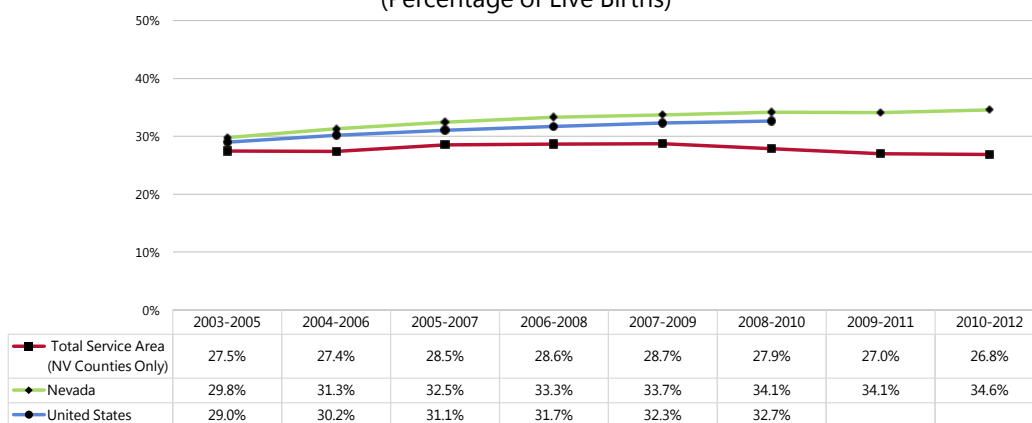


Sources: • Office of Public Health Informatics and Epidemiology. Nevada State Health Division. Electronic Birth Registry System. [unpublished data.] Carson City, Nevada. May 2013.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.  
• US percentage reflects 2008-2010 data.  
• California data not available.

The percentage of live birth deliveries by c-section has been relatively stable in the Total Service Area in recent years; in contrast, the state and US proportions have trended upward.

### C-Section Births

(Percentage of Live Births)



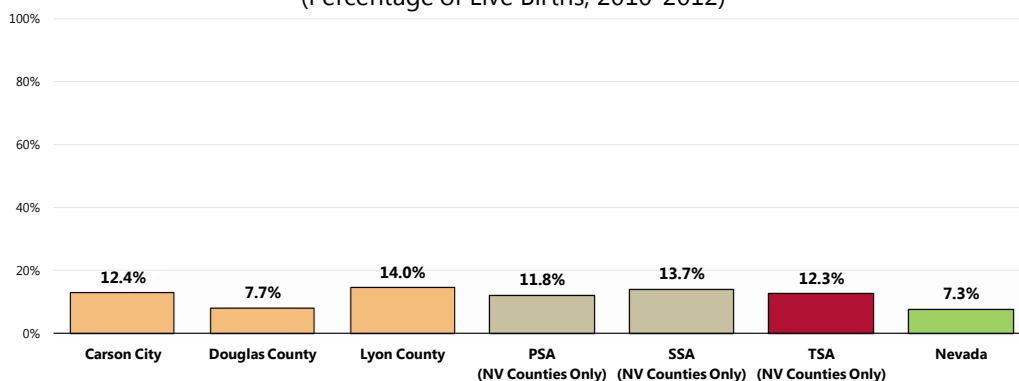
Sources: • Office of Public Health Informatics and Epidemiology. Nevada State Health Division. Electronic Birth Registry System. [unpublished data.] Carson City, Nevada. May 2013.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.  
• California data not available.

## Use of Tobacco

**Between 2010 and 2012, 12.3% of all live births in the Total Service Area were to mothers who used tobacco during pregnancy.**

- Higher than the Nevada rate.
- Favorably low in Douglas County; higher in the SSA than in the PSA.

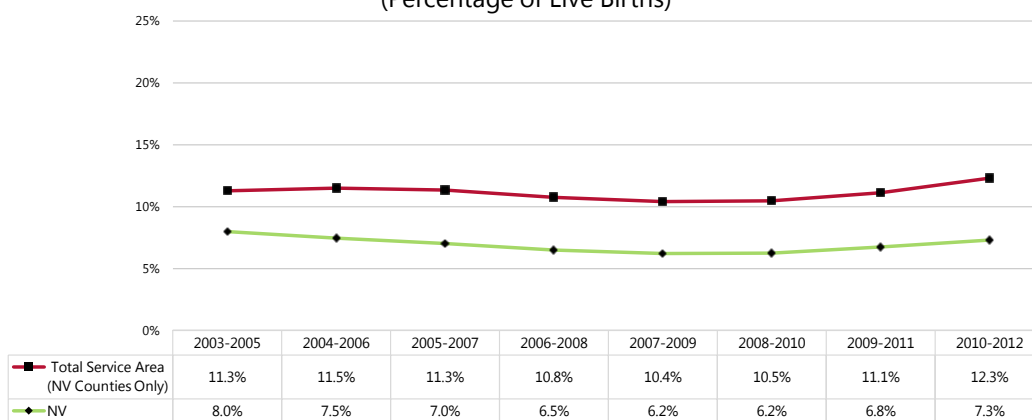
### Self-Reported Tobacco Use During Pregnancy (Percentage of Live Births, 2010-2012)



Sources: • Office of Public Health Informatics and Epidemiology, Nevada State Health Division, Electronic Birth Registry System, [unpublished data.] Carson City, Nevada, May 2013.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.  
• California data not available.

- ☒ Tobacco use among pregnant females in the TSA has risen slightly in the most recent reporting years, as is seen across Nevada.

### Self-Reported Tobacco Use During Pregnancy (Percentage of Live Births)



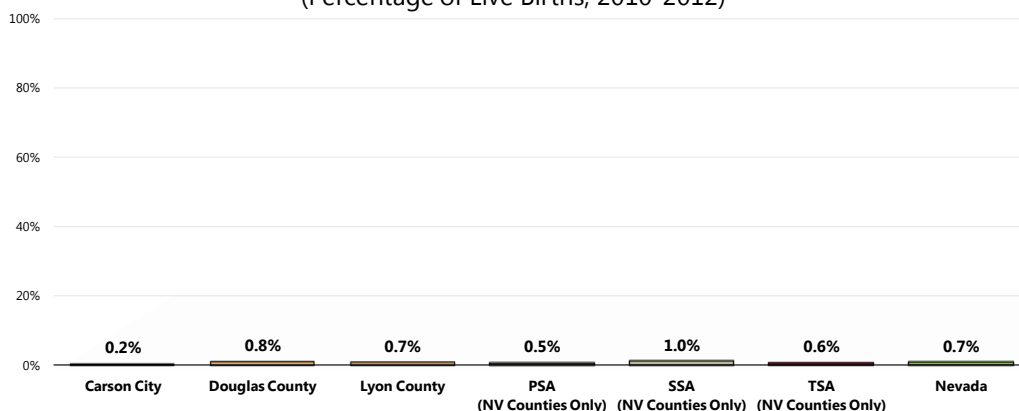
Sources: • Office of Public Health Informatics and Epidemiology, Nevada State Health Division, Electronic Birth Registry System, [unpublished data.] Carson City, Nevada, May 2013.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.  
• California data not available.

## Use of Alcohol

**Just 0.6% of 2010-2012 live births in the Total Service Area were to females who consumed alcohol during pregnancy.**

- More favorable than the Nevada rate.
- Higher in Douglas County; higher in the SSA than in the PSA.

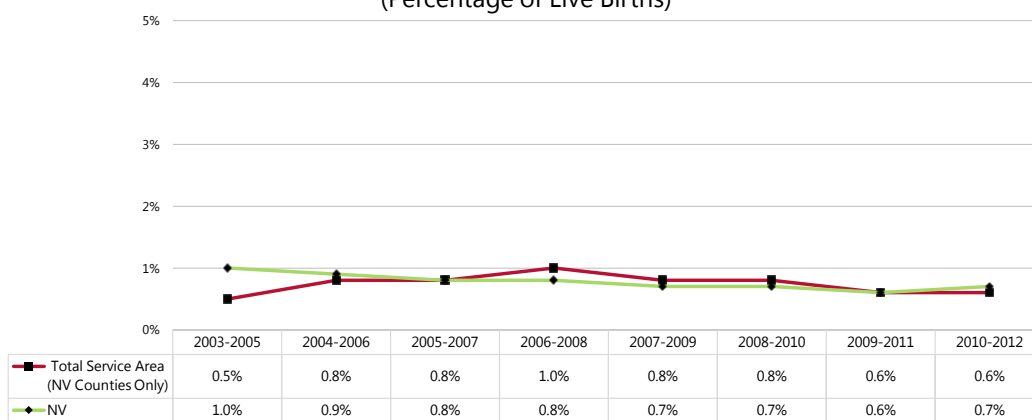
### Self-Reported Alcohol Use During Pregnancy (Percentage of Live Births, 2010-2012)



Sources: • Office of Public Health Informatics and Epidemiology, Nevada State Health Division. Electronic Birth Registry System. [unpublished data.] Carson City, Nevada. May 2013.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.  
• California data not available.

- ☒ The proportion of live births to TSA females who consumed alcohol during pregnancy has not changed dramatically over the past decade.

### Self-Reported Alcohol Use During Pregnancy (Percentage of Live Births)



Sources: • Office of Public Health Informatics and Epidemiology, Nevada State Health Division. Electronic Birth Registry System. [unpublished data.] Carson City, Nevada. May 2013.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.  
• California data not available.

# Family Planning

Family planning is one of the 10 great public health achievements of the 20<sup>th</sup> century. The availability of family planning services allows individuals to achieve desired birth spacing and family size and contributes to improved health outcomes for infants, children, and women. Family planning services include contraceptive and broader reproductive health services (patient education and counseling), breast and pelvic examinations, breast and cervical cancer screening, sexually transmitted infection (STI) and HIV prevention education/counseling/testing/referral, and pregnancy diagnosis and counseling. For many women, a family planning clinic is their entry point into the healthcare system and is considered to be their usual source of care. This is especially true for women with incomes below the poverty level, women who are uninsured, Hispanic women, and Black women.

Unintended pregnancies (those reported by women as being mistimed or unwanted) are associated with many negative health and economic outcomes. In 2001, almost one-half of all pregnancies in the US were unintended. For women, negative outcomes associated with unintended pregnancy include:

- Delays in initiating prenatal care
- Reduced likelihood of breastfeeding
- Poor maternal mental health
- Lower mother-child relationship quality
- Increased risk of physical violence during pregnancy

Children born as a result of an unintended pregnancy are more likely to experience poor mental and physical health during childhood and poor educational and behavioral outcomes.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Births to Unwed Mothers

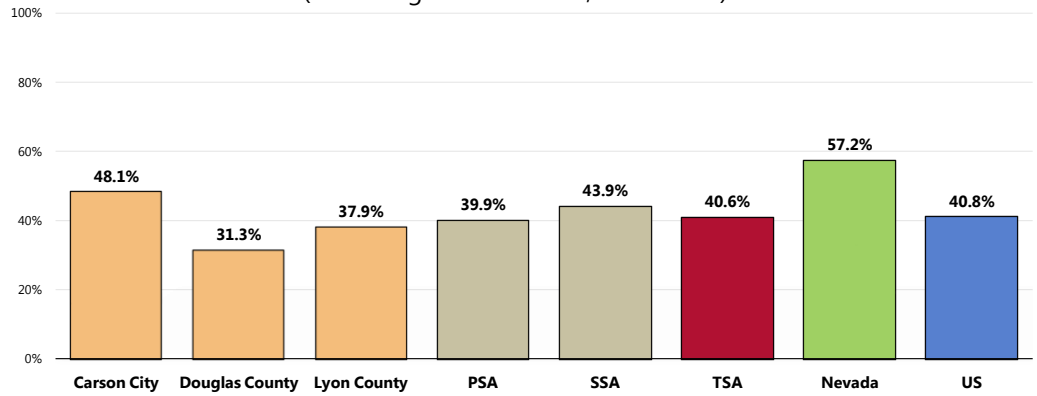
According to the CDC, an unintended pregnancy is a pregnancy that is either mistimed or unwanted at the time of conception. It is a core concept in understanding the fertility of populations and the unmet need for contraception. Unintended pregnancy is associated with an increased risk of morbidity for women, and with health behaviors during pregnancy that are associated with adverse effects. For example, women with an unintended pregnancy may delay prenatal care, which may affect the health of the infant. Women of all ages may have unintended pregnancies, but some groups, such as teens, are at a higher risk.

Because it is impossible to measure the true incidence of unintended pregnancy in the US, the following indicator looks at births occurring among unmarried mothers as a proxy measure for pregnancies that are not intended (knowing that this is not always the case).

### **A total of 40.6% of 2010-2012 births were to unwed mothers.**

- Lower than the percentage reported statewide.
- Almost identical to that found nationally.
- Higher in Carson City; higher in the Secondary Service Area.

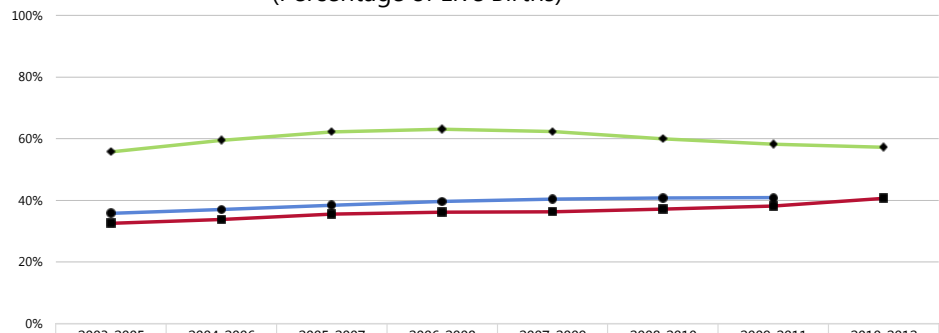
## Births to Unwed Mothers (Percentage of Live Births, 2010-2012)



Sources: • Office of Public Health Informatics and Epidemiology, Nevada State Health Division. Electronic Birth Registry System. [unpublished data.] Carson City, Nevada. May 2013.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.  
• US percentage reflects 2008-2010 data.

The percentage of births to unwed mothers in the Total Service Area increased over the past decade, echoing the national trend. The Nevada proportion has fluctuated over the past decade, with no apparent trend.

## Births to Unwed Mothers (Percentage of Live Births)



Sources: • Office of Public Health Informatics and Epidemiology, Nevada State Health Division. Electronic Birth Registry System. [unpublished data.] Carson City, Nevada. May 2013.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.

## Births to Teen Mothers

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

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

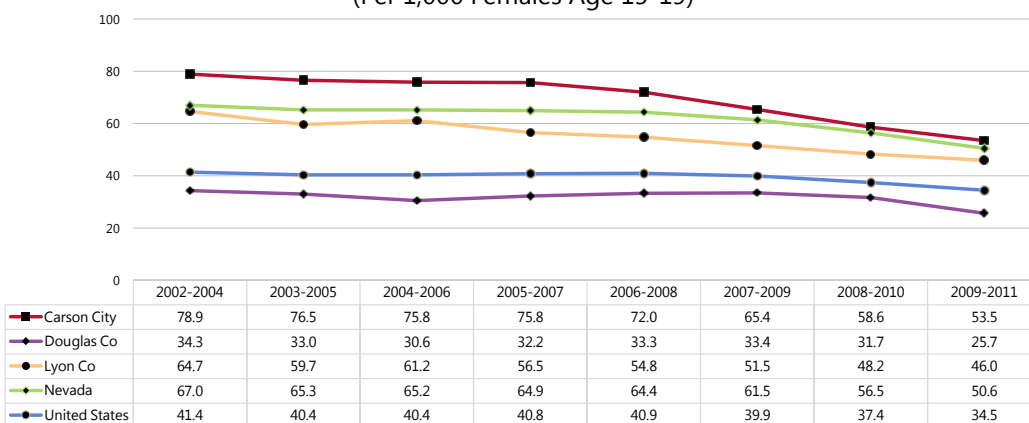
Similarly, early fatherhood is associated with lower educational attainment and lower income. Children of teen parents are more likely to have lower cognitive attainment and exhibit more behavior problems. Sons of teen mothers are more likely to be incarcerated, and daughters are more likely to become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

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**Between 2009 and 2011, Carson City reported a teen birth rate of 53.5 per 1,000 females age 15 to 19.**

- Higher than the Nevada rate.
- Much higher than the national rate.
- Higher than Douglas and Lyon County rates.
- ▣ Teen birth rates have decreased over time in each region, as shown below.

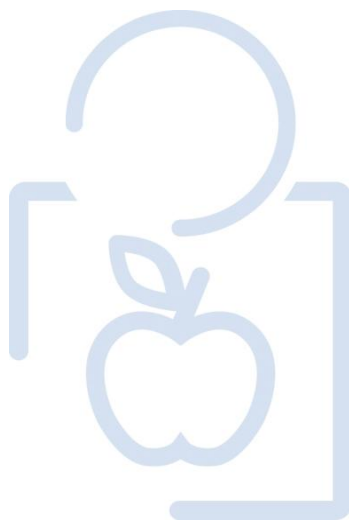
**Teen Birth Rate**  
(Per 1,000 Females Age 15-19)



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 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 births to females age 15-19 per 1,000 females (15-19).



# 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.

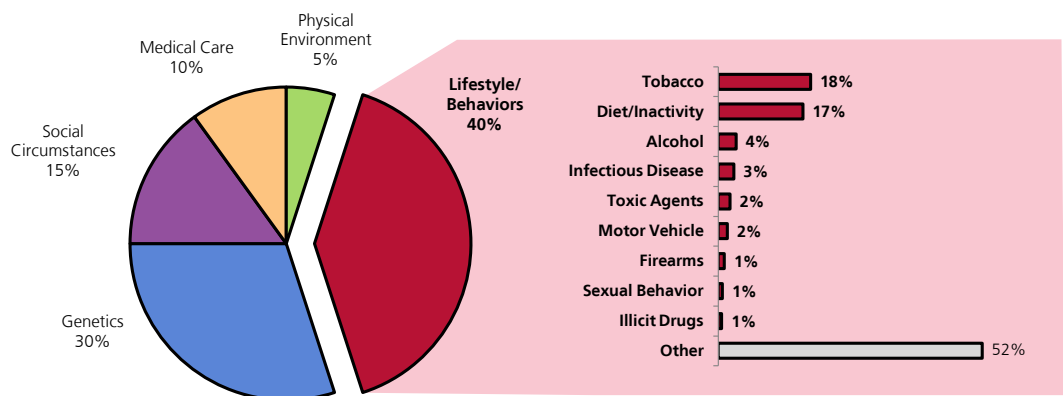
These analyses show that smoking remains the leading cause of mortality. However, poor diet and physical inactivity may soon overtake tobacco as the leading cause of death. These findings, along with escalating healthcare costs and aging population, argue persuasively that the need to establish a more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

## 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.

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.

# 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](http://www.healthypeople.gov))

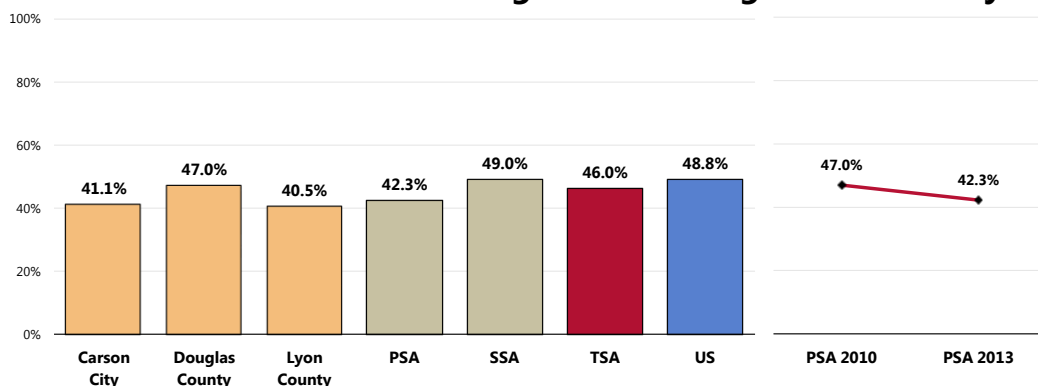
## Daily Recommendation of Fruits/Vegetables

**A total of 46.0% of Total Service Area adults report eating five or more servings of fruits and/or vegetables per day.**

- Similar to national findings.
- Similar findings by area.
- ☒ Fruit/vegetable consumption has not changed significantly since 2010 in the Primary Service Area.

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.

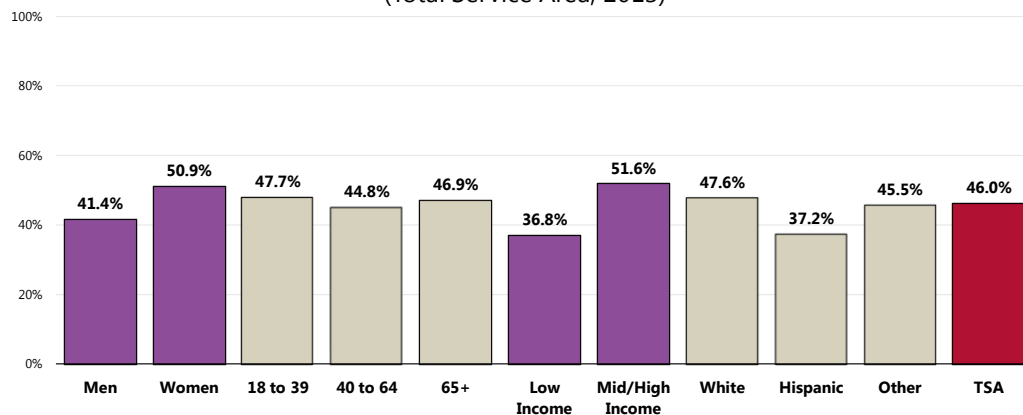
### Consume Five or More Servings of Fruits/Vegetables Per Day



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 171]  
 • 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 men are less likely to get the recommended servings of daily fruits/vegetables, as are low-income adults in the Total Service Area.

### Consume Five or More Servings of Fruits/Vegetables Per Day (Total Service Area, 2013)



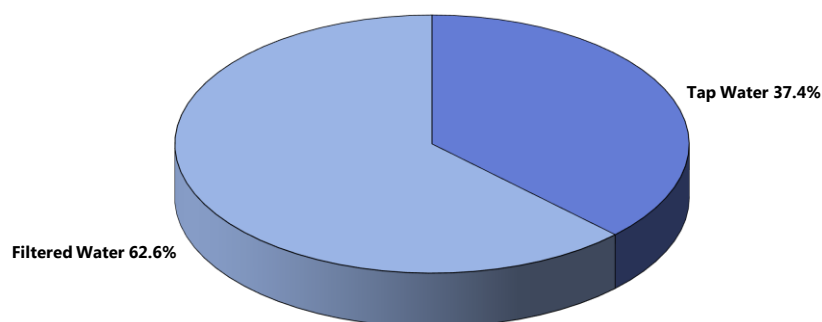
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 171]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories 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.

## Water Consumption

Among Total Service Area respondents, 37.4% report drinking water from the tap, while 62.6% primarily drink filtered or bottled water.

### Type of Water Consumption

(Total Service Area, 2013)

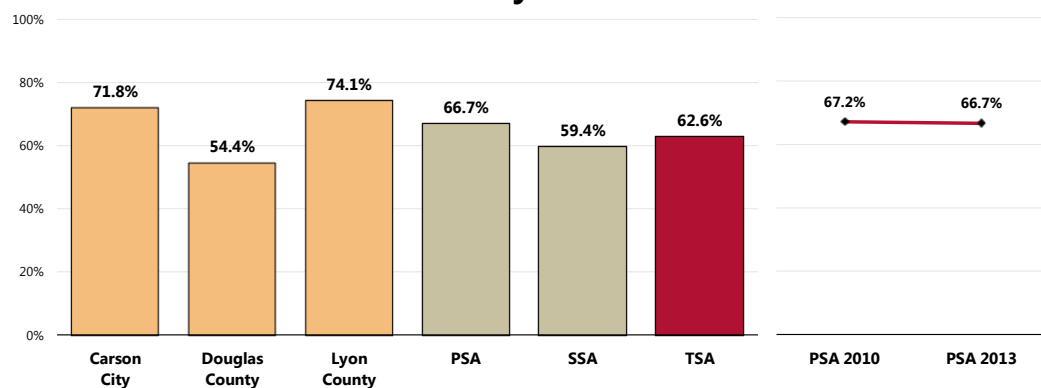


Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]  
Notes: • Reflects the total sample of respondents.

- Filtered water consumption is lowest in Douglas County and similar by service area.

📈 No significant change in the Primary Service Area since 2010.

### Drink Primarily Filtered Water

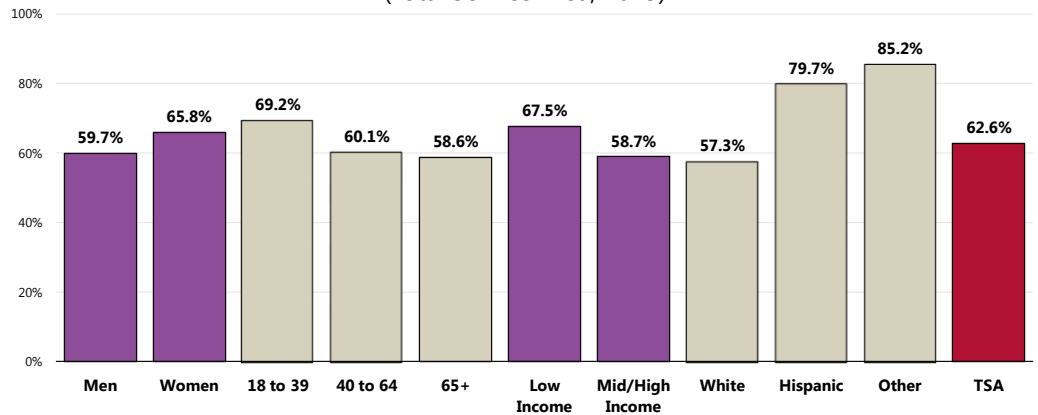


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 99]  
Notes: • Asked of all respondents.

Upper-income residents and Whites are less likely to report drinking primarily filtered water.

## Drink Primarily Filtered Water

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]

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.

## Health Advice About Diet & Nutrition

**A total of 31.9% of survey respondents acknowledge that a physician counseled them about diet and nutrition in the past year.**

• Lower than national findings.

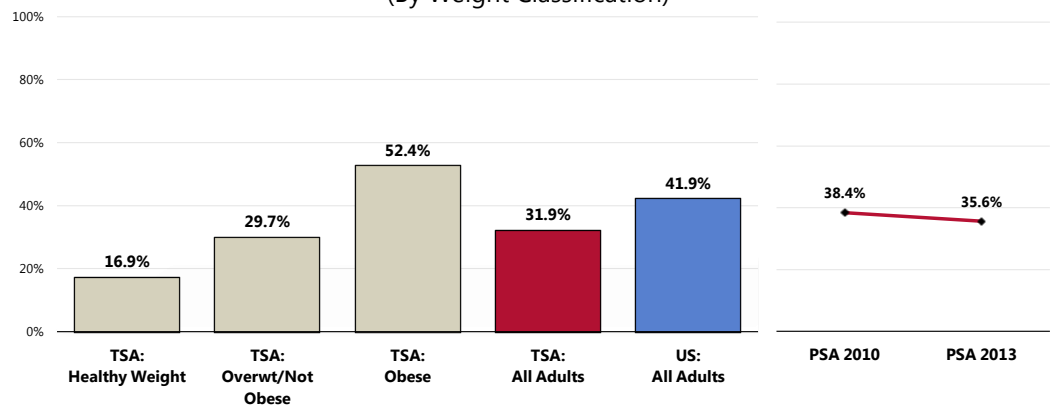
• Similar results by area (not shown).

• No significant change in the Primary Service Area since 2010.

• Note: Among obese respondents, 52.4% report receiving diet/nutrition advice (meaning that nearly 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: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 20]

Notes: • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

• Asked of all respondents.

# 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

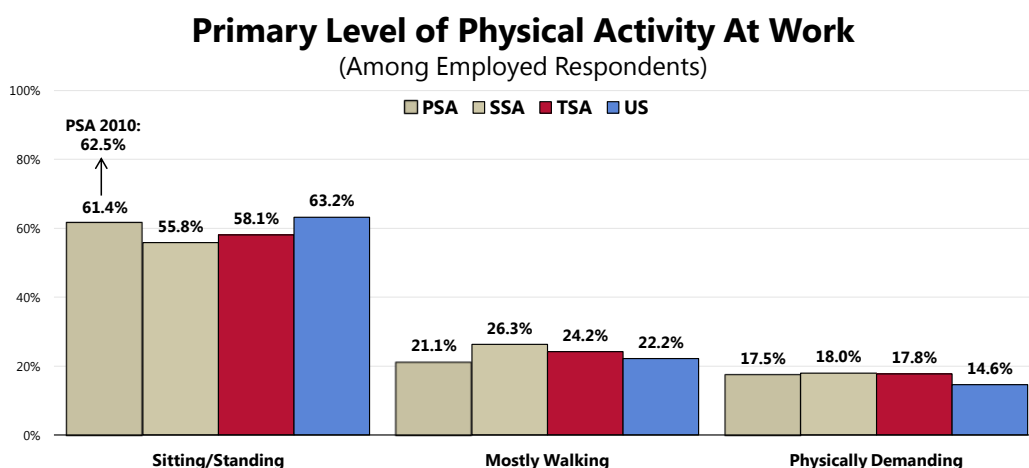
People with disabilities may be less likely to participate in physical activity due to physical, emotional, and psychological barriers. Barriers may include the inaccessibility of facilities and the lack of staff trained in working with people with disabilities.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Level of Activity at Work

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

- Just less than 6 in 10 employed respondents (58.1%) report that their job entails mostly sitting or standing, similar to the US figure.
- 24.2% report that their job entails mostly walking (similar to that reported nationally).
- 17.8% report that their work is physically demanding (similar to that reported nationally).
- No difference by service area (not shown).
- 📅 In the Primary Service Area, findings among employed adults have not changed over time.



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 100]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of those respondents who are employed for wages.

## Leisure-Time Physical Activity

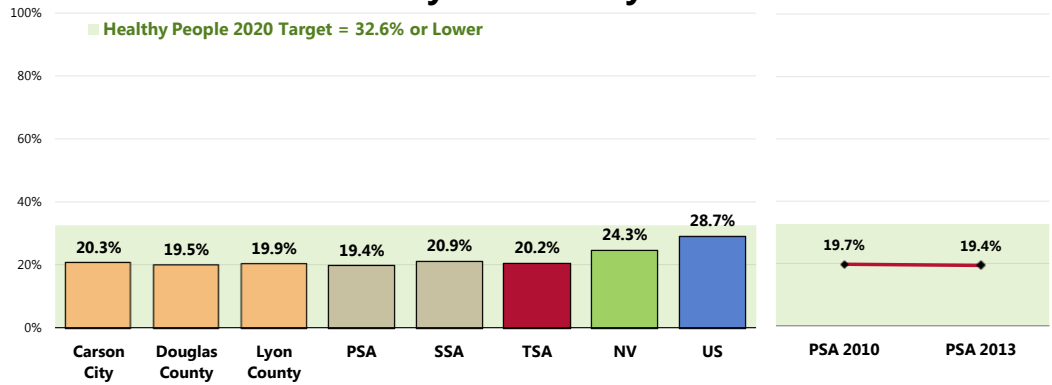
### A total of 20.2% of Total Service Area adults report no leisure-time physical activity in the past month.

- More favorable than statewide findings.
- More favorable than national findings.
- Satisfies the Healthy People 2020 target (32.6% or lower).
- Similar findings by area.
- 📅 No significant change in the Primary Service Area since 2010.

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



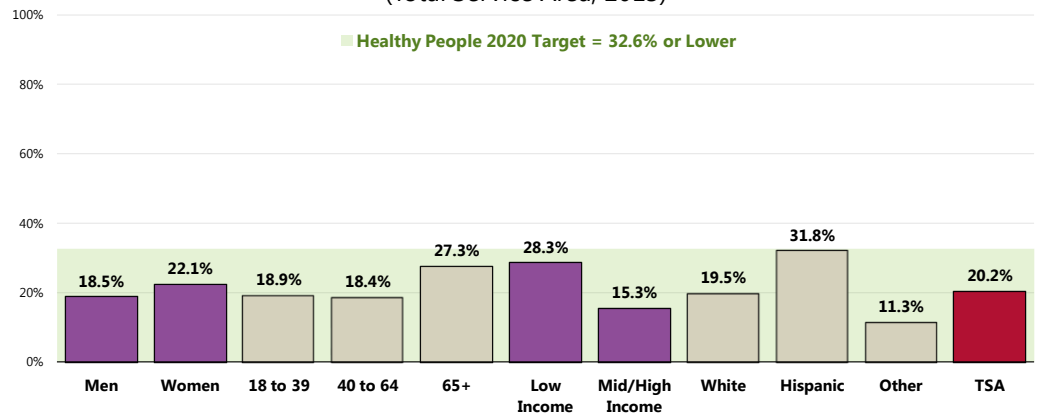
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 101]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2011 Nevada data.  
 • 2011 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:

- 👥 Seniors (age 65+).
- 👥 Lower-income residents.
- 👥 Hispanic adults.

## No Leisure-Time Physical Activity in the Past Month

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 101]  
 • 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. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Activity 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.

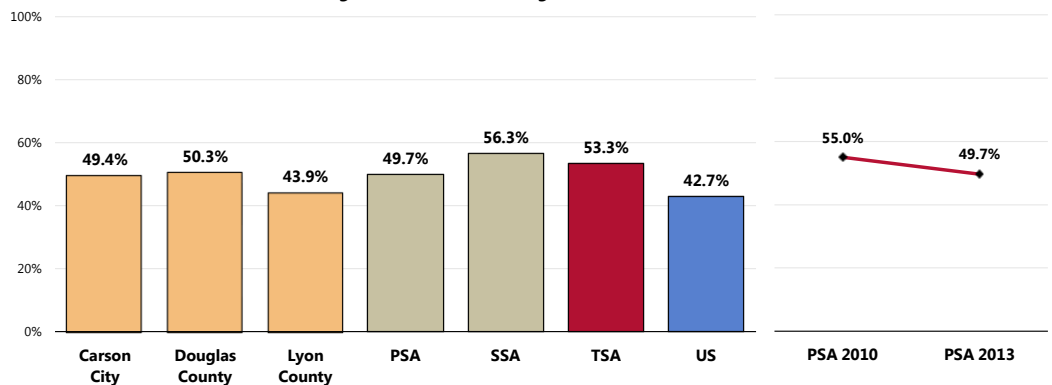
– 2008 Physical Activity Guidelines for Americans, U.S. Department of Health and Human Services. [www.health.gov/PAGuidelines](http://www.health.gov/PAGuidelines)

### Recommended Levels of Physical Activity

**A total of 53.3% of Total Service Area adults participate in regular, sustained moderate or vigorous physical activity (meeting physical activity recommendations).**

- More favorable than national findings.
- Similar findings by area.
- 📉 In the Primary Service Area, marks a significant decrease over time.

### Meets Physical Activity Recommendations



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 174]

• 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.

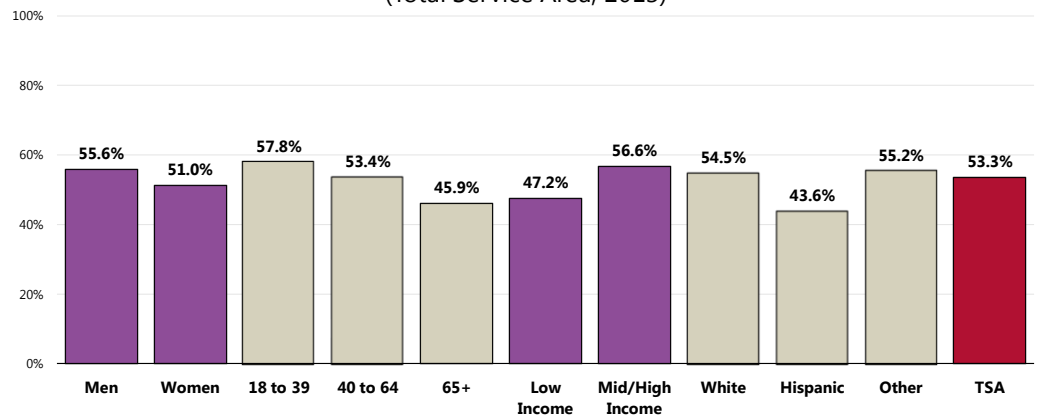
Those less likely to meet physical activity requirements include:

👴 Seniors (65+).

👨 Residents in lower-income households.

## Meets Physical Activity Recommendations

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 174]

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.

• 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.

**A total of 31.8% of adults participated in moderate physical activity (5 times a week, 30 minutes at a time) in the past month.**

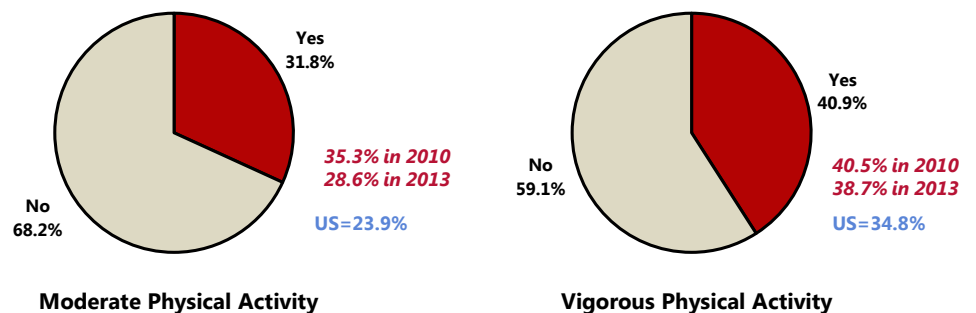
- More favorable than the national level.
- Similar results by area (not shown).
- 📉 In the Primary Service Area, this marks a significant decrease over time.

**In the past month, a total of 40.9% participated in vigorous physical activity (3 times a week, 20 minutes at a time).**

- More favorable than the nationwide figure.
- Unfavorably high in Lyon County; similar by service area (not shown).
- 📊 Unchanged since 2010 in the Primary Service Area.

## Moderate & Vigorous Physical Activity

(Total Service Area, 2013)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 176-177]

Notes: • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

• 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.

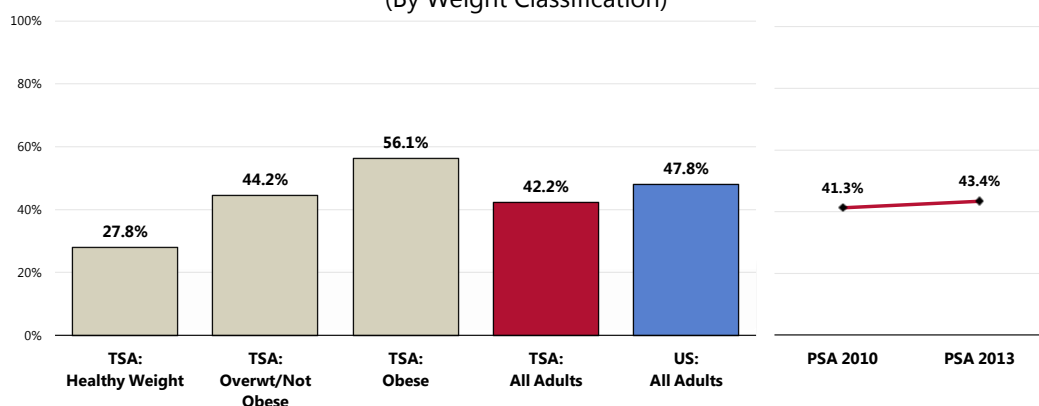
• Vigorous Physical Activity: Takes part in activities that cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes per time.

## Health Advice About Physical Activity & Exercise

**A total of 42.2% of Total 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.
- Highest in Lyon County; similar by service area (not shown).
- ▣ Unchanged from the 2010 Primary Service Area survey findings.
- 👥 Note: 56.1% of obese Total 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: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 21]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.

### Related Focus Group Findings: Physical Activity

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

- Opportunities to participate
- Sedentary lifestyle
- Technology
- Parental fear

Focus group attendees feel that area residents have **opportunities to participate** in physical activity, but the number of residents who do *not* partake remains high. The community has many low-cost gyms and free outdoor activities, including bike trails, skiing, and hiking.

*"I mean the ones that are motivated – there are places. There are private gyms patients go to. But a lot of them just walk outside. I think it's healthy to walk outside. It's good for your attitude. And this is Bike Month. We have bike lanes. There's a nice bike path that goes from kind of midtown, over on the west side of town. And it's several miles." — Physician*

Even though these options exist, many residents lead a **sedentary lifestyle** and the large amount of time spent in front of the **television, computer, or video games** may contribute. Today, exercising occurs in residents living rooms, as a participant explains:

*"Everybody's a couch potato and you've got, 'Hey, let's go bowling.' Okay, turn on the Wii. It doesn't burn the same calories." — Community Leader*

Other respondents believe that children do not play outside as much as previous years because **parents worry** about their children being outside alone:

*"When I was growing up, 'Get out of the house.' Now it's like, 'Don't go outside. The boogeyman is there.' A molester. 'Someone's going to kidnap you. Not in the front yard. You can play in the back.'" — Community Leader*

# 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](http://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<sup>2</sup>)] 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  $\geq 30 kg/m^2$ . 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  $\geq 30 kg/m^2$ , 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	$\geq 30.0$

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

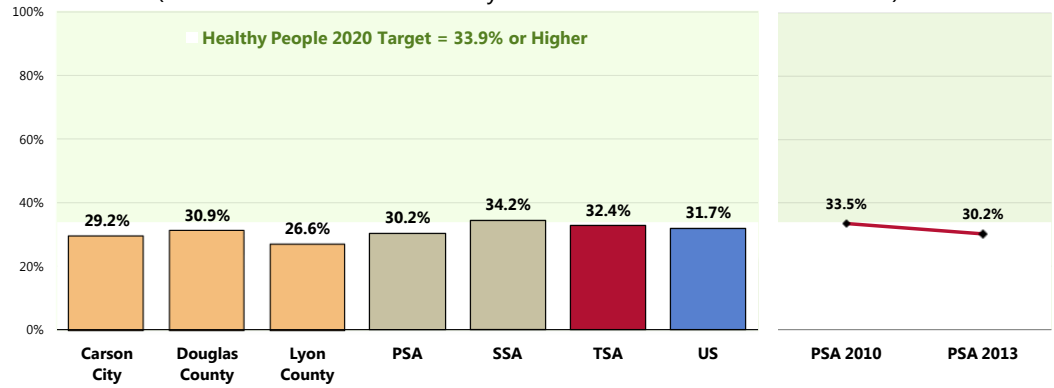
"Healthy weight" means neither underweight, nor overweight (BMI = 18.5-24.9).

**Based on self-reported heights and weights, 32.4% of Total Service Area adults are at a healthy weight.**

- Comparable to national findings.
- Comparable to the Healthy People 2020 target (33.9% or higher).
- Comparable findings by area.
- 📊 No significant change in the Primary Service Area since 2010.

## Healthy Weight

(Percent of Adults With a Body Mass Index Between 18.5 and 24.9)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 182]  
 • 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-8]  
 Notes: • Based on reported heights and weights, asked of all respondents.  
 • 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

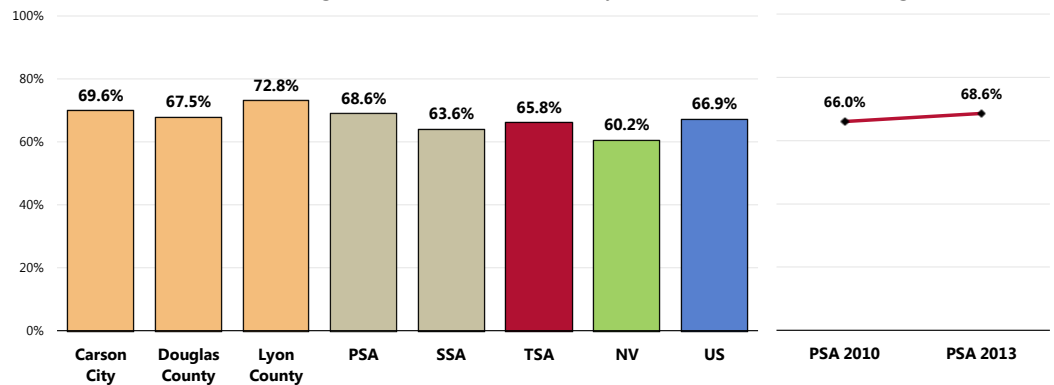
Here, "overweight" includes those respondents with a BMI value  $\geq 25$ .

**Nearly two in three Total Service Area adults (65.8%) are overweight.**

- Worse than the Nevada prevalence.
- Similar to the US overweight prevalence.
- Similar findings by area.
- Statistically unchanged over time in the Primary Service Area.

## Prevalence of Total Overweight

(Percent of Overweight or/Obese Adults; Body Mass Index of 25.0 or Higher)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 182]  
 • 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 Nevada 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.

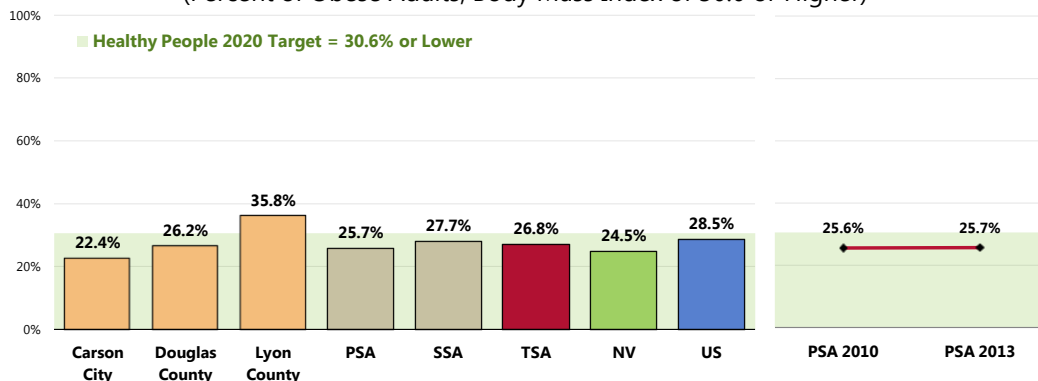
"Obese" (also included in overweight prevalence discussed previously) includes respondents with a BMI value  $\geq 30$ .

### Further, 26.8% of Total Service Area adults are obese.

- Similar to Nevada findings.
- Similar to US findings.
- Satisfies the Healthy People 2020 target (30.6% or lower).
- Statistically similar by area.
- 📊 In the Primary Service Area, no significant change over time.

## Prevalence of Obesity

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

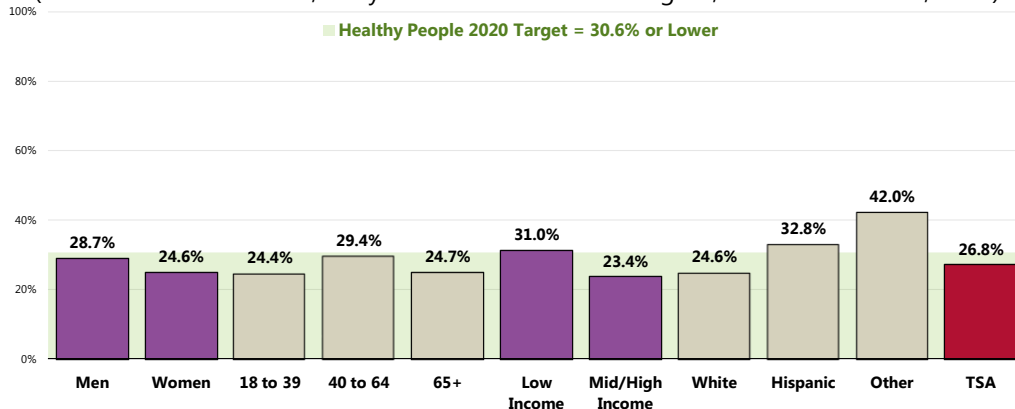


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 182]
  - 2011 PRC National Health Survey, Professional Research Consultants, Inc.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]
  - 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 Nevada 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 residents of "Other" racial backgrounds.

## Prevalence of Obesity

(Percent of Obese Adults; Body Mass Index of 30.0 or Higher; Total Service Area, 2013)



- Sources:
- 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 182]
  - 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. 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.
  - 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.



## Relationship of Overweight With Other Health Issues

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

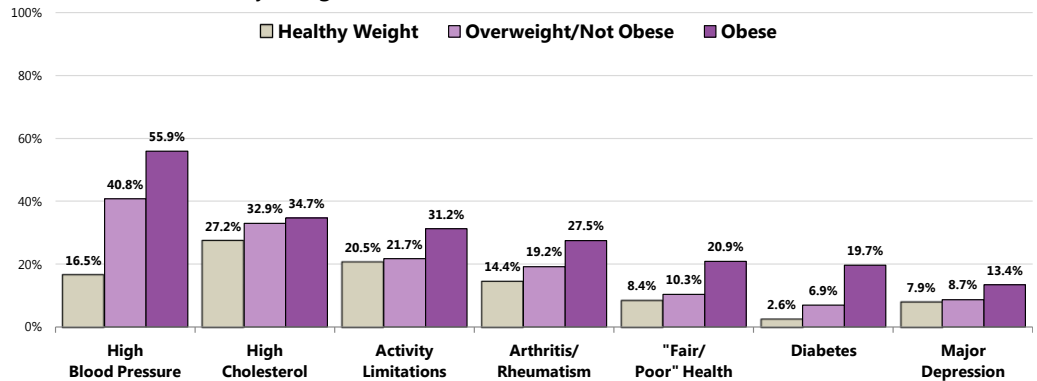
### Overweight and obese adults are more likely to report a number of adverse health conditions.

Among these are:

- Hypertension (high blood pressure).
- High cholesterol.
- Activity limitations.
- Arthritis/rheumatism.
- "Fair" or "poor" physical health.
- Diabetes.
- Major depression.

### Relationship of Overweight With Other Health Issues

(By Weight Classification; Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 5, 30, 35, 45, 112, 145, 146]  
Notes: • Based on reported heights and weights, asked of all respondents.

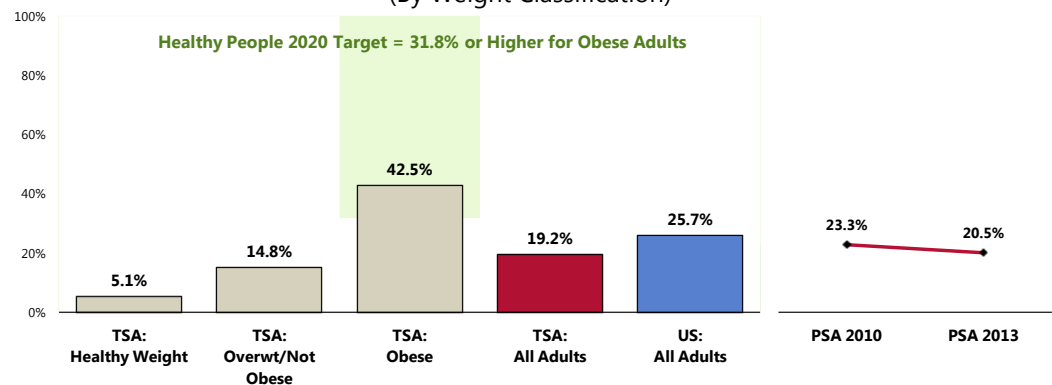
## Weight Management

### Health Advice

**A total of 19.2% of adults have been given advice about their weight by a doctor, nurse or other health professional in the past year.**

- Statistically lower than the national findings.
- Highest in Lyon County; similar by service area (not shown).
- 🏠 No significant change in the Primary Service Area since 2010.
- 👥 Note that 42.5% of obese adults have been given advice about their weight by a health professional in the past year (while over one-half have not).
  - This prevalence satisfies 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: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 107, 185]
- 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-6.2]

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.

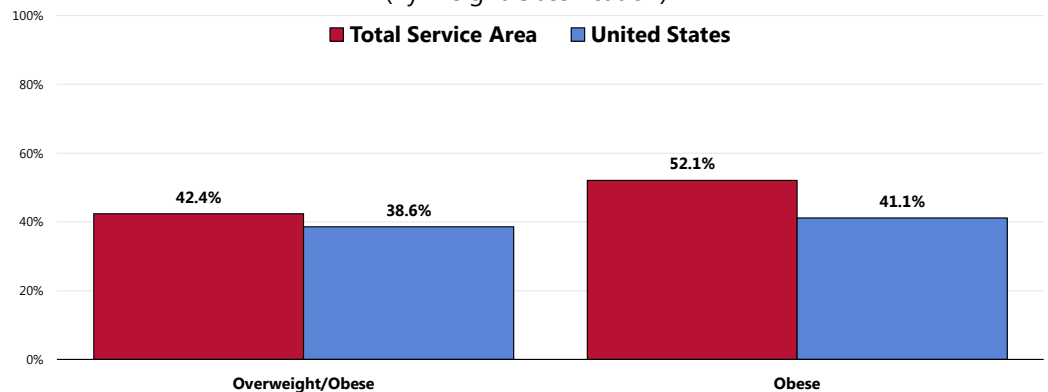
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**A total of 42.4% of Total Service Area adults who are overweight say that they are both modifying their diet and increasing their physical activity to try to lose weight.**

- Similar to national findings.
- Similar results by area (not shown).
- 📊 No significant change in the Primary Service Area since 2010.
- 👥 Note: 52.1% of obese Total Service Area adults report that they are trying to lose weight through a combination of diet and exercise, higher than what is found nationally.

### Trying to Lose Weight by Both Modifying Diet and Increasing Physical Activity

(By Weight Classification)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 183]  
• 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

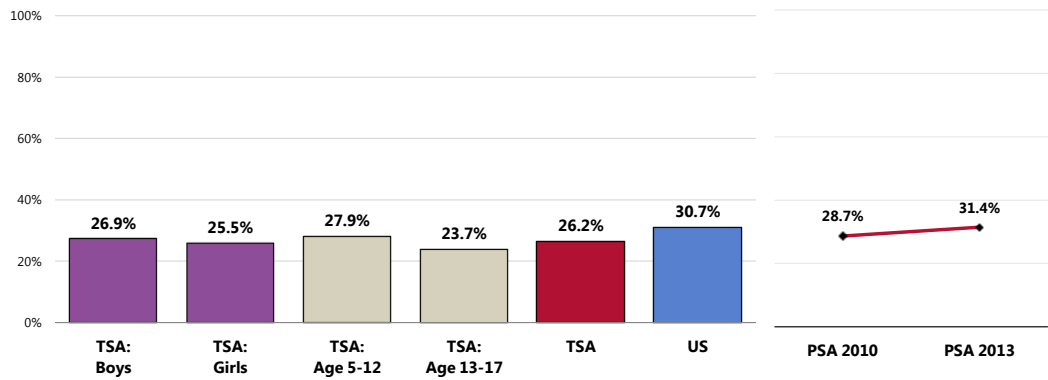
– Centers for Disease Control and Prevention.

**Based on the heights/weights reported by surveyed parents, 26.2% of Total Service Area children age 5 to 17 are overweight or obese (≥85th percentile).**

- Comparable to that found nationally.
- 📊 Statistically unchanged since 2010 in the Primary Service Area.
- 👥 Statistically similar by child's age and gender.

## Child Total Overweight Prevalence

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 186]

• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

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

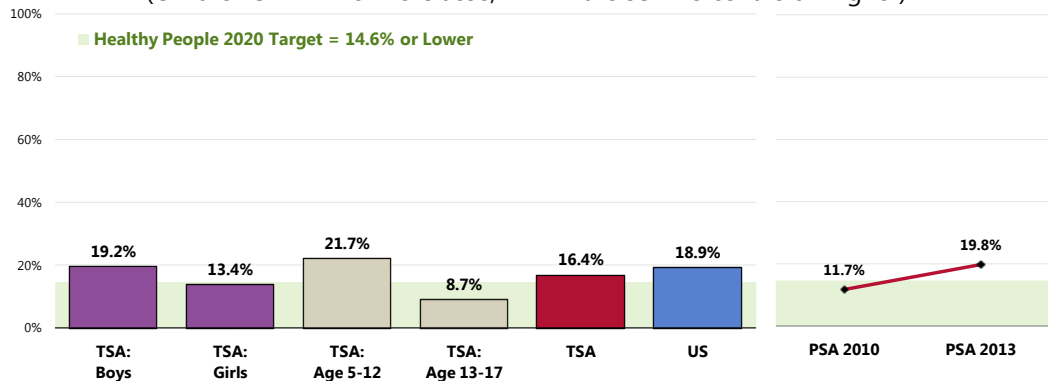
• Overweight among children is determined by children's Body Mass Index status at or above the 85<sup>th</sup> percentile of US growth charts by gender and age.

### Further, 16.4% of Total Service Area children age 5 to 17 are obese (≥95th percentile).

- Statistically similar to the national percentage.
- Similar to the Healthy People 2020 target (14.6% or lower for children age 2-19).
- 📊 No significant change in the Primary Service Area since 2010.
- 👨👩👦 Higher in boys and children age 5-12.

## Child Obesity Prevalence

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 186]

• 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 95<sup>th</sup> percentile of US growth charts by gender and age.

## Related Focus Group Findings: Obesity & Nutrition

Many focus group participants discussed nutrition and its relationship to obesity, with specific concerns about the following:

- Poor nutrition habits leading to obesity
- Fast food establishments
- Hunger

Focus group attendees believe that residents have **poor nutrition habits** which contribute to the high prevalence of **obesity** in the community. Participants think that poor nutrition stems from a variety of sources in the community. Many community members rely on **fast food establishments** because of busy lifestyles and both parents working. Fast food represents the quick, easy option for families who do not have time to make dinner. Other low income families cannot afford to eat healthy and fast food dollar menus are a cheap option. Fresh produce is also more expensive, so these residents opt for processed foods.

*"I think the other thing is financial. Like there are a lot of poorer income families in Carson. And so they say, 'Well, I have to eat canned foods. I don't have money to get fresh or whatever.' And sometimes they come in with heart failure and stuff like that. Because they do well for most of the month. But then at the end of the month, they're out of money. And so then they're kind of eating canned stuff that's salty." — Physician*

The community also does not have any nutrition education, or dieticians, because of limited funding. Key informants feel that nutrition education that centers on nutrition and how to eat healthy on a budget would greatly benefit the area.

On the other side of the obesity epidemic are **hunger concerns**. Through the Food for Thought program, several local elementary schools offer food backpacks to low-income children, providing families with food for the weekend; the organization also subsidizes a summer food program. In addition, the community has a local food bank and food closets to help alleviate some of the need.

# 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](http://www.healthypeople.gov))

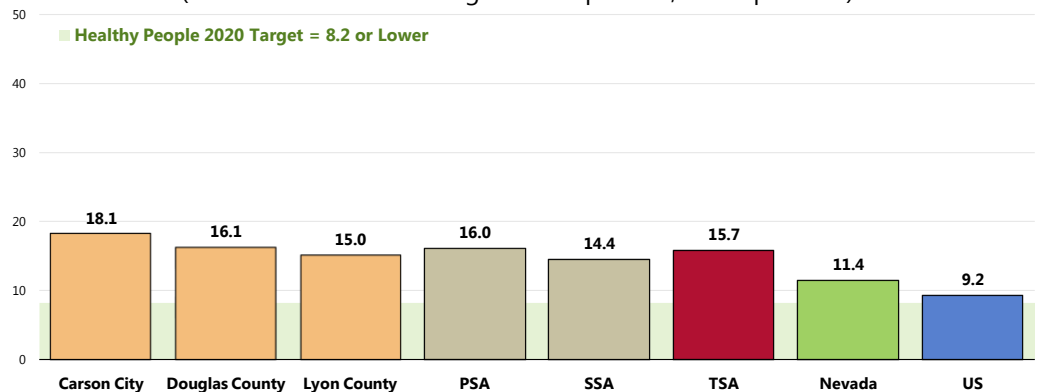
## Age-Adjusted Cirrhosis/Liver Disease Deaths

Between 2008 and 2010, there was an annual average age-adjusted cirrhosis/liver disease mortality rate of 15.7 deaths per 100,000 population in the Total Service Area.

- Higher than the statewide rate.
- Higher than the national rate.
- Fails to satisfy the Healthy People 2020 target (8.2 or lower).
- Higher in Carson City; lower in the SSA than in the PSA.

### Cirrhosis/Liver Disease: Age-Adjusted Mortality

(2008-2010 Annual Average Deaths per 100,000 Population)

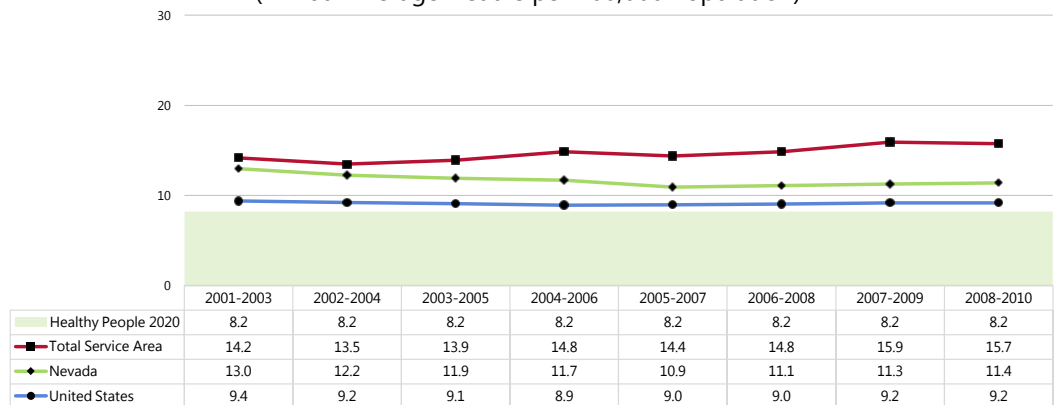


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>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

- ☒ The mortality rate has increased somewhat over time in the Total Service Area; rates have decreased or remained stable statewide and nationwide.

### Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends

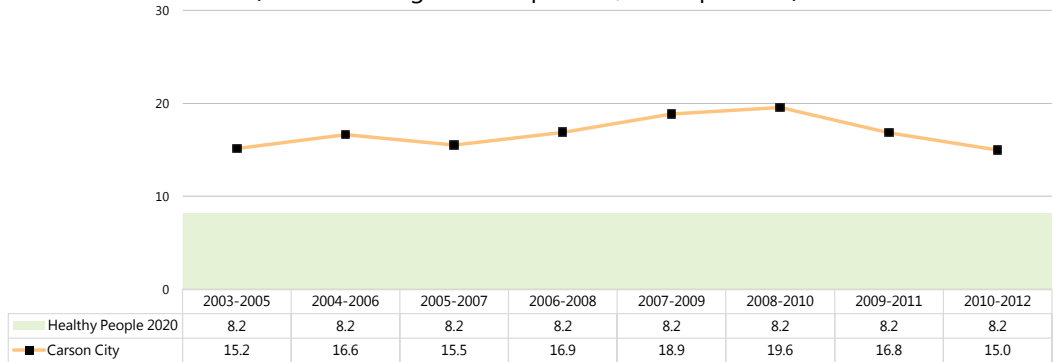
(Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 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.  
• State and national data are simple three-year averages.

- ▣ The Carson City cirrhosis/liver disease death rate increased during much of the past decade.

## Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



Sources: • Office of Public Health Informatics and Epidemiology.  
• 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.  
• Rates are simple three-year averages of individual year rates.  
• 2011 and 2012 rates reflect preliminary data and are subject to change.

"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.

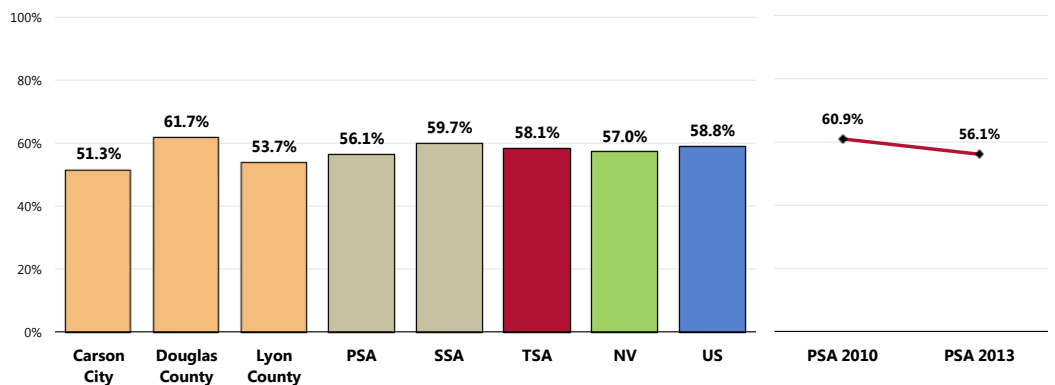
## High-Risk Alcohol Use

### Current Drinking

**A total of 58.1% 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.
- Lowest in Carson City; similar by service area.
- ▣ Statistically unchanged since 2010 in the Primary Service Area.

## Current Drinkers

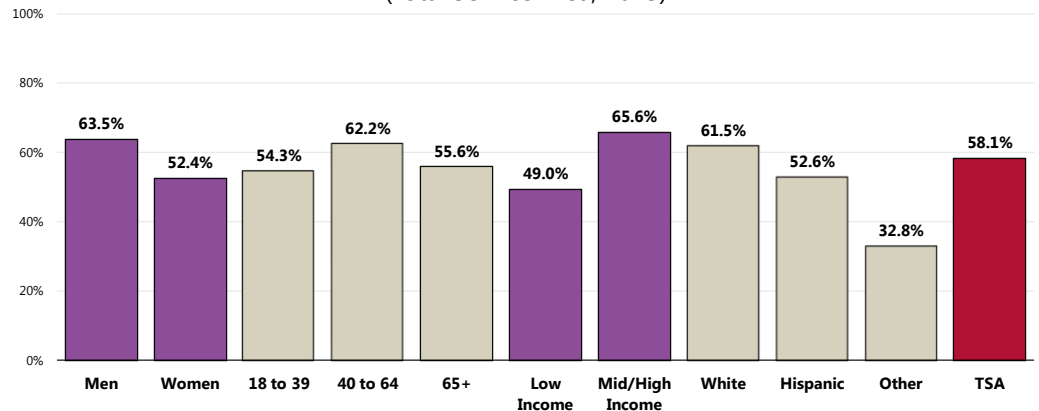


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 191]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2011 Nevada data.  
• 2011 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, upper-income residents, and Whites.

### Current Drinkers (Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 191]  
 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.  
 • Current drinkers had at least one alcoholic drink in the past month.

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

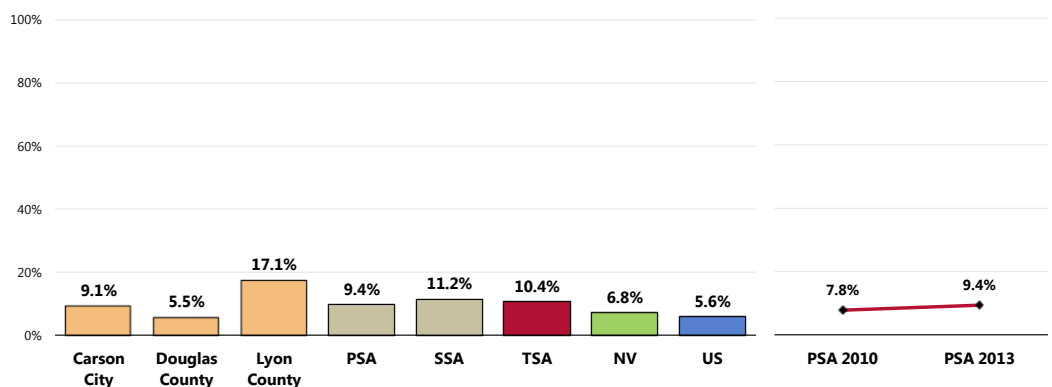
RELATED ISSUE:  
See also *Stress* in the **Mental Health & Mental Disorders** section of this report.

### Chronic Drinking

**A total of 10.4% of area adults averaged two or more drinks of alcohol per day in the past month (chronic drinkers).**

- Higher than the statewide proportion.
- Higher than the national proportion.
- Favorably low in Douglas County; similar by service area.
- No significant change over time in the Primary Service Area.

### Chronic Drinkers

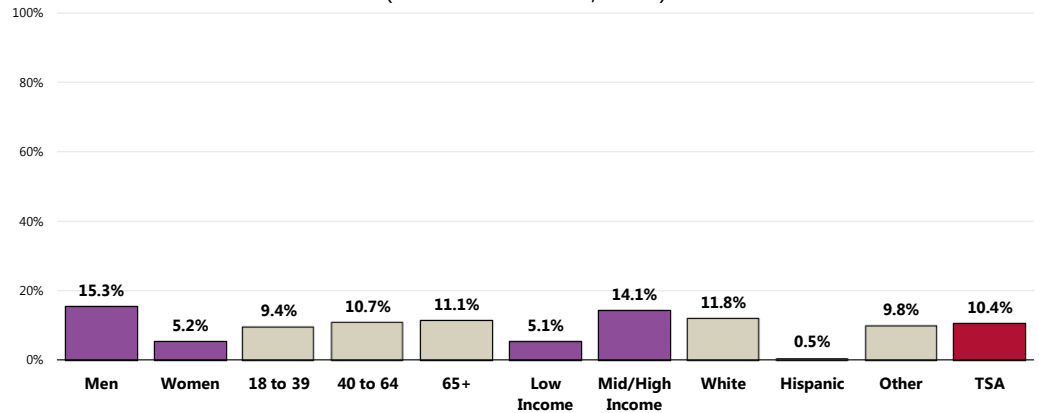


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 192]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 Nevada data.  
 • 2011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



Chronic drinking is more prevalent among men, adults in upper-income households, and Non-Hispanic residents.

## Chronic Drinkers (Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 192]  
 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.  
 • Chronic drinkers are defined as those having 60+ alcoholic drinks in the past month.

"Binge drinkers" include:

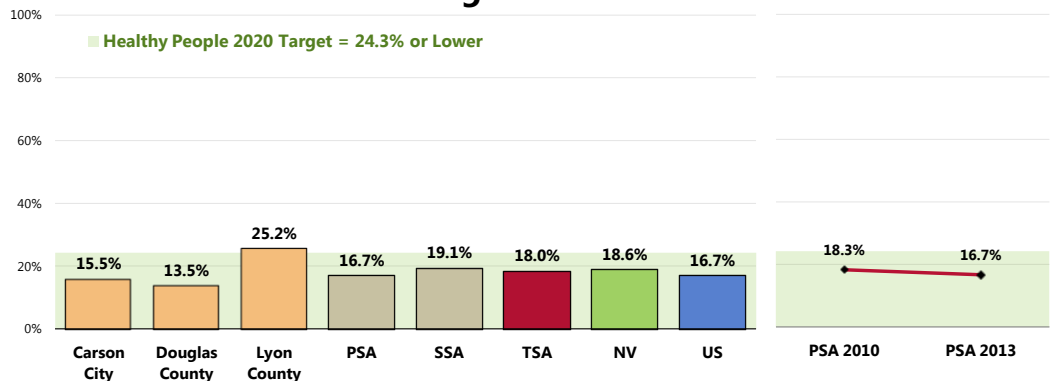
- 1) MEN who report drinking 5 or more alcoholic drinks on any single occasion during the past month; and
- 2) WOMEN who report drinking 4 or more alcoholic drinks on any single occasion during the past month.

## Binge Drinking

**A total of 18.0% of Total Service Area adults are binge drinkers.**

- Similar to Nevada findings.
- Similar to national findings.
- Satisfies the Healthy People 2020 target (24.3% or lower).
- Statistically similar by area.
- ☒ Statistically similar to 2010 Primary Service Area findings (note, however, that the previous definition for binge drinking was five or more drinks, regardless of gender).

## Binge Drinkers

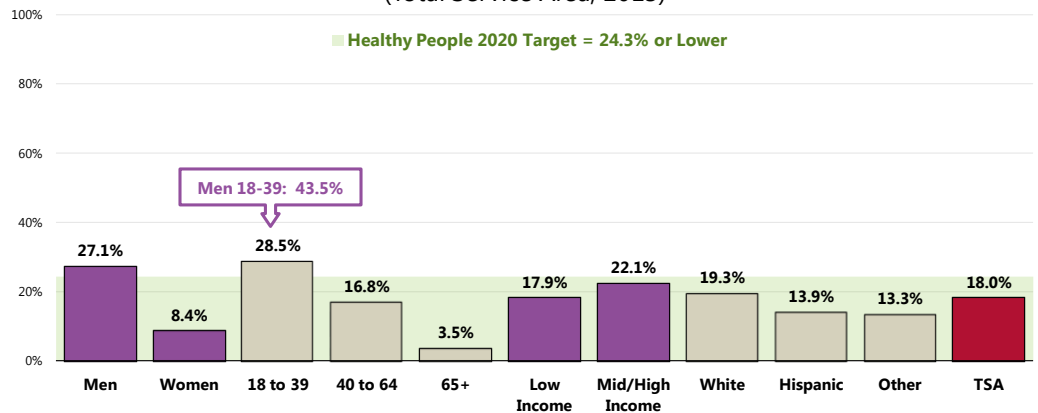


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 193]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Nevada data.  
 • 2011 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 (note the negative correlation over time).

### Binge Drinkers (Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 193]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-14.3]  
 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.  
 • Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion

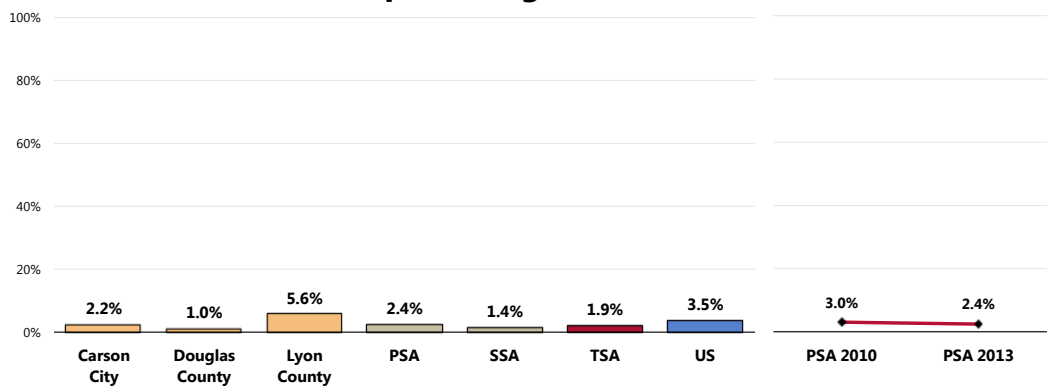
### Drinking & Driving

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 1.9% of Total Service Area adults acknowledge having driven a vehicle in the past month after they had perhaps too much to drink.**

- Lower than the national findings.
- No significant difference by area.
- The Primary Service Area drinking and driving prevalence has not changed significantly over time.

### Have Driven in the Past Month After Perhaps Having Too Much to Drink

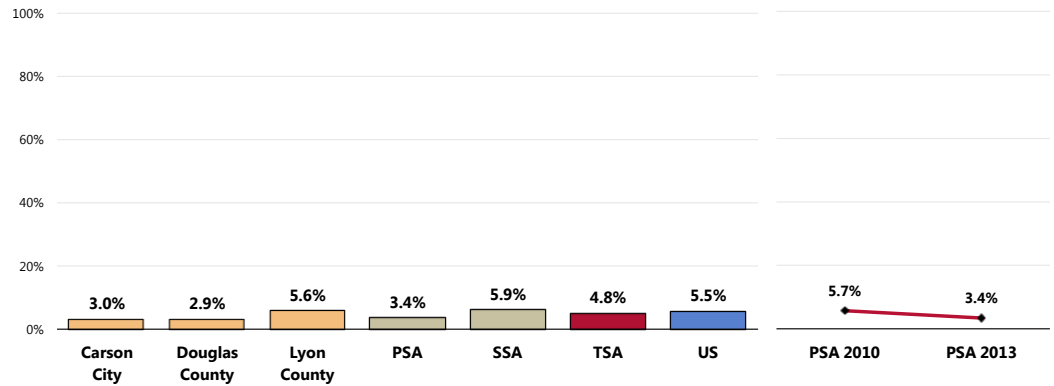


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 64]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

**A total of 4.8% of Total Service Area adults acknowledge either drinking and driving or riding with a drunk driver in the past month.**

- Comparable to the national findings.
- Comparable findings by area.
- In the Primary Service Area, marks a significant decrease over time.

### Have Driven Drunk OR Ridden With a Driver in the Past Month Who Had Too Much to Drink



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 194]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.

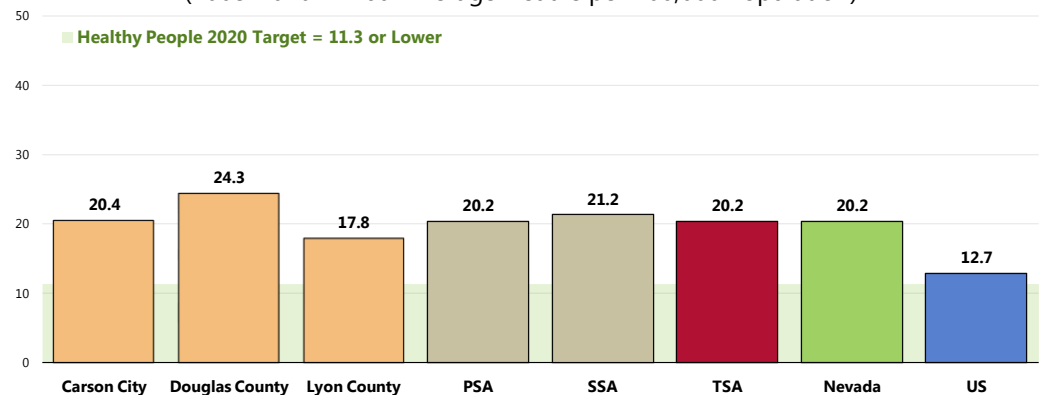
Notes: • Asked of all respondents.

## Age-Adjusted Drug-Induced Deaths

**Between 2008 and 2010, there was an annual average age-adjusted drug-induced mortality rate of 20.2 deaths per 100,000 population in the Total Service Area.**


- Identical to the statewide rate.
- Much higher than the national rate.
- Fails to satisfy the Healthy People 2020 target (11.3 or lower).
- Higher in Douglas County; similar by service area.

### Drug-Induced Deaths: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)

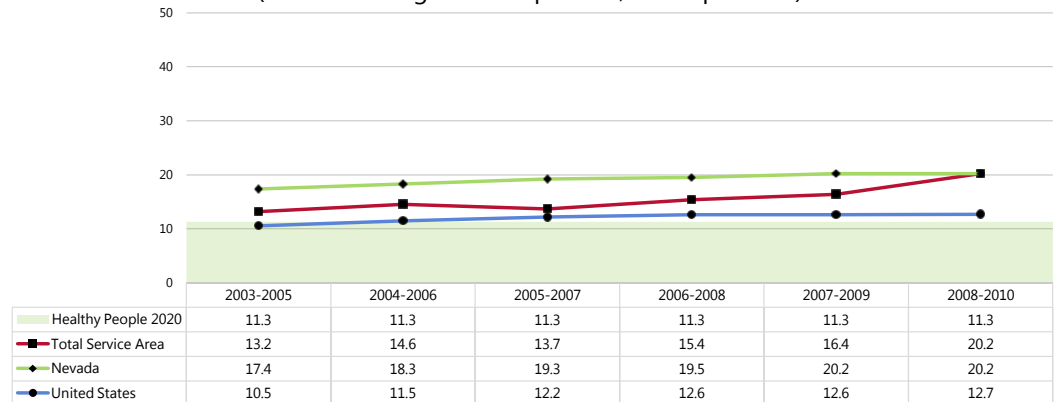


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2013.

Notes: • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-12]  
 • 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.  
 • Local, state and national data are simple three-year averages.

-  The TSA mortality rate has increased in recent years, in keeping with the upward trends reported for Nevada and the US overall.

## Drug-Induced Deaths: Age-Adjusted Mortality Trends (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 June 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.
- County, state and national data are simple three-year averages.

## Illicit Drug Use

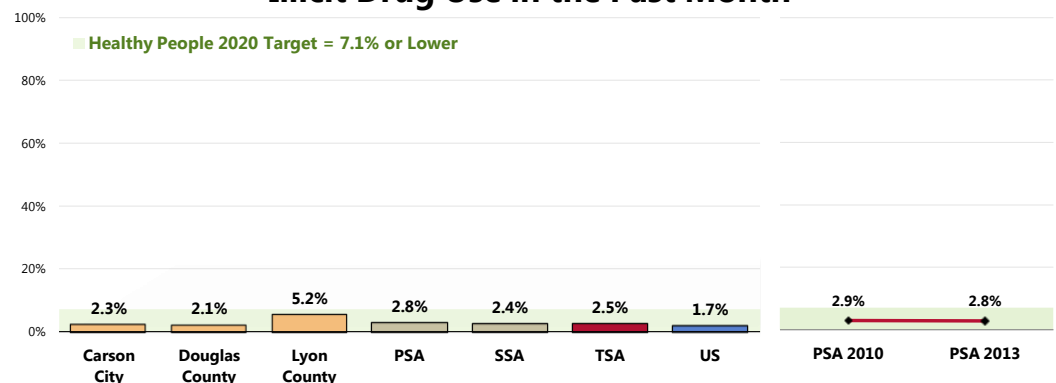
For the purposes of this survey, "illicit drug use" includes use of illegal substances or of prescription drugs taken without a physician's order.

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.

**A total of 2.5% of Total Service Area adults acknowledge using an illicit drug in the past month.**

- Similar to the proportion found nationally.
- Satisfies the Healthy People 2020 target of 7.1% or lower.
- Similar by area.
-  No statistically significant change in the Primary Service Area since 2010.

## Illicit Drug Use in the Past Month



Sources:
 

- PRC Community Health Surveys, 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 SA-13.3]

 Notes:
 

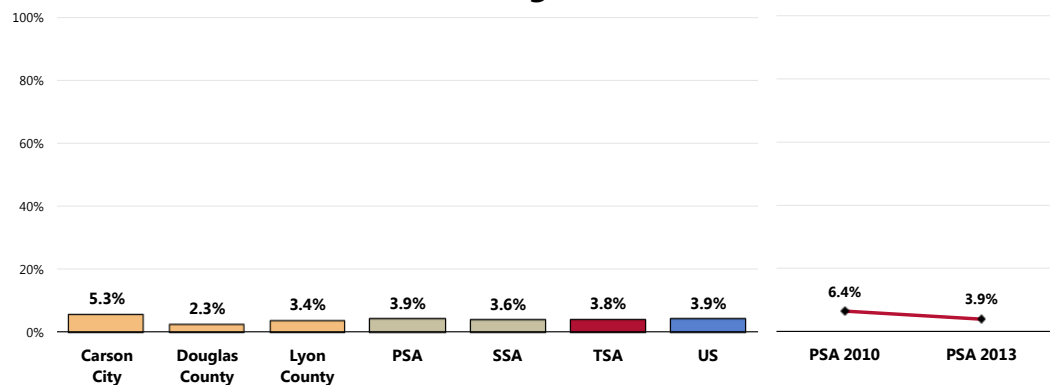
- Asked of all respondents.

## Alcohol & Drug Treatment

**A total of 3.8% of Total 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.
- Similar findings by area.
- ▣ Marks a significant decrease over time in the Primary Service Area.

### Have Ever Sought Professional Help for an Alcohol/Drug-Related Problem



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 67]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

## Related Focus Group Findings: Substance Abuse

A number of focus group participants are concerned with substance abuse in the community. The main issues discussed include:

- Prevalence of substance use and abuse
- Prescription drug misuse
- Inadequate number of substance abuse treatment facilities

A number of focus group participants express concern with the **prevalence of substance use and abuse** in the community, especially methamphetamines, marijuana, heroin, alcohol abuse, and prescription drugs. Attendees believe that marijuana use begins as early as fifth grade. According to key informants, local schools find drugs on students daily. In addition, respondents fear that hardcore drugs no longer hold a negative connotation, as a community leader explains:

*"It is scary. Again, when we were kids 85 years ago, a heroin abuser was that guy under the bridge and he was a nasty, creepy character. Now heroin has lost that image and it is 'opium is a natural substance.' It takes you to a higher plane. It's being marketed and perceived a lot differently and not as that nasty drug. Now meth is that nasty drug. So that allure around heroin, we have to recreate and rekindle that impression that it's not a good drug." — Community Leader*

**Prescription drug misuse** also greatly concerns respondents. Attendees feel that physicians and dentists over-prescribe narcotics to young patients. These young patients may then become addicted to the narcotic, or sell it to their friends. A participant describes:

*"A chain effect. One student gets a prescription for Vicodin or Percocet and comes to school and gives it to four other kids who are now becoming addicted and they're selling it to their friends. I mean it's really bad." — Community Leader*

Respondents worry that physicians and dentists overprescribe narcotics without fully explaining the medication to parents. Currently, pharmacists review prescription information with the patient, but pharmacists do not have a relationship with the person. Key informants think that the medical provider needs to educate patients about narcotic use and its highly addictive nature because of their previously established rapport. A community leader describes her experiences with the pharmacy:

*"Patients normally don't have a relationship with their pharmacy because there's different pharmacists' working on different shifts... If I have a kid who's just gone through knee surgery that day and his in the car with his leg propped up on the dashboard and I'm swinging by the pharmacy on the way home to get his medication for him, they're going to ask me, 'Have you had this before?' 'Oh, yeah, I have. I know all about it.' You sign and you get out of there and don't tell me other parents don't do that as well. And so they're not getting that information." — Community Leader*

The community has local pain management clinics to assist those residents with true chronic pain, but the clinics only accept private insurance patients. Unfortunately, there are few, if any, options for uninsured residents or Medicaid recipients. In order to decrease "doctor shopping" for pain medications, Sierra Family Health Center requires either an MRI or X-Rays *and* a urine drug screen before prescribing narcotics to new pain management patients. However, this can create financial barrier for those uninsured residents.

The community has a **limited number of substance abuse treatment facilities** and most residents must travel for those services. Therefore, ongoing treatment programs remain difficult to access. Detox represents the main option. A participant describes how residents perceive incarceration as their next best option:

*"A young person pled guilty and wanted to go to prison. Because that's where she could get some help with her drug addiction. So it's – there's not easy access to any kind of program like that." — Physician*

# 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](http://www.healthypeople.gov))

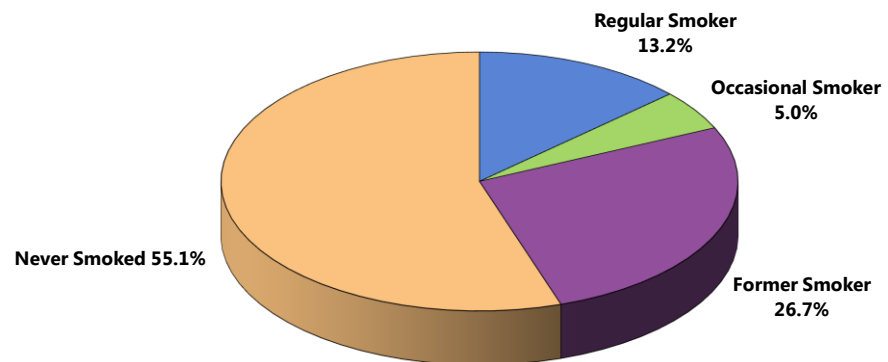
## Cigarette Smoking

### Cigarette Smoking Prevalence

**A total of 18.2% of Total Service Area adults currently smoke cigarettes, either regularly (13.2% every day) or occasionally (5.0% on some days).**

#### Cigarette Smoking Prevalence

(Total Service Area, 2013)



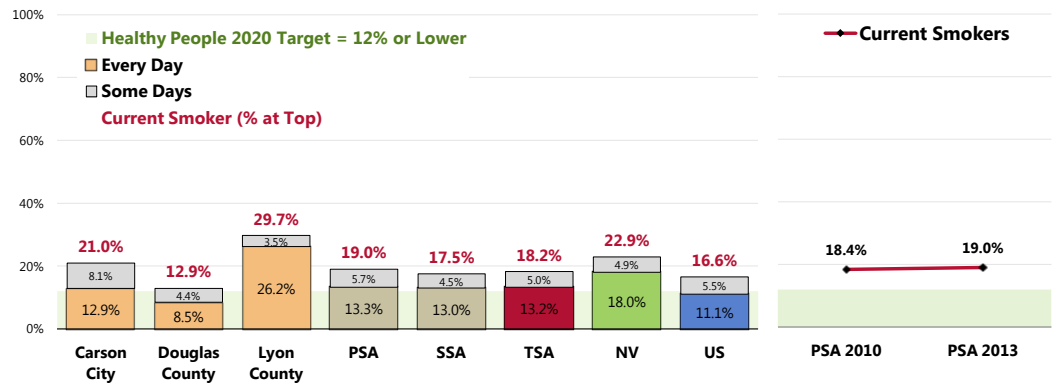
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 187]  
Notes: • Asked of all respondents.

- Better than statewide findings.
- Similar to national findings.
- Fails to satisfy the Healthy People 2020 target (12% or lower).
- Least favorable in Lyon County; similar by service area.



☒ The current Primary Service Area smoking percentage is statistically unchanged since 2010.

## Current Smokers



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 187]  
• 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 Nevada data.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-11]

Notes: • Asked of all respondents.  
• Includes regular and occasional smokers (everyday and some days).

Cigarette smoking is more prevalent among:

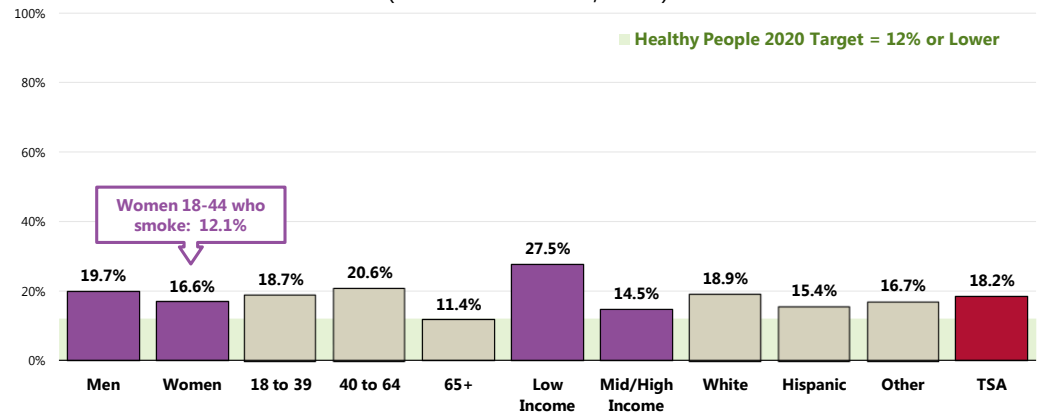
- ☒ Adults under 65.
- ☒ Lower-income residents.

Note also:

- ☒ 12.1% 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

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 187-188]  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-11]

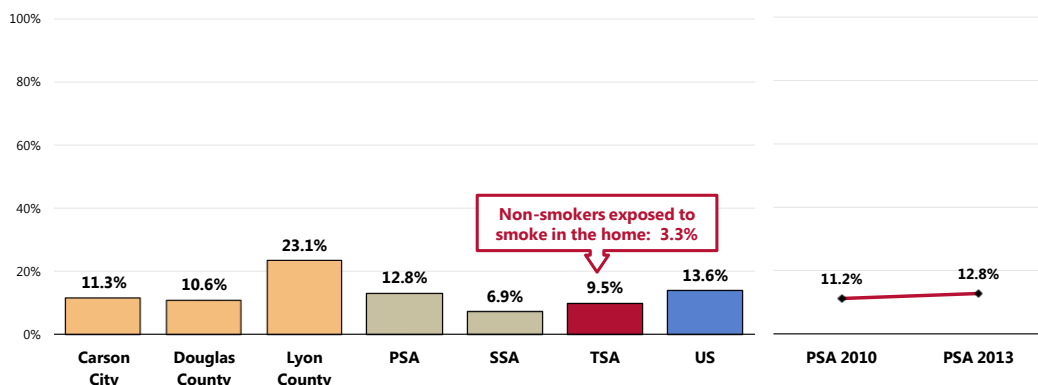
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household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

## Environmental Tobacco Smoke

**A total of 9.5% of Total Service Area adults (including smokers and non-smokers) report that a member of their household has smoked cigarettes in the home an average of 4+ times per week over the past month.**

- More favorable than national findings.
- Least favorable in Lyon County; much higher in the PSA than in the SSA.
- 📊 No significant change in the Primary Service Area since 2010.
- 👤 Note that 3.3% of Total Service Area non-smokers are exposed to cigarette smoke at home.

### Member of Household Smokes at Home



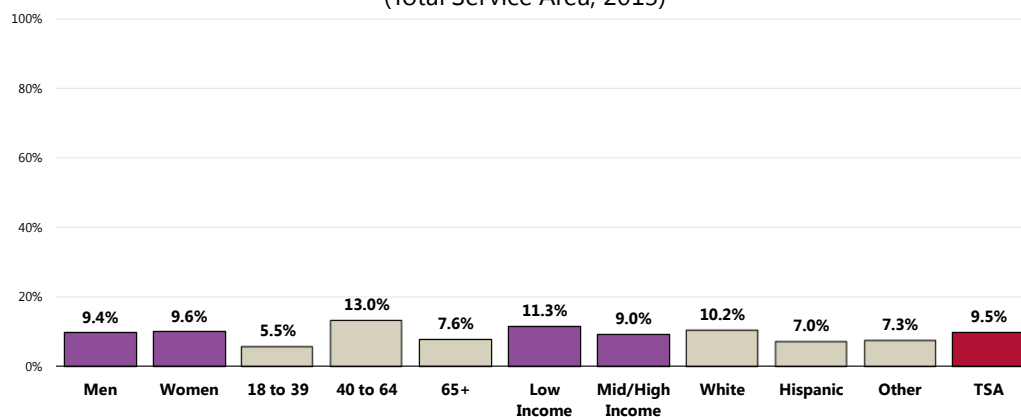
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 58, 189]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

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 age 40 to 64.

### Member of Household Smokes At Home (Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 58]

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).

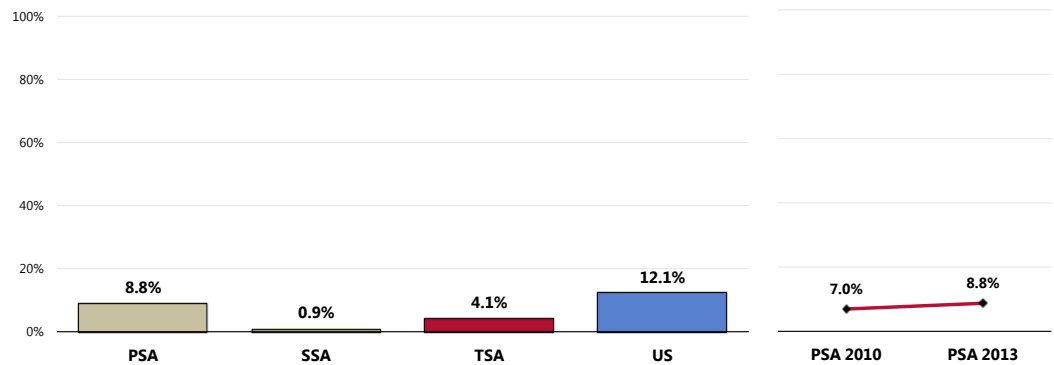
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

• "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, 4.1% have someone who smokes cigarettes in the home.**

- More favorable than national findings.
- Nearly 10 times higher in the Primary Service Area than in the Secondary Service Area.
- ▣ In the Primary Service Area, statistically unchanged over time.

**Percentage of Households With Children In Which Someone Smokes in the Home**



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 190]  
• 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.

## 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.

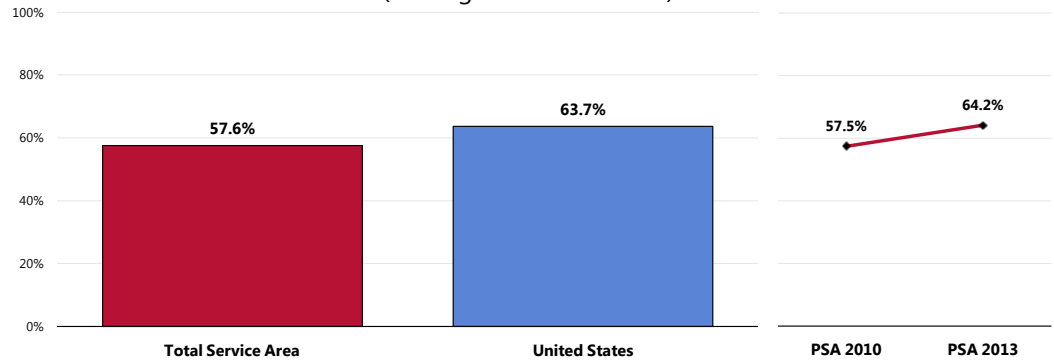
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Health Advice About Smoking Cessation

**A total of 57.6% of smokers say that a doctor, nurse or other health professional has recommended in the past year that they quit smoking.**

- Statistically similar to the national percentage.
- ▣ No statistically significant change since 2010 among Primary Service Area smokers.

## Advised by a Healthcare Professional in the Past Year to Quit Smoking (Among Current Smokers)



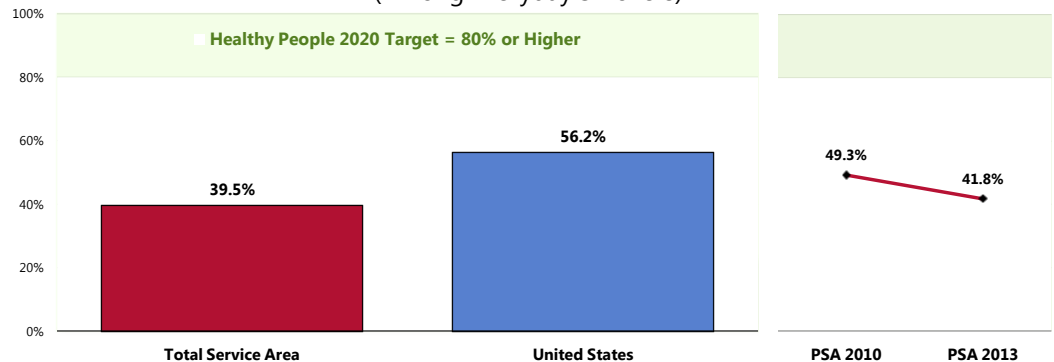
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 57]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all current smokers.

### Smoking Cessation Attempts

**A total of 39.5% of regular smokers went without smoking for one day or longer in the past year because they were trying to quit smoking.**

- Much lower than the national percentage.
- Fails to satisfy the Healthy People 2020 target (80% or higher).
- ☒ Statistically unchanged over time in the Primary Service Area.

## Have Stopped Smoking for One Day or Longer in the Past Year in an Attempt to Quit Smoking (Among Everyday Smokers)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 56]  
• 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.

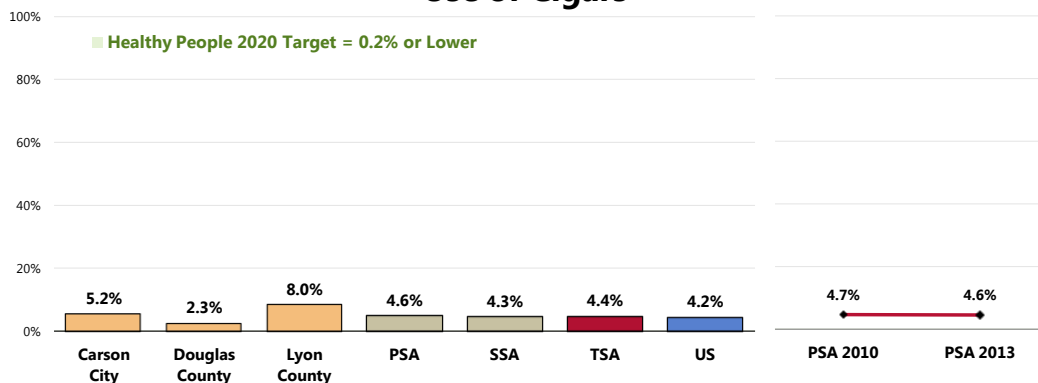
## Other Tobacco Use

### Cigars

**A total of 4.4% of Total 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).
- Similar findings by area.
- 📊 No significant change in the Primary Service Area since 2010.

#### Use of Cigars



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 60]  
• 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.

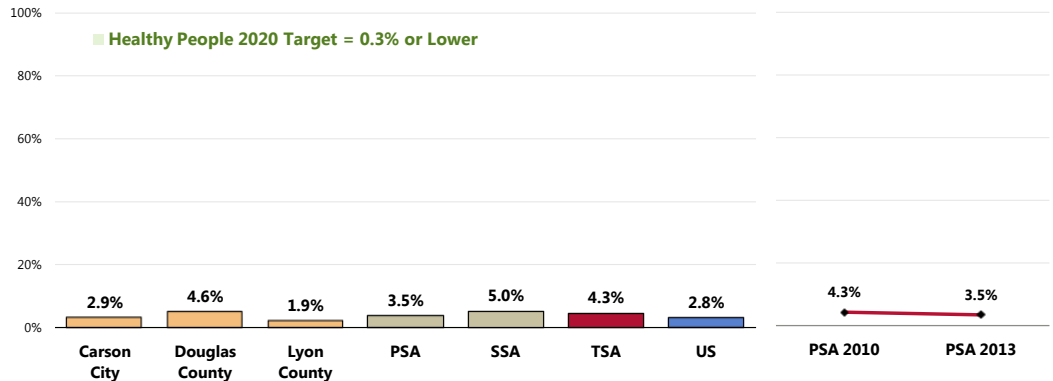
### Smokeless Tobacco

**A total of 4.3% of Total Service Area adults use some type of smokeless tobacco every day or on some days.**

- Comparable to the national percentage.
- Fails to satisfy the Healthy People 2020 target (0.3% or lower).
- No difference by area of residence.
- 📊 Similar to 2010 findings among Primary Service Area respondents.

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

## Use of Smokeless Tobacco



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 59]  
 • 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

Many focus group participants are concerned with tobacco use in the community, with discussion centering on the following issues:

- Community-wide prevalence
- Addictive nature of tobacco
- Education about the consequences of tobacco use


Focus group participants believe that tobacco use is **prevalent across the community** and worry about the negative health consequences of tobacco use and secondhand smoke exposure. Respondents feel that tobacco use is higher among native Nevadans, lower income residents, and those who live in rural settings. In addition, cigarette smoking begins as early as middle school and some think that parents encourage the behavior:

*"Here in Nevada or just in this area, smoking's very common. You'll see young 14-year-old girls smoking with their mother outside a store and no big deal." — Community Leader*

Attendees recognize the **addictive nature of tobacco** products and the difficulty with engaging adults to stop smoking. Carson Tahoe Medical Center provides a smoking cessation clinic. However, in most cases, the motivation to quit smoking comes after a health crisis or scary diagnosis.

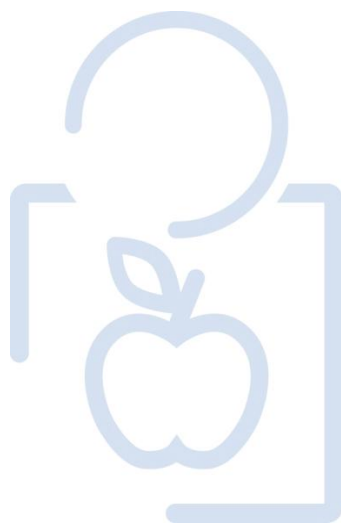
*"They're apt to quit after a major heart attack though ... not all, but a fair number. I mean, what more motivation could you have than have a disease that can be directly linked to your smoking habit? It's still difficult too – after six months or so – it's still difficult." — Physician*

Key informants think that raising the cigarette tax may impact the number of smokers, but really want physicians to provide more **education about the consequences of tobacco use**. Currently, many physicians feel that they do not have time to coach their patients, provide cessation resources or other alternatives. A physician describes what smoking cessation education could entail:



*"The problem is that sometimes you just don't have enough time to really educate them as to exactly what their lung function's going to look like at certain time points. And I think if you sit down and really go through that that hits home – as opposed to just saying, 'Hey, you need to stop smoking. It's going to hurt you.' If you sit down and actually explain to them what it does to their vessels, and then also their lungs over time, they take that a little more seriously. And then give them options. There are more than just patches. There are electronic cigarettes, things like that." — Physician*

# ACCESS TO HEALTH SERVICES





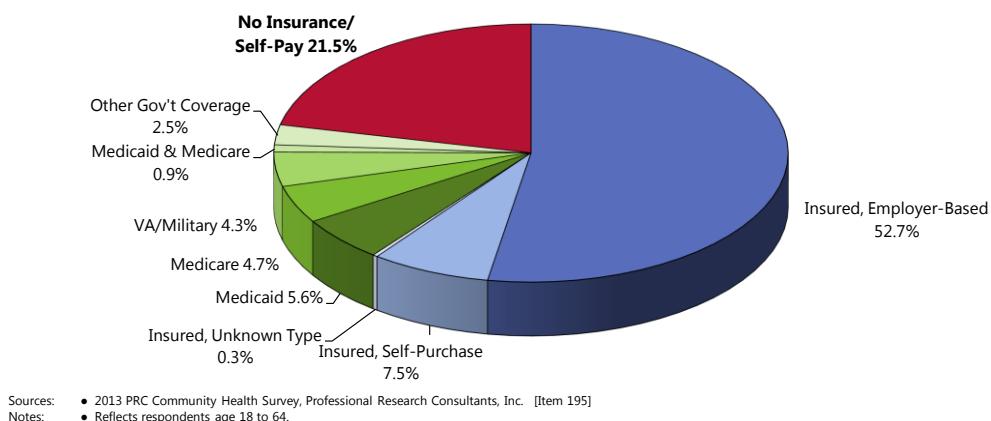
# Health Insurance Coverage

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

## Type of Healthcare Coverage

**A total of 60.5% of Total Service Area adults age 18 to 64 report having healthcare coverage through private insurance. Another 18.0% report coverage through a government-sponsored program (e.g., Medicaid, Medicare, military benefits).**

**Healthcare Insurance Coverage**  
(Among Adults 18-64; Total Service Area, 2013)

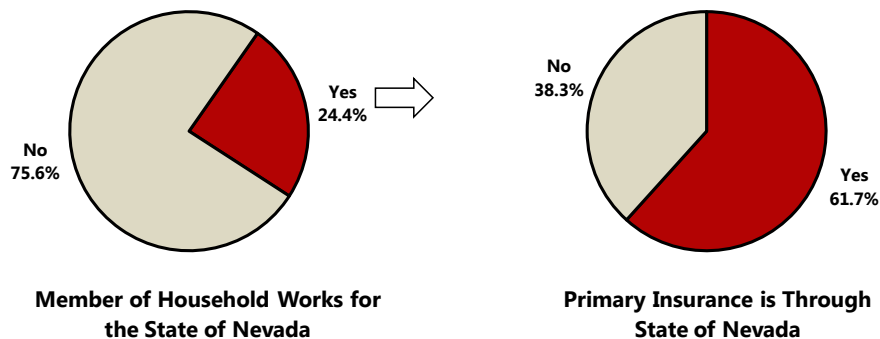


## State Employment

**Among respondents with coverage through an employer or union, 24.4% report that they or a member of their household work for the State of Nevada.**

- Of these people, 61.7% report receiving healthcare insurance coverage through the State.

**Health Insurance Coverage Through State Employment**  
(Adults With Coverage Through Employer/Union, 2013)



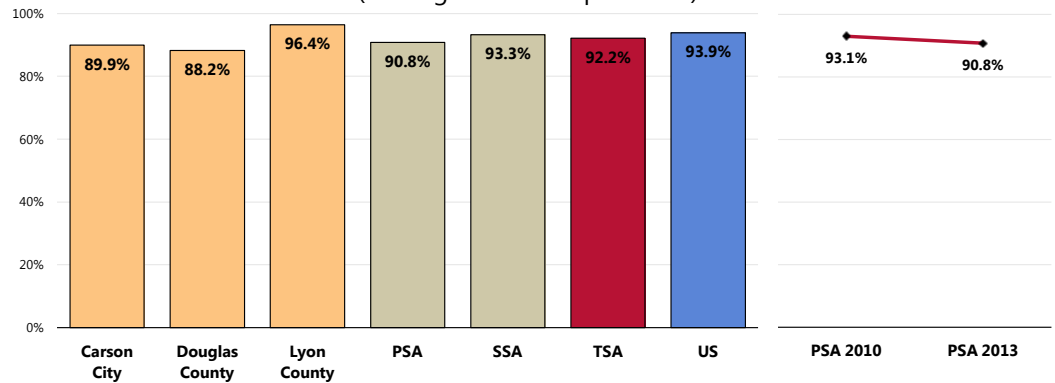
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 80-81]  
Notes: • Asked of those respondents with healthcare insurance coverage through an employer or union.

## Prescription Drug Coverage

**Among insured adults, 92.2% report having prescription coverage as part of their insurance plan.**

- Similar to the national prevalence.
- Highest in Lyon County; similar by service area.
- 📊 No significant change in the Primary Service Area since 2010.

### Health Insurance Covers Prescriptions at Least in Part (Among Insured Respondents)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 83]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

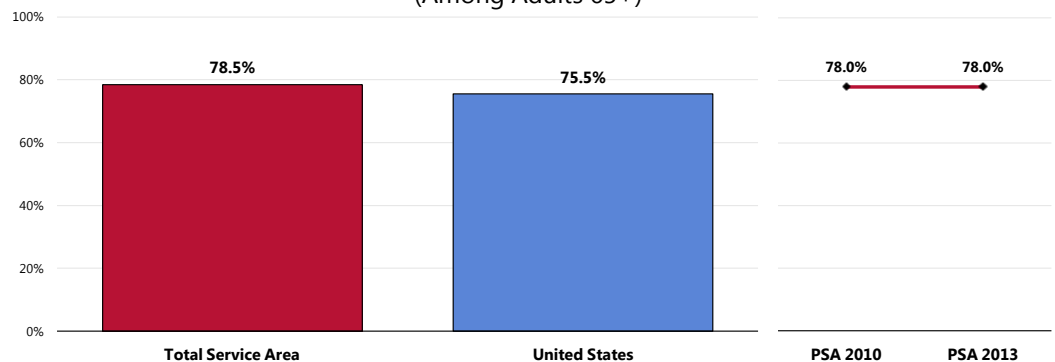
Notes: • Asked of all respondents with healthcare insurance coverage.

## Supplemental Coverage

**Among Medicare recipients, the majority (78.5%) has additional, supplemental healthcare coverage.**

- Comparable to that reported among Medicare recipients nationwide.
- 📊 Unchanged in the Primary Service Area since 2010.

### Have Supplemental Coverage in Addition to Medicare (Among Adults 65+)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 82]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of respondents age 65+.

## Lack of Health Insurance Coverage

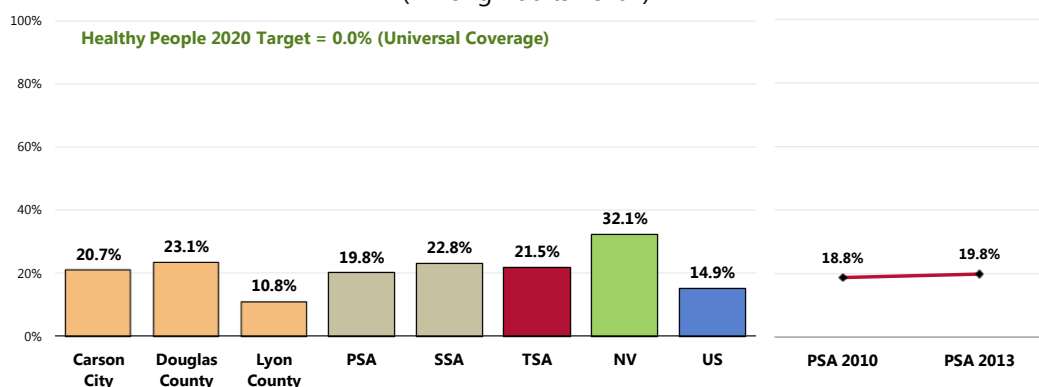
Here, lack of health insurance coverage reflects respondents age 18 to 64 (thus, excluding the Medicare population) who have no type of insurance coverage for healthcare services – neither private insurance nor government-sponsored plans (e.g., Medicaid).

**Among adults age 18 to 64, 21.5% report having no insurance coverage for healthcare expenses.**

- Better than the state finding.
- Worse than the national finding.
- The Healthy People 2020 target is universal coverage (0% uninsured).
- Lowest in Lyon County; similar by service area.
- 📊 Statistically similar to 2010 Primary Service Area findings.

### Lack of Healthcare Insurance Coverage

(Among Adults 18-64)



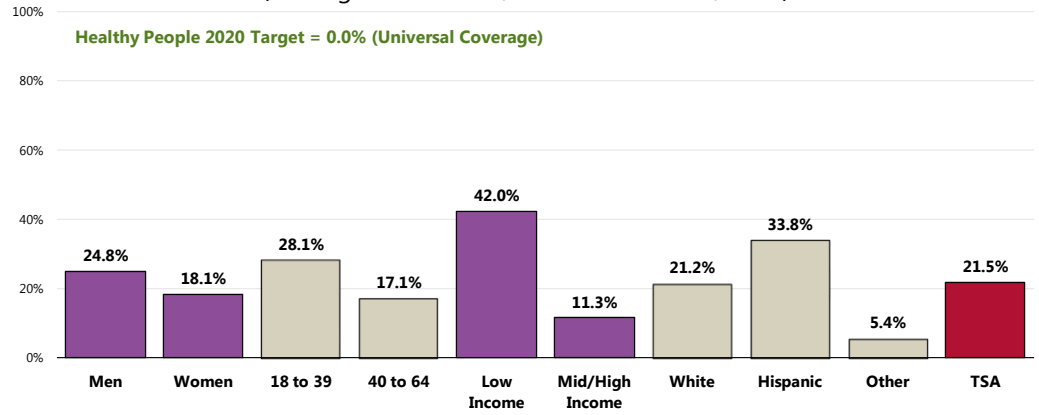
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 195]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Nevada data.  
 • 2011 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 are more likely to be without healthcare insurance coverage:

- 👤 Men.
- 👤 Young adults (under 40).
- 👤 Residents living at lower incomes (note the 42.0% uninsured prevalence among low-income adults).
- 👤 Hispanic adults.

## Lack of Healthcare Insurance Coverage

(Among Adults 18-64; Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 195]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-1]

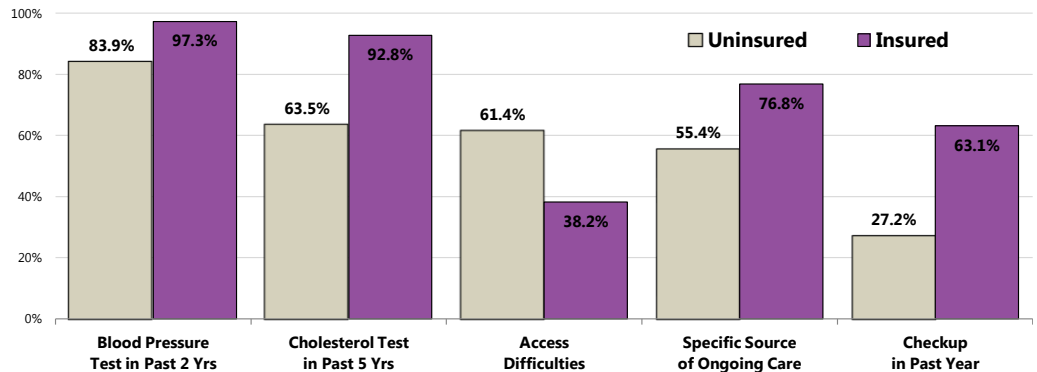
Notes: • Asked of all respondents under the age of 65.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.



As might be expected, uninsured adults in the Total Service Area are less likely to receive routine care and preventive health screenings, and are more likely to have experienced difficulties accessing healthcare.

## Preventive Healthcare

(By Insured Status; Total Service Area, 2013)



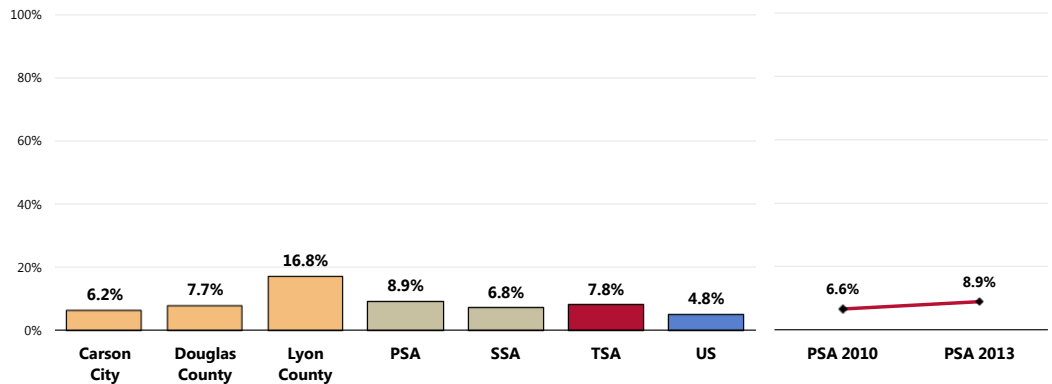
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 18, 50, 53, 196, 199]  
 Notes: • Asked of all respondents.

## Recent Lack of Coverage (Insurance Instability)

**Among currently insured adults in the Total Service Area, 7.8% report that they were without healthcare coverage at some point in the past year.**

- Higher than US findings.
- Higher in Lyon County; similar by service area.
- In the Primary Service Area, statistically unchanged over time.

### Went Without Healthcare Insurance Coverage At Some Point in the Past Year (Among Insured Adults)

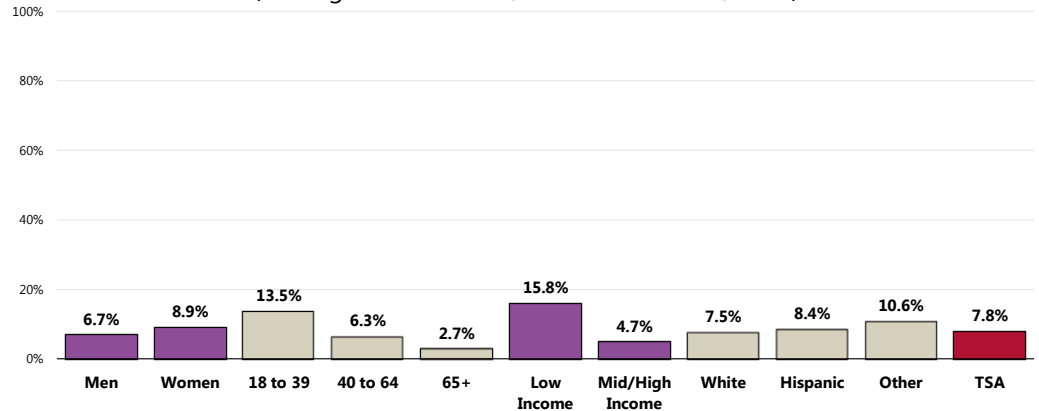


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 84]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all insured respondents.

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.
- Lower-income residents.

### Went Without Healthcare Insurance Coverage At Some Point in the Past Year (Among Insured Adults; Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 84]  
Notes: • Asked of all insured 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.

# 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](http://www.healthypeople.gov))

## Available Healthcare Professionals

**According to data obtained from the State Board of Medical Examiners for 2010, Carson City enjoys some of the highest ratios of health care professionals to population in the state.**

However, this data may be skewed due to professionals holding their license in Carson City but practicing elsewhere.

### Carson City Healthcare Professionals per 100,000 Population

	# of Professionals	Rate per 100,000	State Ranking
Dentists	34	61.6	2 <sup>nd</sup>
Dental Hygienists	38	68.9	1 <sup>st</sup>
Psychiatrists	3	5.4	2 <sup>nd</sup>
Psychologists	19	34.4	1 <sup>st</sup>

Sources: • Carson City Department of Health and Human Services.  
Note: • Rates are per 100,000 population.

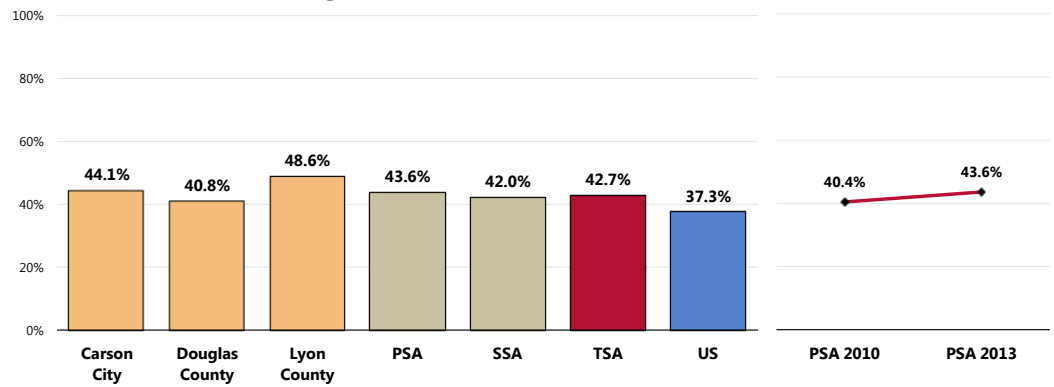
## Difficulties Accessing Services

**A total of 42.7% of Total Service Area adults report some type of difficulty or delay in obtaining healthcare services in the past year.**

- Less favorable than national findings.
- Statistically similar by area.
- 🏠 In the Primary Service Area, statistically similar to 2010 findings.

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.

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 199]  
• 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.

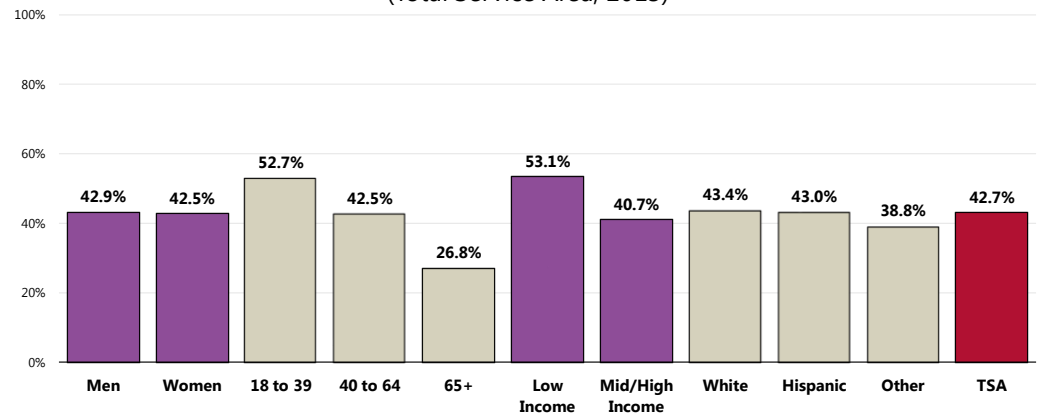
Note that the following demographic groups more often report difficulties accessing healthcare services:

👤 Young adults (note the negative correlation with age).

👤 Lower-income residents.

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

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 199]

Notes: • Asked of all respondents.  
• Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Barriers to Healthcare Access

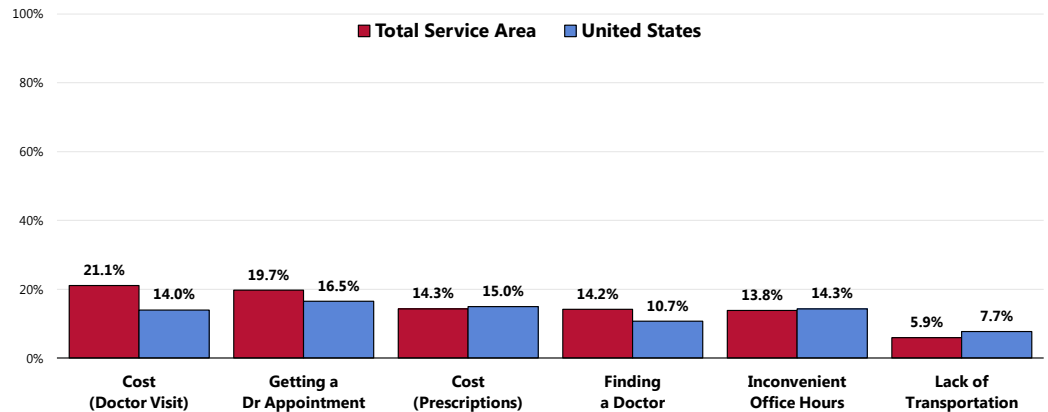
To better understand healthcare access barriers, survey participants were asked whether any of six types of barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

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

**Of the tested barriers, cost of a physician visit impacted the greatest share of Total Service Area adults (21.1% say that cost prevented them from obtaining a visit to a physician in the past year).**

- The proportion of Total Service Area adults impacted was statistically comparable to that found nationwide for each of the tested barriers, with the exceptions of cost as a barrier to physician visits and difficulty finding a physician (for which the Total Service Area fared worse).
- No differences by area (not shown).

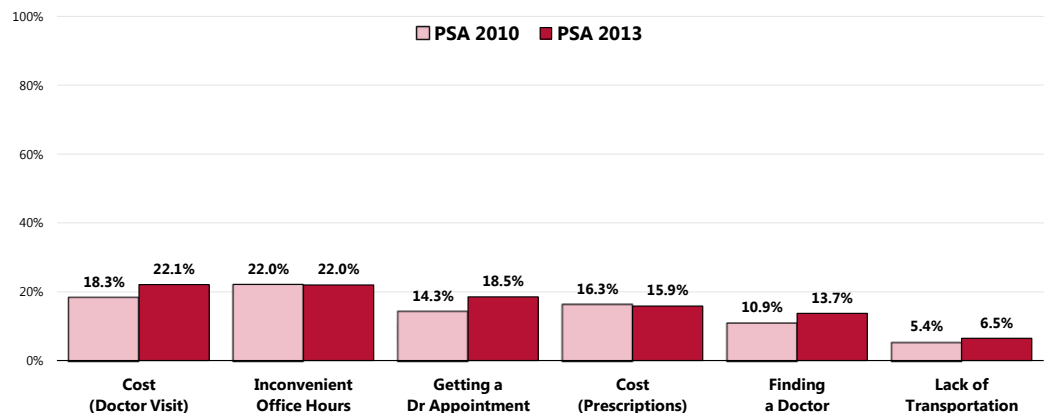
### Barriers to Access Have Prevented Medical Care in the Past Year



Sources: • 2013 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.

- ☒ Compared to baseline 2010 data, the Primary Service Area has seen a significant increase with regard to the barrier of **difficulty getting an appointment**.

### PSA Trend: Barriers to Access Have Prevented Medical Care in the Past Year



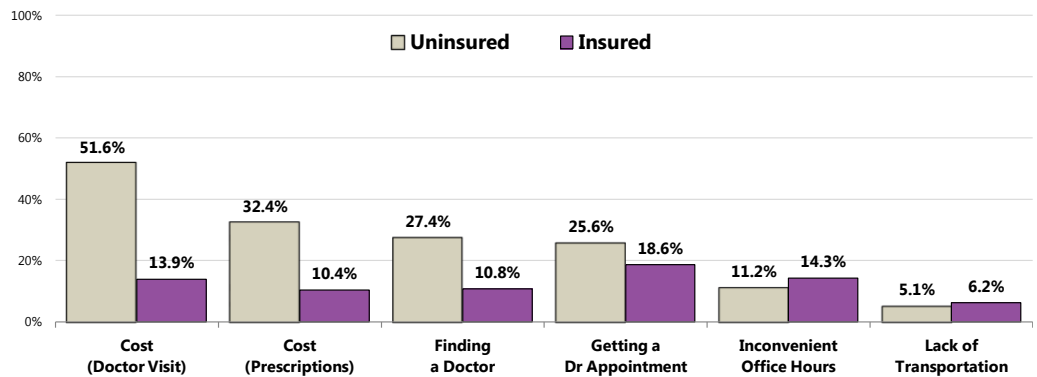
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 7-12]  
Notes: • Asked of all respondents.



As might be expected, Total Service Area adults without health insurance are much more likely to report access barriers when compared to the insured population, particularly those related to cost.

## Barriers to Healthcare Access

(By Insured Status, Adults 18+; Total Service Area, 2013)



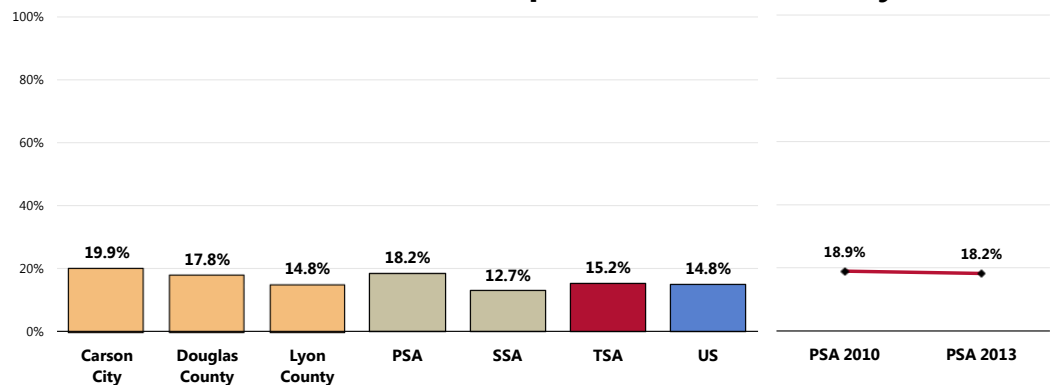
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-12]  
Notes: • Asked of all respondents.

## Prescriptions

Among all Total Service Area adults, 15.2% skipped or reduced medication doses in the past year in order to stretch a prescription and save money.

- Comparable to national findings.
- Unfavorably high in Carson City; similar by service area.
- No significant change in the Primary Service Area since 2010.

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



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

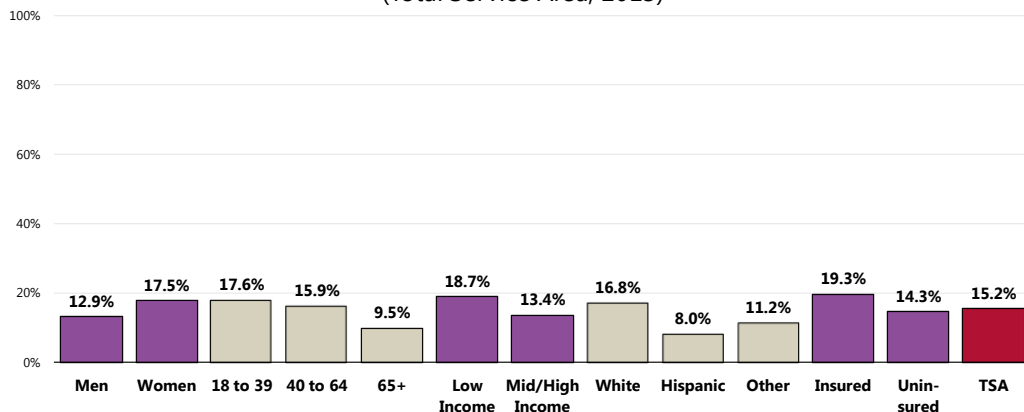
Adults more likely to have skipped or reduced their prescription doses include:

Adults under 65.

Whites.

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

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]

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.

## Accessing Healthcare for Children

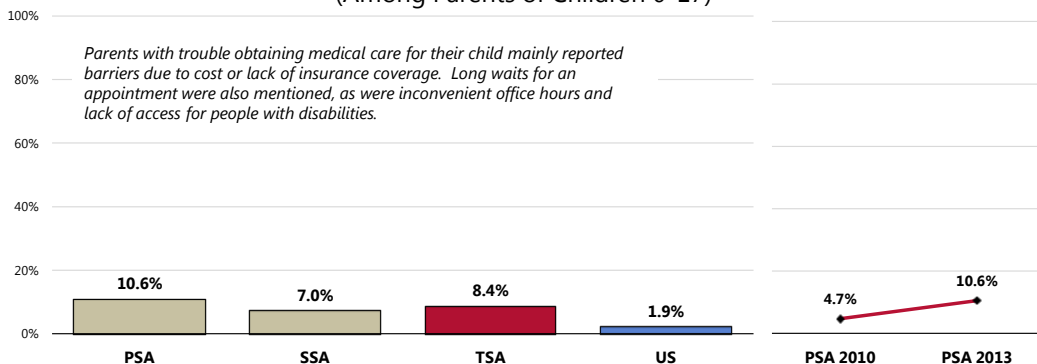
Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly-selected child in their household.

**A total of 8.4% 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.**

- Much higher than what is reported nationwide.
- No difference by service area.
- Marks a significant increase in the Primary Service Area since 2010.

## Had Trouble Obtaining Medical Care for Child in the Past Year

(Among Parents of Children 0-17)



*Parents with trouble obtaining medical care for their child mainly reported barriers due to cost or lack of insurance coverage. Long waits for an appointment were also mentioned, as were inconvenient office hours and lack of access for people with disabilities.*

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 132-133]

• 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 **cost or a lack of insurance** as the primary reason; others cited long waits for appointments, inconvenient office hours, and lack of access for people with disabilities.

## Related Focus Group Findings: Access to Healthcare Services

Many of the key informants participating in the focus groups are concerned with access to healthcare services, discussing such issues as:

- Importance of preventative healthcare
- Barriers to accessing healthcare
- Low income residents
- Under- or uninsured residents
- Medicare reimbursement rate
- Physician office hours
- Transportation
- Interpretive services
- Over-utilization of the emergency room
- Limited access to specialty care

Key informants would like to see more health prevention education occur in the area. Many residents do not think about long-term health consequences or the **importance of preventative healthcare**. Attendees agree that many community members avoid accessing healthcare services for several reasons: apathy about their own health, lack of knowledge about the importance of regular medical care, and/or medication continuity. A physician explains:

*"I have good, well-intentioned people that are non-compliance because some people will take their medicines for a month. And then they run out, and they go, 'Oh, my cholesterol – I thought that was going to cure it or something.' You know what I mean? It's crazy – where people get their ideas." — Physician*

Other community members may lack insurance, so the perceived (or actual) costs may cause them to avoid obtaining prevention services:

*"I saw one person last week. And I was amazed. She'd never had a Pap smear for 20 years. She hasn't had a mammogram, hasn't had a colonoscopy. She's 50-some years old. I said, 'Why?' She said, 'I have no insurance.'" — Physician*

Focus group participants feel that residents encounter several **barriers** when trying to **access healthcare services** in the community. A large number of community members outside of Carson City have **low incomes**. Residents with limited, fixed, or no income cannot afford to see a physician, obtain medication, or purchase insurance, as several participants describe:

*"We're asking them 'You have to get these labs. You're on all these medications. We have to know how your diabetes is doing.' But they say, 'Well, if I pay for these labs, I can't get my meds.' What do you say to that? You don't. You say, 'Well, you need your meds.' Some patients, they have the accountability. They just don't have the resources." — Community Leader*  
*"They'll walk into the school nurse and say, or their mom will walk them in and say, 'Can you see if my daughter has strep throat? Do you think my son has ADHD?' Those kinds of things. It's alarming how many times that the school nurse is asked to do a checkup and we'll say, 'We can't diagnose anything as RNs in the state of Nevada but we certainly would recommend that you go – 'Well, we don't have insurance,' or 'We don't have a lot of income. We don't have hardly any*

money to pay for anything.” — Community Leader

“I saw a lady yesterday who needs back surgery and does not have any insurance. She’s 61, so we were discussing her options. She was scheduled to surgery. But then after talking to the hospital, it was going to be probably \$50,000.00, and she simply couldn’t afford it. So I said her options are, number one, she can wait four years, five years, until she goes on Medicare. She can fly to India or one of the other countries around the world, where the surgery would be substantially discounted, or she can just live with her pain and manage things as best we can.” — Physician

Focus group members feel that many residents are also **under-insured or uninsured**, limiting their access to healthcare services. The underinsured population includes the working poor, those individuals who may qualify for employer insurance but the deductibles are too high or the monthly employee cost too much, so they elect to go without. A number of outpatient options exist for these residents. These include the Sierra Family Health Center, Friends In Service Helping (FISH) for chronically ill patients, Maternal Obstetrical Management (MOM) Clinic for pregnant women, rural health clinics, and HAWC Community Health Centers (Reno, NV). These clinics operate with sliding-fee schedules, but participants would like to see a truly *free* clinic in the area.

Elderly residents may qualify for **Medicare**, but finding a provider who accepts that insurance can be difficult. Attendees agree that the number of physicians accepting Medicare has decreased due to the low **reimbursement rate**. Many physicians will have trouble keeping the doors open if they accept a large number of Medicare patients

**Physician office hours** can also delay a resident’s ability to access healthcare. Many residents work multiple jobs, which make getting to a doctor appointment during normal office hours difficult. These residents do not want to miss work because of the loss of income. School nurses are often asked to act as the primary care provider; however, school nurses can only suggest that students make an appointment with their family physician.

Participants also view **transportation** as an obstacle to accessing healthcare and other services. No regional transportation system exists in the area. Carson City represents the area’s healthcare hub and is the only community with satisfactory intercity transit services. The surrounding areas are rural in nature and do not have any transport options, so if a resident does not have access to a vehicle, they may not have the ability to get to healthcare services in Carson City. One attendee describes the rural communities:

“I mean Lyon County attracted a lot of people who were lower income because the housing was a lot cheaper out there and now they’re stranded, there’s no services and it’s a big challenge there and some parts of Eastern Douglas County. There are just too many miles in between houses let alone services.” — Community Leader

Key informants describe Carson City and surrounding communities as having a fair number of Hispanic immigrants. These residents may struggle to access care due to limited **interpretive services**. Participants note that the hospital has a video system for language services and some bilingual staff. In other clinics, many times younger family members have to act as interpreters, which is not ideal. Communication in these situations remains a challenge.

Focus group participants agree that community members also **over-utilize the emergency room (ER)**. Residents wait until their disease is so far advanced that major care is needed. Other families go to the emergency room for minor, non-emergent

situations, and if the person cannot afford the bill they simply do not pay. A key informant explains that if a family cannot get a same-day appointment, they head to the ER:

*"I think a lot of the primary care physicians drive people to the ERs because they don't have the ability to see – either there aren't enough physicians or they don't schedule enough blank time to fit those patients in. So I believe that physicians' offices – and I'm not even sure if physicians are aware of this – but physicians' offices are driving people to the ER. In fact, I know they're telling people that. So you call to make an appointment because you need to get in because you have an earache or whatever else and someone on the phone will say, 'We don't have any openings today.' They say, 'I'm really in a lot of pain.' And then the receptionist will say, 'Well, you should probably go to the ER then.'" — Community Leader*

In addition to struggling with overall access to healthcare services, many participants worry that community members **do not have access to specialists** due to the low number of local specialty providers. Most area residents will need to travel for specialty care; however, cardiologists, oncologists, general surgeons, and urologists have begun to travel to some surrounding communities through outreach clinics. Overall, key informants would like to see more neurologists, endocrinologists, rheumatologists, psychiatrists, and counselors. Current wait times for these specialists can exceed several months.

# 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](http://www.healthypeople.gov))

## Specific Source of Ongoing Care

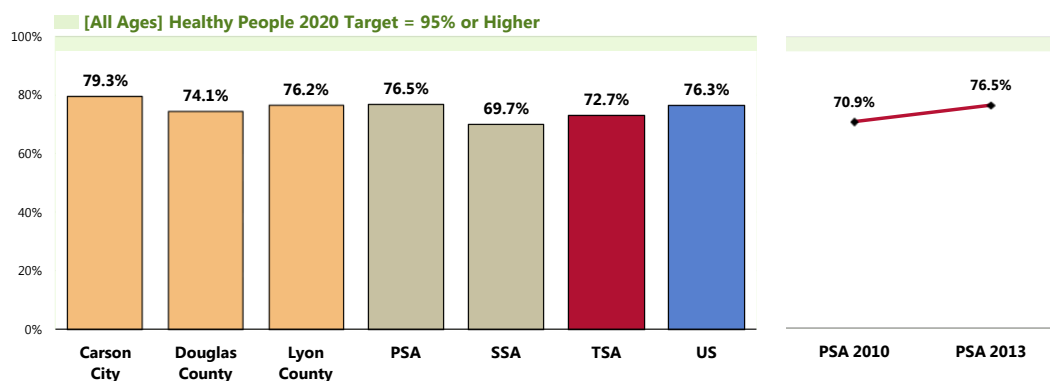
**A total of 72.7% of Total Service Area adults were determined to have a specific source of ongoing medical care (a “medical home”).**

- Similar to national findings.
- Fails to satisfy the Healthy People 2010 objective (95% or higher).
- Highest in Carson City; similar by service area.
- 📈 In the Primary Service Area, this marks a statistically significant increase since 2010.

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.

## Have a Specific Source of Ongoing Medical Care



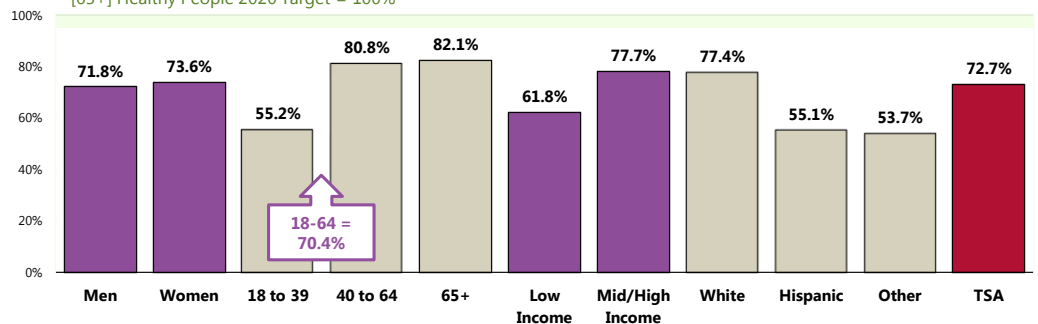
Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 196]  
 ● 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-5.1]  
 Notes: ● Asked of all respondents.

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

- 👤 Adults under age 40.
- 👤 Lower-income adults.
- 👤 Non-White residents.
- 👤 Among adults age 18-64, 70.4% 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+, 82.1% have a specific source for care, comparable 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 (Total Service Area, 2013)

[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: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 196-198]  
 • 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. 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.

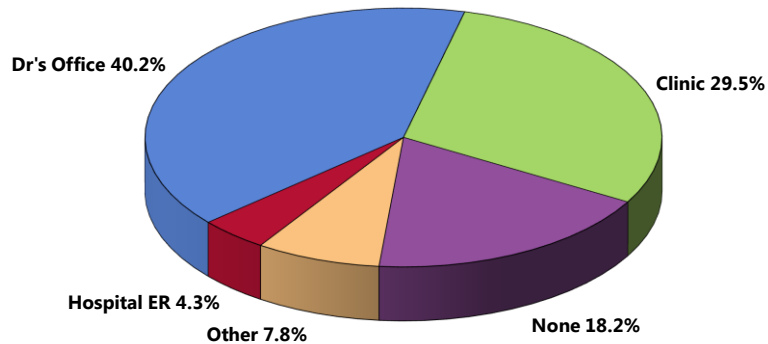
## Type of Place Used for Medical Care

When asked where they usually go if they are sick or need advice about their health, the greatest share of respondents (40.2%) identified a particular doctor's office.

A total of 29.5% say they usually go to some type of clinic, while 4.3% rely on a hospital emergency room.

### Particular Place Utilized for Medical Care

(Total Service Area, 2013)



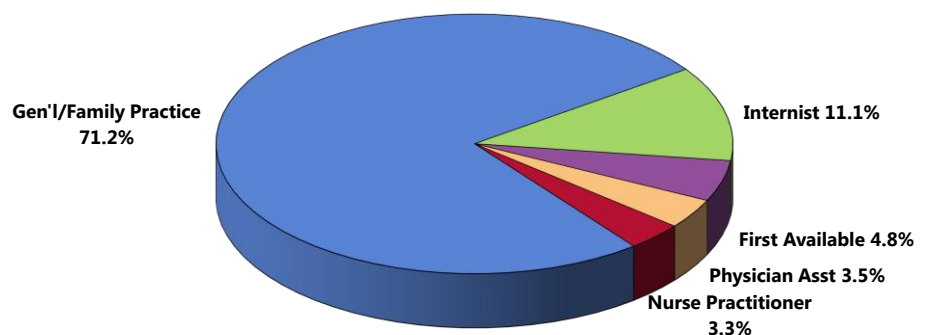
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 15-16]  
Notes: • Asked of all respondents.

When asked about the type of physician generally seen for their healthcare needs, most respondents mentioned a general or family practitioner (71.2%).

Fewer (11.1%) mentioned relying on an internist for their care, followed by mention of the "first available" (4.8%), a physician's assistant (3.5%), and a nurse practitioner (3.3%).

### Type of Physician Seen for General Healthcare Needs

(Adults With a Particular Place for Care; TSA, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 17]  
Notes: • Asked of all respondents with a particular place for care; does not include those who use an ER or UCC for their primary care.



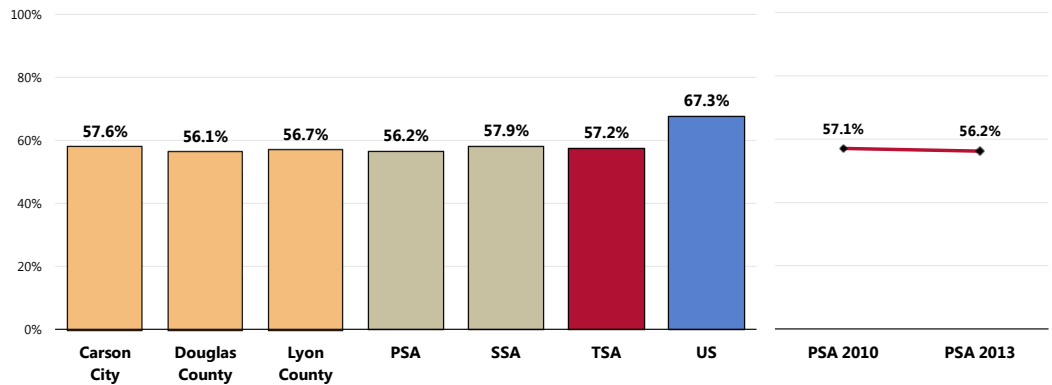
## Utilization of Primary Care Services

### Adults

**A total of 57.2% of Total Service Area adults visited a physician for a routine checkup in the past year.**

- Lower than national findings.
- Comparable by area.
- 📊 Statistically similar to 2010 Primary Service Area findings.

### Have Visited a Physician for a Checkup in the Past Year



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 18]  
● 2011 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: ● Asked of all respondents.

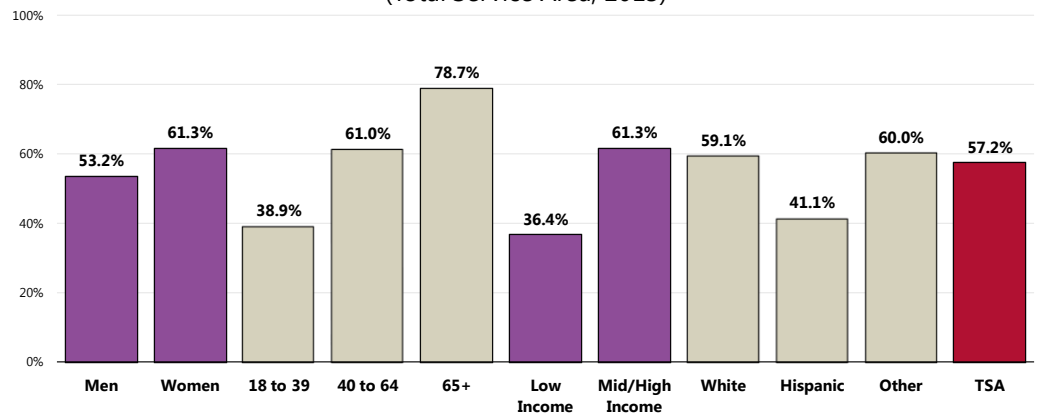
Asked what type of physician they visited for their routine checkup, 69.1% of these adults mentioned a **general/family practitioner**, followed by mention of an **internist** (8.5%) and an **OB/GYN** (5.6%).

These population segments are less likely to have received routine care in the past year:

- 👤 Men.
- 👤 Young adults (note the positive correlation with age).
- 👤 Lower-income residents.
- 👤 Hispanic adults.

## Have Visited a Physician for a Checkup in the Past Year

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]

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.

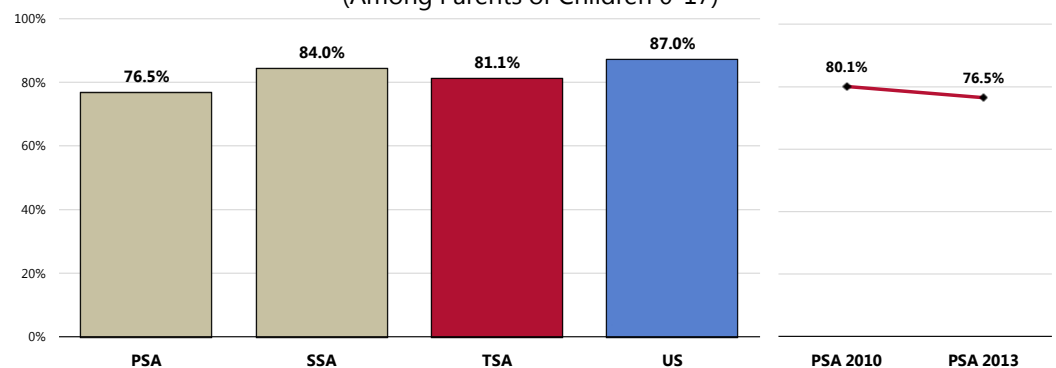
## Children

**Among surveyed parents, 81.1% report that their child has had a routine checkup in the past year.**

- Similar to national findings.
- Similar by service area.
- No significant change in the Primary Service Area since 2010.

## Child Has Visited a Physician for a Routine Checkup in the Past Year

(Among Parents of Children 0-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 134]

• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

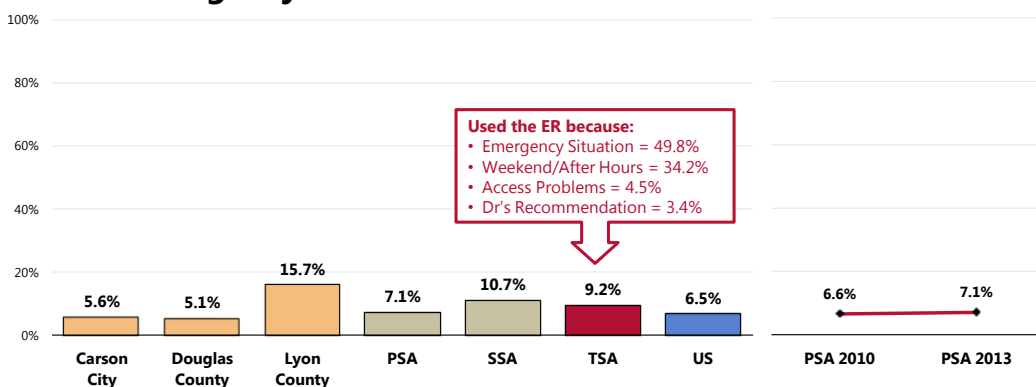
Notes: • Asked of all respondents with children 0 to 17 in the household.

# Emergency Room Utilization

**A total of 9.2% of Total 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.
- Favorably low in Carson City and Douglas County; similar by service area.
- Statistically unchanged over time in the Primary Service Area.

## Have Used a Hospital Emergency Room More Than Once in the Past Year



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 25-26]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.

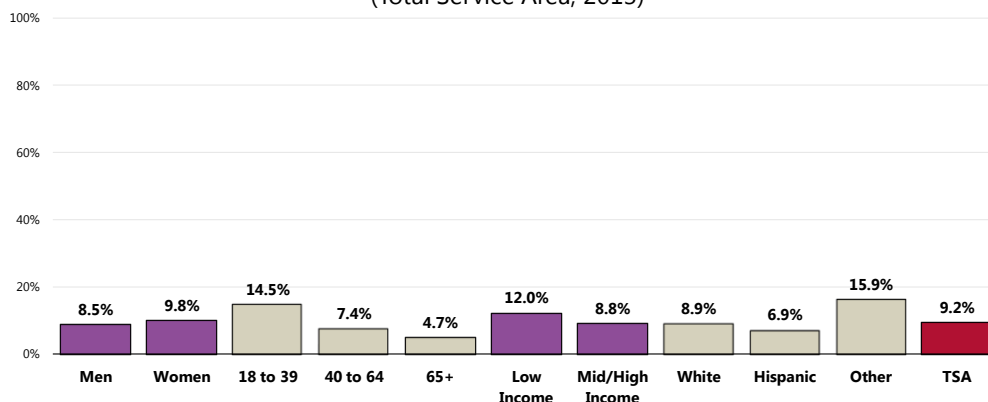
Notes: • Asked of all respondents.

Of those using a hospital ER, 49.8% say this was due to an **emergency or life-threatening situation**, while 34.2% indicated that the visit was during **after-hours or on the weekend**. A total of 4.5% cited **difficulties accessing primary care** for various reasons, and 3.4% were following a physician's recommendation.

ER use is statistically high among young adults (negative correlation with age).

## Have Used a Hospital Emergency Room More Than Once in the Past Year

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 25]

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.

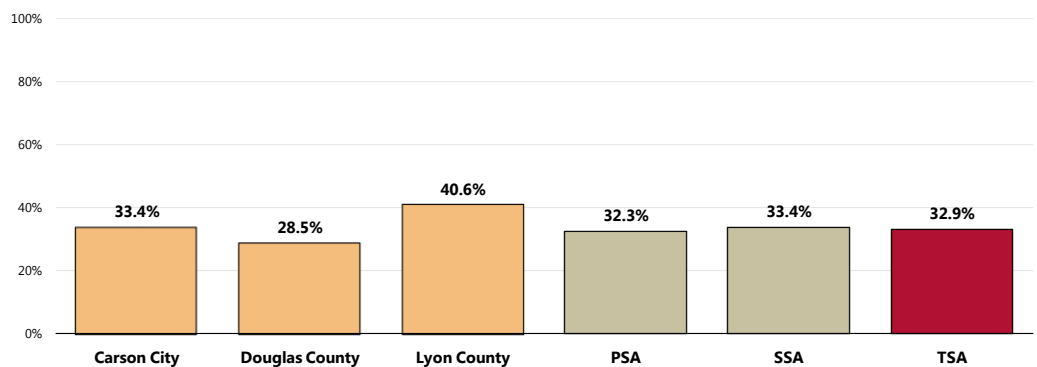
# Inpatient, Long-Term, & Surgical Care

## Inpatient Care

A total of 32.9% of survey respondents report that they or a member of their household received inpatient care in the past 2 years.

- No statistically significant difference by area of residence.

### Member of Household Received Inpatient Care in the Past 2 Years

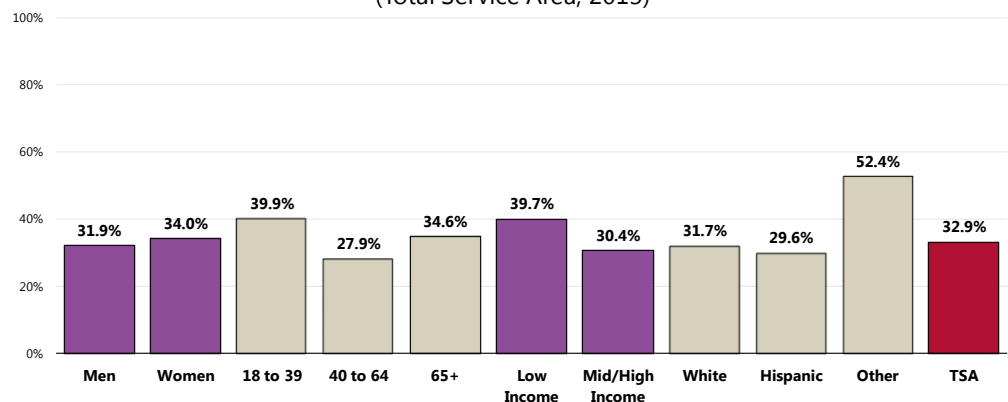


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 119]  
Notes: • Asked of all respondents.

Receipt of inpatient care (by a household member) is reported more often among the following adults:

- Those under 40.
- Lower-income households.
- "Other" adults.

### Member of Household Received Inpatient Care in the Past 2 Years (Total Service Area, 2013)



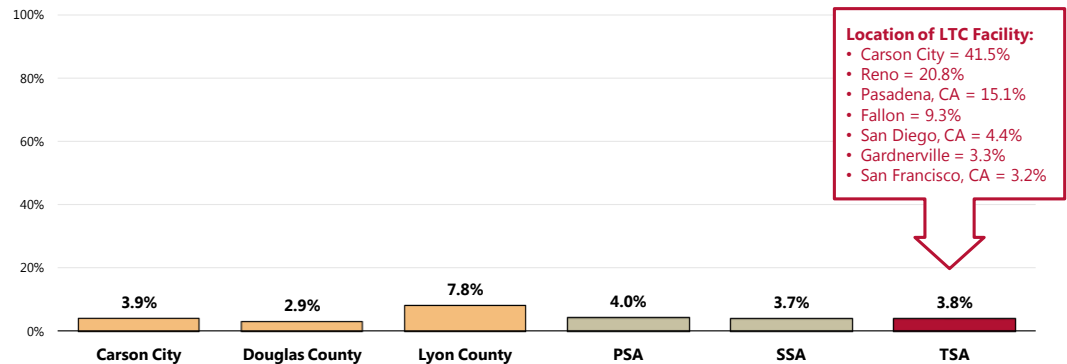
Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 119]  
Notes: • Asked of all respondents.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories 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.

## Long-Term Acute Care

A total of 3.8% of survey respondents report that they or a member of their household received long-term acute care in the past 3 years.

- Comparable findings by area.

### Member of Household Received Long-Term Acute Care in the Past 3 Years



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 120-121]  
Notes: ● Asked of all respondents.

Of these adults, 41.5% received long-term acute care in Carson City, followed by receipt of care in Reno (20.8%), Pasadena (15.1%), Fallon (9.3%), and San Diego (4.4%).

Among those with household members receiving long-term acute care, 90.6% returned **home** after their care, while 9.4% received further care at another **health facility**.

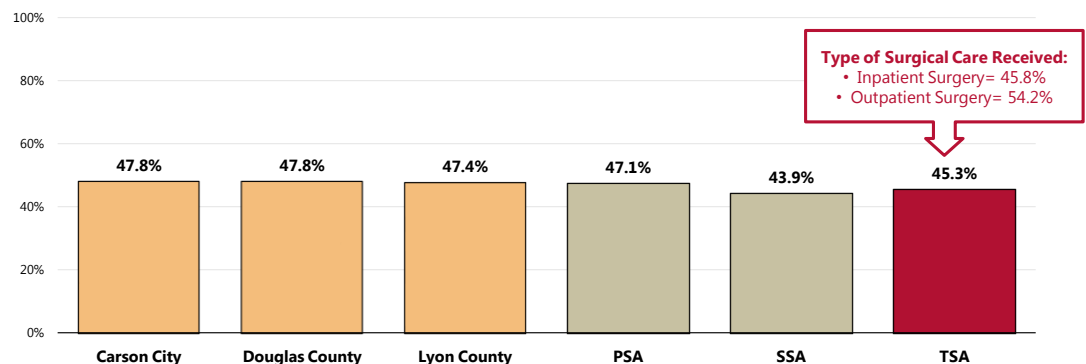
## Surgical Care

A greater share of respondents (45.3%) report that they or a member of their household received surgical care in the past 3 years.

- No difference by area.

- 👤 Of these residents, 45.8% received inpatient surgical care and 54.2% received outpatient surgical care.

### Member of Household Received Surgical Care in the Past 3 Years



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 123-124]  
Notes: ● Asked of all respondents.

Of adults receiving some type of surgical care in the past 3 years, 29.9% report that the surgery was an **emergency procedure** that needed to be performed immediately.

A total of 69.0% of adults with recent surgical experience received their surgery in a **hospital**, while 19.9% received care in a same-day **surgical center** and 6.8% received surgical care in a **doctor's office**.

Asked where they received their surgical care, respondents mentioned Reno, Carson City, South Lake Tahoe (CA), and Gardnerville.

# 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](http://www.healthypeople.gov))

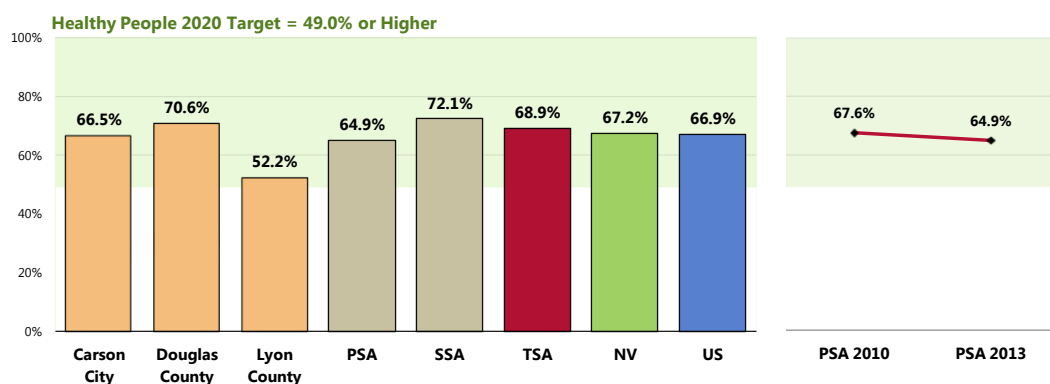
## Dental Care

### Adults

**Just less than 7 in 10 Total Service Area adults (68.9%) have visited a dentist or dental clinic (for any reason) in the past year.**

- Similar to statewide findings.
- Similar to national findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- Lowest in Lyon County; similar by service area.
- No significant change in the Primary Service Area since 2010.

### Have Visited a Dentist or Dental Clinic Within the Past Year



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 23]  
• 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 Nevada data.

Notes: • Asked of all respondents.

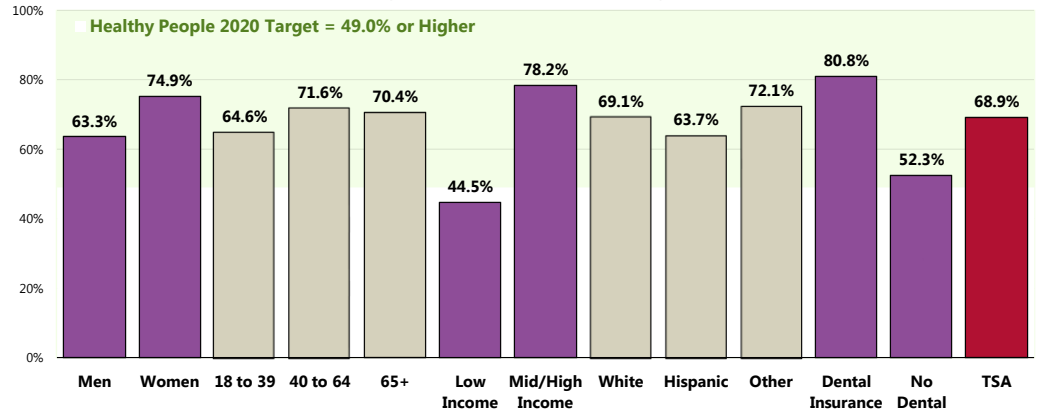
Note the following:

- Men are less likely than women to report recent dental visits.
- Persons living in the higher income categories report much higher utilization of oral health services (low-income adults fail to satisfy the Healthy People 2020 target).
- As might be expected, persons without dental insurance report much lower utilization of oral health services than those with dental coverage.



## Have Visited a Dentist or Dental Clinic Within the Past Year

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 23]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
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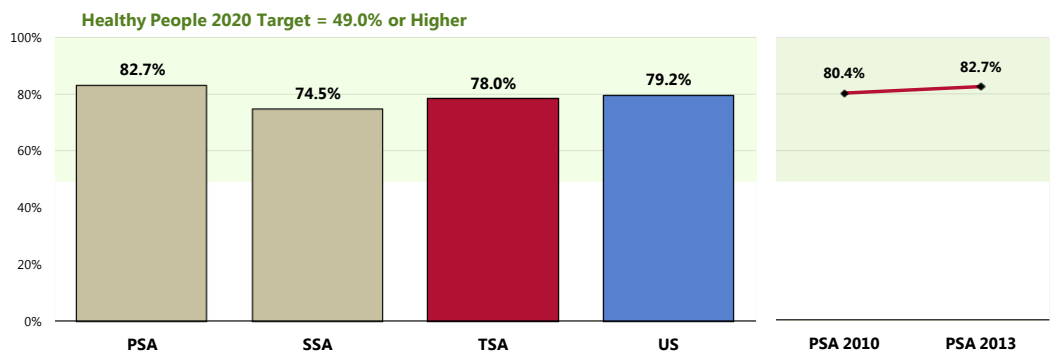
## Children

**A total of 78.0% 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).
- Significantly lower in the Secondary Service Area.
- Statistically unchanged over time in the Primary Service Area.

## Child Has Visited a Dentist or Dental Clinic Within the Past Year

(Among Parents of Children 2-17)



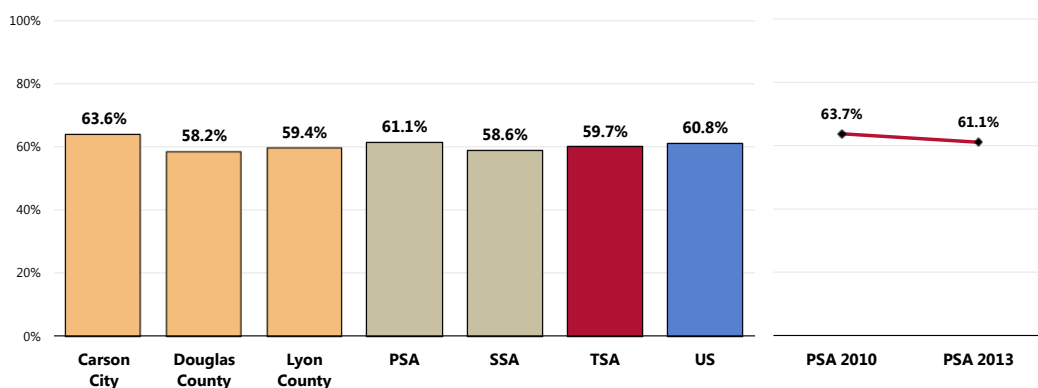
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 135]  
 • 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]  
 Notes: • Asked of all respondents with children age 2 through 17.

## Dental Insurance

**A total of 6 in 10 Total Service Area adults (59.7%) have dental insurance that covers all or part of their dental care costs.**

- Comparable to the national finding.
- Comparable findings by area.
- ▣ Statistically unchanged in the Primary Service Area over time.

### Have Insurance Coverage That Pays All or Part of Dental Care Costs



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 24]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

## Related Focus Group Findings: Oral Health

Participants discussed oral health in the community, focusing on:

- Importance of regular preventative dental care
- Uninsured limited options

Focus group participants agree that neglect of oral health can result in a significant decrease to a person's overall health and increases the chances of poor health outcomes. Attendees recognize the **importance of regular preventative dental care**; however, many residents face barriers in accessing oral healthcare. For residents without dental insurance, many cannot afford basic care and do not obtain any dental care, as there are **virtually no options for dental care for those residents**.

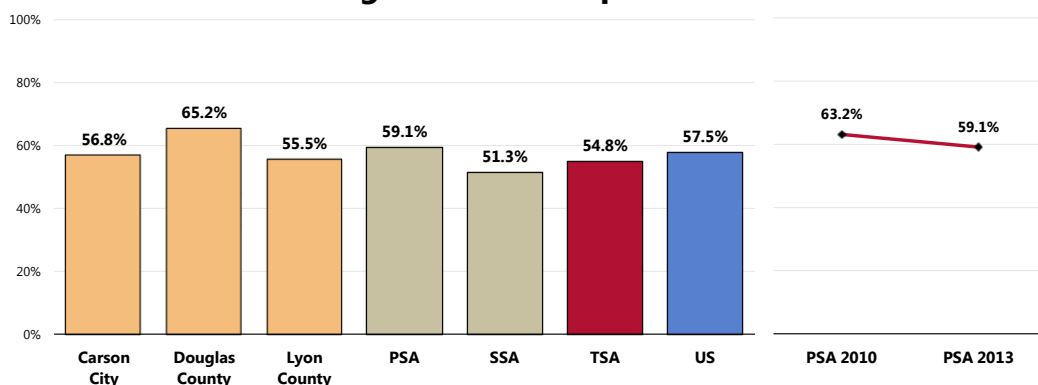
# Vision Care

RELATED ISSUE:  
See also *Vision & Hearing* in  
the **Deaths & Disease**  
section of this report.

**A total of 54.8% of residents had an eye exam in the past two years during which their pupils were dilated.**

- Statistically comparable to national findings.
- Favorably high in Douglas County; similar findings by service area.
- No significant change in the Primary Service Area since 2010.

## Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated

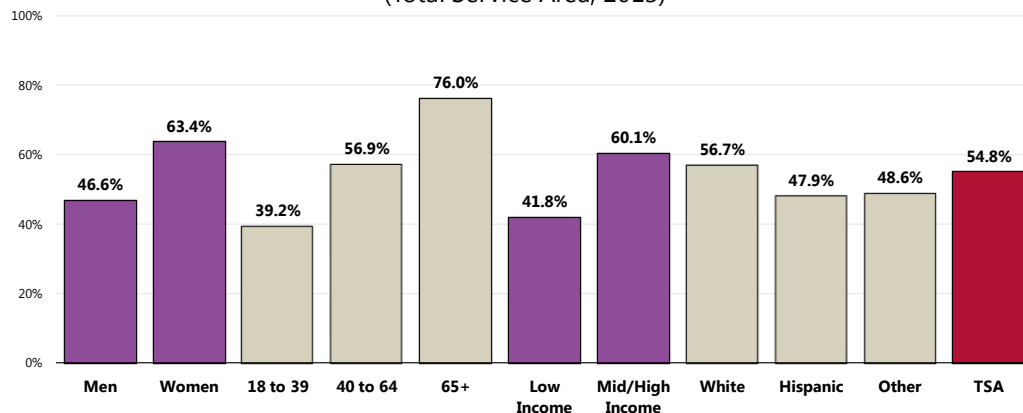


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 22]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

Recent vision care in the Total Service Area is more often reported among:

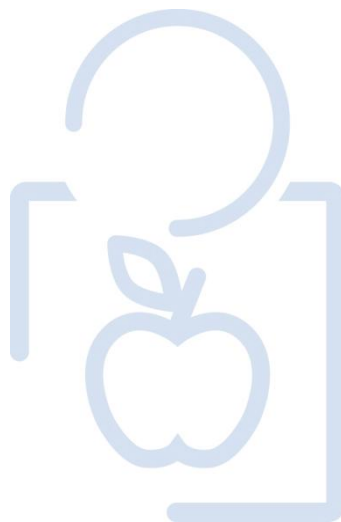
- Women.
- Residents with higher incomes.
- Note also the positive correlation between age and recent eye exams.

## Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated (Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 22]  
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.

# HEALTH EDUCATION & OUTREACH



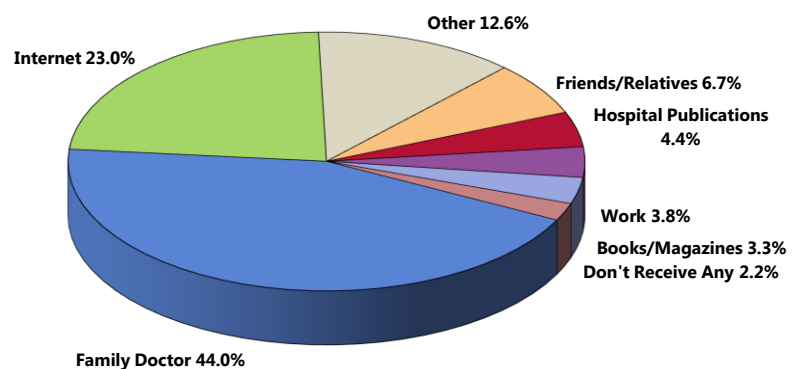
# Healthcare Information

## Healthcare Information Sources

**Family physicians and the Internet are residents' primary sources of healthcare information.**

- 44.0% of Total Service Area adults cited their **family physician** as their primary source of healthcare information.
- The **Internet** received the second-highest response, with 23.0%.
  - Other sources mentioned include friends and relatives (6.7%), hospital publications (4.4%), work (3.8%), and books/magazines (3.3%).
- Just 2.2% of survey respondents say that they do not receive any healthcare information.

**Primary Source of Healthcare Information**  
(Total Service Area, 2013)



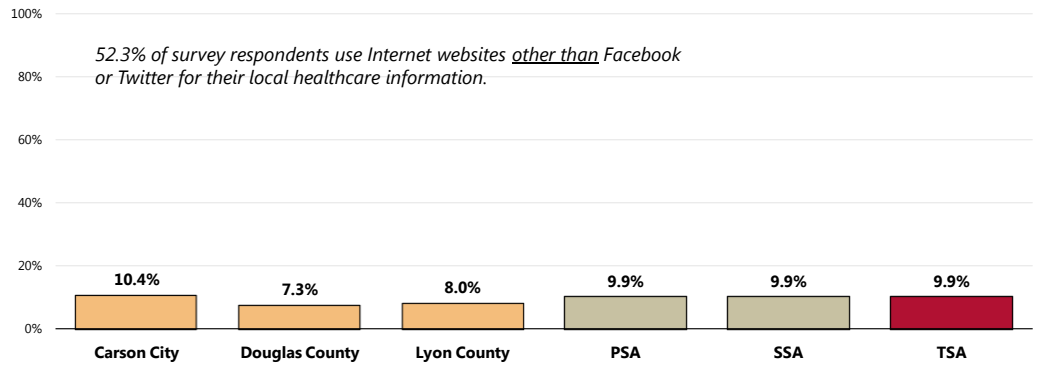
Sources: ● 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 114]  
Notes: ● Asked of all respondents.

## Use of Social Media

**One in 10 survey respondents (9.9%) report using social media such as Facebook and Twitter for their local healthcare information.**

- No difference in survey findings by area.
- 👥 Among the total sample of respondents, 52.3% use some other website for their local healthcare information.

## Use Social Media Websites (Facebook, Twitter, Etc.) to Obtain Local Healthcare Information



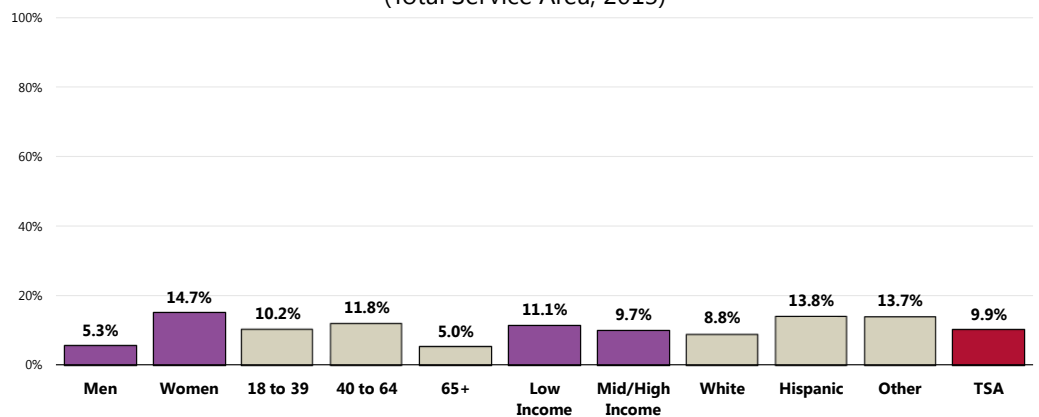
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 115-116]  
Notes: • Asked of all respondents.



Total Service Area adults more likely to use Facebook or Twitter for their local healthcare information include women and adults under 65.

## Use Social Media Websites (Facebook, Twitter, Etc.) to Obtain Local Healthcare Information

(Total Service Area, 2013)



Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 115]  
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.

# 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.

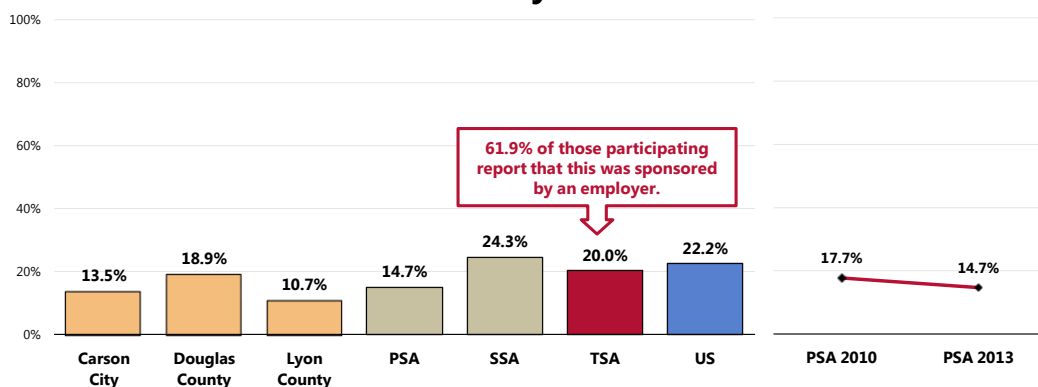
Educational and community-based programs encourage and enhance health and wellness by educating communities on topics such as: chronic diseases; injury and violence prevention; mental illness/behavioral health; unintended pregnancy; oral health; tobacco use; substance abuse; nutrition; and obesity prevention.

– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**A total of 20.0% of Total Service Area adults participated in some type of organized health promotion activity in the past year, such as health fairs, health screenings, or seminars.**


- Comparable to the national prevalence.
- Unfavorably low in Carson City and Lyon County; much higher in the Secondary Service Area than in the Primary Service Area.
- 📊 Unchanged since the 2010 Primary Service Area survey was conducted.
- 👥 Note that 61.9% of adults who participated in a health promotion activity in the past year indicate that it was sponsored by their employer.

## Participated in a Health Promotion Activity in the Past Year

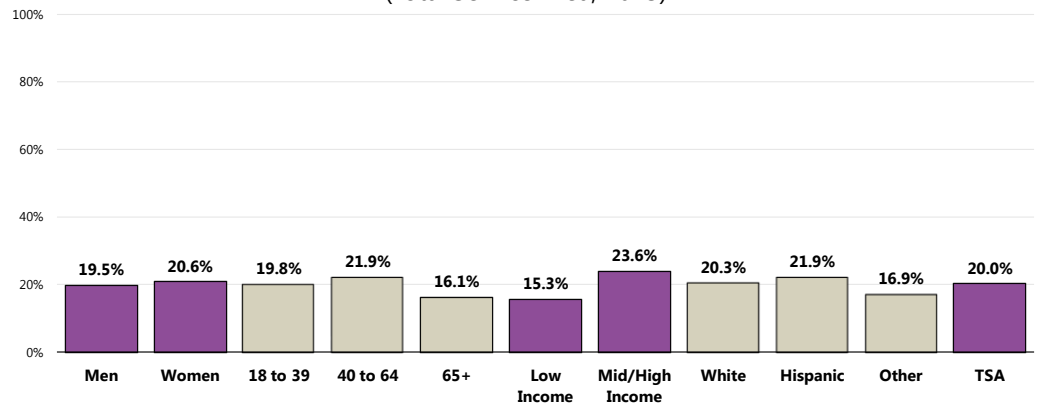


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 117-118]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

The following chart outlines participation by various demographic characteristics.

 Note that adults with higher incomes more often report participation in health promotion activities.

### Participated in a Health Promotion Activity in the Past Year (Total Service Area, 2013)

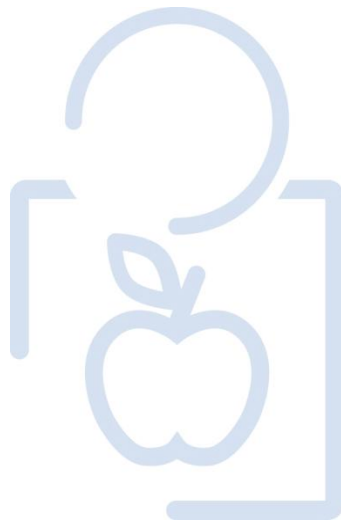


Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 117]

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.



# LOCAL RESOURCES

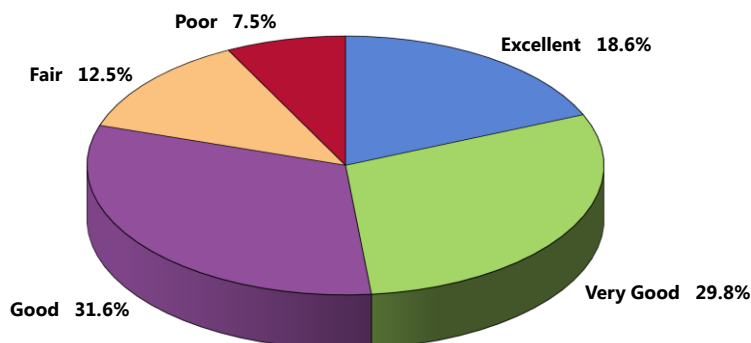


# Perceptions of Local Healthcare Services

Just less than one-half of Total Service Area adults (48.4%) rate the overall healthcare services available in their community as "excellent" or "very good."

- Another 31.6% gave "good" ratings.

**Rating of Overall Healthcare Services Available in the Community**  
(Total Service Area, 2013)

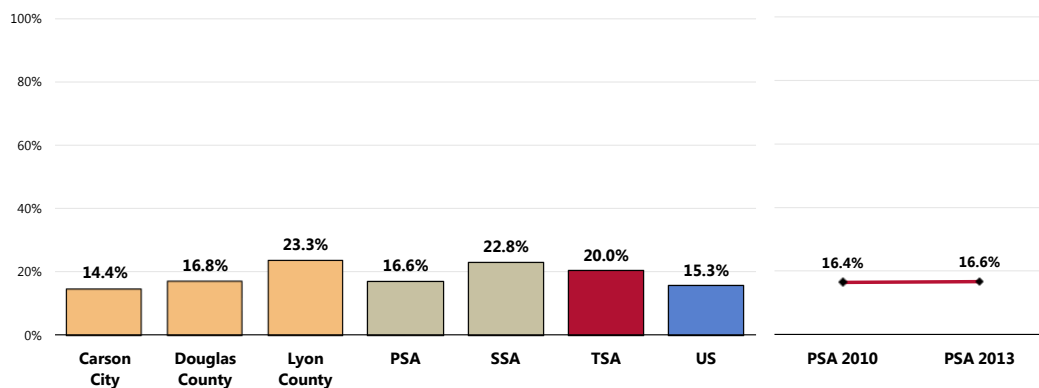


Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]  
Notes: • Asked of all respondents.

However, 20.0% of residents characterize local healthcare services as "fair" or "poor."

- Less favorable than reported nationally.
- Favorably low in Carson City; similar findings by service area.
- In the Primary Service Area, statistically unchanged over time.

**Perceive Local Healthcare Services as "Fair/Poor"**

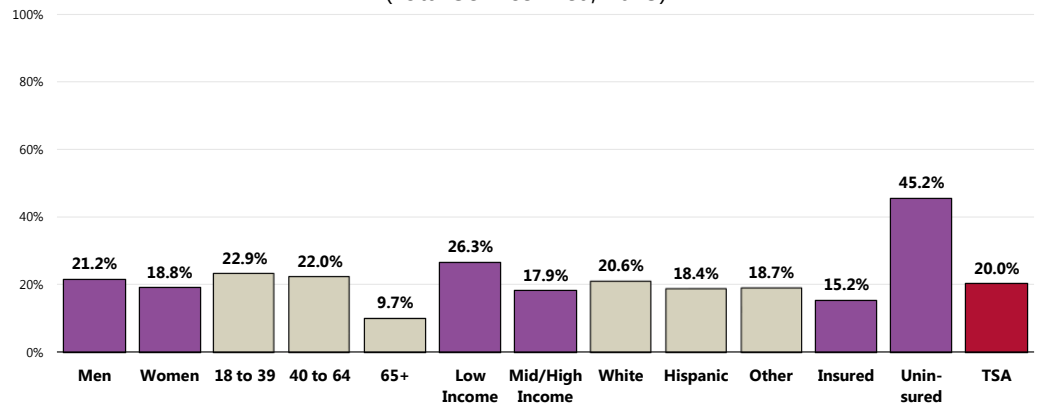


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 6]  
• 2011 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

The following residents are more critical of local healthcare services:

- 👤 Adults under age 65.
- 👤 Residents with lower incomes.
- 👤 Uninsured adults.

### Perceive Local Healthcare Services as “Fair/Poor” (Total Service Area, 2013)




Sources: • 2013 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]  
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.

# Resources Available to Address Significant Health Needs

The following represent potential measures and resources (such as programs, organizations, and facilities in the community) available to address the significant health needs identified in this report. This list is not exhaustive, but rather outlines those resources identified in the course of conducting this Community Health Needs Assessment.

- Behavioral Health Services
- Carson Area Wellness Association
- Carson City Health and Human Services
- Carson Mental Health
- Carson Tahoe Medical Center
- Chamber of Commerce
- Community Gardens
- Counselors/Private Psychiatrists
- Dentists
- Emergency Rooms
- Friends in Service Helping (FISH) Clinic
- Food 4 Thought
- HAWC Clinic (Reno, NV)
- Law Enforcement
- Let's Move Nevada
- Meals On Wheels
- Medicaid/Medicare
- Maternal Obstetrical Management (MOM) Clinic
- Muscle Powered Carson City
- Nevada Department of Health & Human Services
- Nevada Health Center
- Nevada Oral Healthcare Coalition
- Parks & Recreation
- Partnership Carson City (PCC)
- Pediatric Clinic
- Pharmacy Board
- Physicians
- Ross Medical Clinic

- 
- Rural Health Clinics
  - Sierra Nevada Health Center
  - School Districts
  - Tobacco Cessation Classes
  - Wal-Mart Clinics and \$4 Prescriptions List
  - Women, Infant & Children (WIC) Program

# Other Issues

## Collaboration

### Related Focus Group Findings

All participants agree that there is some collaboration happening in the community between schools, non-profit organizations, government agencies and healthcare facilities. The main ideas surrounding collaboration included:

- Varying opinions on the level of collaboration
- Lack of communication

Key informants have **varying opinions on the level of collaboration** occurring in the community. In general, participants believe that agencies have only recently begun to work more together. One example of recent collaboration includes Partnership Carson City (PCC) with funding assistance from the state and the Carson City Health and Human Services. PCC brings together over 30 agencies to network, discuss community concerns, and educate the public. A respondent explains PCC:

*"Carson City Health and Human Services started a community action agency network several years back and when Partnership Carson City came to the community, we partnered up with them to see if we couldn't grow that group. We now have about 35 agencies coming routinely to these meetings and they're sharing information. They're talking about a new service that they've got because they just got this grant or, 'Hey, does anybody know where I can get this or that?' And someone else will go, 'Yeah, we can do that.'" — Community Leader*

Friends In Service Helping (FISH), Sierra Family Health Center, Carson Tahoe Medical Center and other state agencies also coordinate services.

Other attendees describe a community that **lacks communication** and one in which every organization works autonomously:

*"I think everybody does their own thing. The hospital does their own thing. The city does their own thing. The schools do their own thing. But nobody talks to each other – in my opinion. I mean I've been part of the hospital board, and I know the hospital does outreach. Because we have talks. We have things going on. I know the schools have their own health. But there's no interconnection between any of these entities." — Physician*

## Elderly

### Related Focus Group Findings

Many focus group participants discussed services for elderly residents in the community. The main issues included:

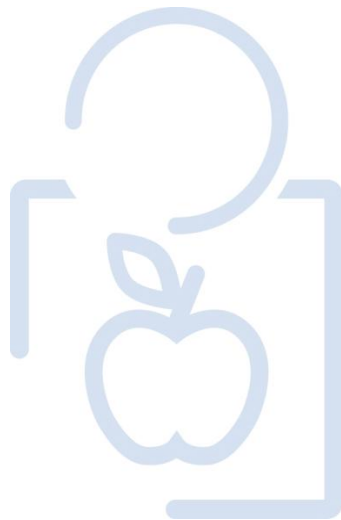
- Aging population
- Number of physicians who accept Medicare

According to focus group participants the **number of seniors in the community will continue to increase in the coming years** and Carson City already has a large elderly population. Currently, the community has several local agencies servicing elderly residents. These include nursing homes, independent living complexes, home health agencies, senior centers, and Meals on Wheels programming. However, respondents believe that the amount of resources to identify and combat elder abuse needs to increase.

Key informants worry that the residents on **Medicare will not be able to find a provider who will accept that insurance**. Many physicians only see a limited number of Medicare patients because of the low reimbursement rate. Other physicians will quickly drop a patient from their roster if they reschedule, don't show up, or cancel an appointment. A focus group member explains:

*"Well, anybody in private practice is not going to take Medicare patients. You can't even talk them into it. In fact, some of the physicians – family docs that are in private practice – are dismissing their Medicare patients at the slightest cause, and sometimes just saying, 'Well, you've got Medicare now. You have to go find another doctor.'" — Physician*

# APPENDICES





# Appendix I: Carson City Summary Table

## TREND SUMMARY

(Current vs. Baseline Data)

### Survey Data Indicators:

Trends for survey-derived indicators represent significant changes in Carson City since first measured (1999, in most cases).

### Other (Secondary) Data

**Indicators:** Trends for other Carson City indicators (e.g., public health data) represent point-to-point changes between the most current reporting period and the earliest presented in this report or previous reports (typically representing the span of roughly a decade).

































The following tables provide an overview of indicators in **Carson City**, including trend data.
















































### Reading the Summary Tables




























- In the following charts, Carson City results are shown in the larger, blue column.
- The columns to the right of the Carson City column provide trending, as well as comparisons to any available state and national findings, and Healthy People 2020 targets. Again, symbols indicate whether Carson City 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	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% [Age 18-64] Lack Health Insurance	20.7	☀️ 32.1	☁️ 14.9	🌧️ 0.0	☁️ 17.9
% [65+] With Medicare Supplement Insurance	69.6		☁️ 75.5		☁️ 77.5
% [Insured] Insurance Covers Prescriptions	89.9		☁️ 93.9		☁️ 92.2
% [Insured] Went Without Coverage in Past Year	6.2		☁️ 4.8		☁️ 7.0
% Difficulty Accessing Healthcare in Past Year (Composite)	44.1		🌧️ 37.3		☁️ 43.0
% Inconvenient Hrs Prevented Dr Visit in Past Year	13.4		☁️ 14.3		☁️ 9.9
% Cost Prevented Getting Prescription in Past Year	17.4		☁️ 15.0	🌧️	🌧️ 8.7
% Cost Prevented Physician Visit in Past Year	22.1		🌧️ 14.0		🌧️ 8.1
% Difficulty Getting Appointment in Past Year	19.2		☁️ 16.5	🌧️	🌧️ 12.1
% Difficulty Finding Physician in Past Year	16.1		🌧️ 10.7		🌧️ 5.8
% Transportation Hindered Dr Visit in Past Year	6.3		☁️ 7.7		☁️ 4.2





























Access to Health Services (continued)	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Skipped Prescription Doses to Save Costs	19.9	<div><div></div><div>14.8</div></div>			<div><div></div><div>18.8</div></div>
% Difficulty Getting Child's Healthcare in Past Year	7.9	<div><div></div><div>1.9</div></div>			<div><div></div><div>5.3</div></div>
% [Age 18+] Have a Specific Source of Ongoing Care	79.3	<div><div></div><div>76.3</div></div>	<div><div></div><div>95.0</div></div>	<div><div></div><div>73.0</div></div>	
% Have Had Routine Checkup in Past Year	57.6	<div><div></div><div>67.3</div></div>			<div><div></div><div>52.0</div></div>
% Child Has Had Checkup in Past Year	84.4	<div><div></div><div>87.0</div></div>			<div><div></div><div>75.5</div></div>
% Two or More ER Visits in Past Year	5.6	<div><div></div><div>6.5</div></div>			<div><div></div><div>4.9</div></div>
% Rate Local Healthcare "Fair/Poor"	14.4	<div><div></div><div>15.3</div></div>			<div><div></div><div>11.5</div></div>
% Member of HH Received Inpatient Care/Past 2 Years	33.4				
% Member of HH Received Long-Term Acute Care/3 Yrs	3.9				
% Member of HH Received Surgical Care/Past 3 Yrs	47.8				
		<div><div></div><div>better</div></div> <div><div></div><div>similar</div></div> <div><div></div><div>worse</div></div>			
Arthritis, Osteoporosis & Chronic Back Conditions	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% [50+] Arthritis/Rheumatism	32.9	<div><div></div><div>35.4</div></div>			<div><div></div><div>34.1</div></div>
% [50+] Osteoporosis	12.3	<div><div></div><div>11.4</div></div>	<div><div></div><div>5.3</div></div>	<div><div></div><div>8.7</div></div>	
% Sciatica/Chronic Back Pain	23.8	<div><div></div><div>21.5</div></div>			<div><div></div><div>21.9</div></div>
% Migraine/Severe Headaches	16.0	<div><div></div><div>16.9</div></div>			<div><div></div><div>16.7</div></div>
% Chronic Neck Pain	12.0	<div><div></div><div>8.3</div></div>			<div><div></div><div>11.3</div></div>
		<div><div></div><div>better</div></div> <div><div></div><div>similar</div></div> <div><div></div><div>worse</div></div>			

























Cancer	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Cancer (Age-Adjusted Death Rate)	210.5	 182.5	 175.6	 160.6	 207.7
Lung Cancer (Age-Adjusted Death Rate)	59.4	 47.4	 49.5	 45.5	
Prostate Cancer (Age-Adjusted Death Rate)	32.3	 22.7	 22.6	 21.2	
Female Breast Cancer (Age-Adjusted Death Rate)	25.5	 26.7	 22.6	 20.6	
Colorectal Cancer (Age-Adjusted Death Rate)	16.2	 18.8	 16.4	 14.5	
% Skin Cancer	9.4	 5.4	 8.1		 9.6
% Cancer (Other Than Skin)	6.3	 6.9	 5.5		 5.9
% [Men 50+] Prostate Exam in Past 2 Years	69.6		 70.5		 75.6
% [Women 50-74] Mammogram in Past 2 Years	68.5	 69.9	 79.9	 81.1	 76.3
% [Women 21-65] Pap Smear in Past 3 Years	74.7	 78.4	 84.7	 93.0	 78.7
% [Age 50+] Sigmoid/Colonoscopy Ever	67.9	 61.5	 72.0		 45.9
% [Age 50+] Blood Stool Test in Past 2 Years	25.9	 17.2	 28.3		 51.6
% [Age 50-75] Colorectal Cancer Screening	64.8			 70.5	
 better  similar  worse					
Chronic Kidney Disease	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Kidney Disease (Age-Adjusted Death Rate)	13.2		 14.7		 19.4
 better  similar  worse					













Diabetes	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Diabetes Mellitus (Age-Adjusted Death Rate)	37.2	 25.8	 21.7	 19.6	 28.9
% Diabetes/High Blood Sugar	9.5	 10.3	 10.1		 7.4
		 better	 similar	 worse	
Dementias, Including Alzheimer's Disease	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Alzheimer's Disease (Age-Adjusted Death Rate)	29.5	 17.7	 23.5		 20.5
		 better	 similar	 worse	
Educational & Community-Based Programs	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Attended Health Event in Past Year	13.5		 22.2		 19.5
% Use Social Media for Local Healthcare Info	10.4				
		 better	 similar	 worse	
Family Planning	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% of Births to Unwed Mothers	48.1	 40.0	 40.4		 43.9
Teenage Birth Rate (15-19)/1,000	53.5				
		 better	 similar	 worse	

General Health Status	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% "Fair/Poor" Physical Health	18.5	 20.2	 16.8		 11.3
% Activity Limitations	23.5	 23.2	 17.0		 18.8
 better  similar  worse					
Hearing & Other Sensory or Communication Disorders	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Deafness/Trouble Hearing	8.8		 9.6		 10.8
 better  similar  worse					
Heart Disease & Stroke	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Diseases of the Heart (Age-Adjusted Death Rate)	206.5	 203.1	 185.8	 152.7	 263.1
Stroke (Age-Adjusted Death Rate)	45.3	 36.6	 40.6	 33.8	 57.2
% Heart Disease (Heart Attack, Angina, Coronary Disease)	8.7		 6.1		 6.9
% Stroke	3.6	 3.2	 2.7		 2.5
% Blood Pressure Checked in Past 2 Years	92.6		 94.7	 94.9	 89.8
% Told Have High Blood Pressure (Ever)	38.3	 30.8	 34.3	 26.9	 24.6
% [HBP] Taking Action to Control High Blood Pressure	97.9		 89.1		 86.1
% Cholesterol Checked in Past 5 Years	86.8	 71.5	 90.7	 82.1	 77.4
% Told Have High Cholesterol (Ever)	32.9	 37.3	 31.4	 13.5	 25.0
% [HBC] Taking Action to Control High Blood Cholesterol	84.8		 89.1		 69.0


















Heart Disease & Stroke (continued)	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% 1+ Cardiovascular Risk Factor	87.0		86.3		81.8
		 better	 similar	 worse	
HIV	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% [Age 18-44] HIV Test in the Past Year	18.3		19.9	16.9	21.1
		 better	 similar	 worse	
Immunization & Infectious Diseases	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% [Age 65+] Flu Shot in Past Year	79.3	 53.7	 71.6	 90.0	 70.8
% [High-Risk 18-64] Flu Shot in Past Year	63.9		 52.5	 90.0	 54.5
% [Age 65+] Pneumonia Vaccine Ever	77.2	 68.9	 68.1	 90.0	 70.4
% [High-Risk 18-64] Pneumonia Vaccine Ever	44.6		 32.0	 60.0	 33.8
% Ever Vaccinated for Hepatitis B	36.2		 38.4		 33.8
		 better	 similar	 worse	
Injury & Violence Prevention	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Unintentional Injury (Age-Adjusted Death Rate)	39.0	 28.1	 38.7	 36.0	
% Child [Age 0-17] "Always" Uses Seat Belt/Car Seat	95.3		 91.6		 90.6
Violent Crime per 100,000	295.7	 322.9	 431.4		 384.6





















Injury & Violence Prevention (continued)	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Domestic Violence Offenses per 100,000	741.9	<div><div> 832.0</div></div>			
<div><div> better</div><div> similar</div><div> worse</div></div>					
Maternal, Infant & Child Health	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Less Than Adequate Prenatal Care	27.9				
% of Low Birthweight Births	6.4	<div><div> 10.6</div></div>	<div><div> 8.2</div></div>	<div><div> 7.8</div></div>	<div><div> 8.0</div></div>
% Alcohol Use During Pregnancy	12.4				<div><div> 10.8</div></div>
% Tobacco Use During Pregnancy	0.2				
<div><div> better</div><div> similar</div><div> worse</div></div>					
Mental Health & Mental Disorders	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% "Fair/Poor" Mental Health	12.8	<div><div> 11.7</div></div>			<div><div> 9.9</div></div>
% Major Depression	12.3	<div><div> 11.7</div></div>			<div><div> 8.2</div></div>
% Symptoms of Chronic Depression (2+ Years)	31.2	<div><div> 26.5</div></div>			<div><div> 21.1</div></div>
Suicide (Age-Adjusted Death Rate)	23.5	<div><div> 11.6</div></div>		<div><div> 10.2</div></div>	<div><div> 29.1</div></div>
% Have Ever Sought Help for Mental Health	23.3	<div><div> 24.4</div></div>			<div><div> 23.9</div></div>
% Typical Day Is "Extremely/Very" Stressful	10.9	<div><div> 11.5</div></div>			<div><div> 10.3</div></div>
<div><div> better</div><div> similar</div><div> worse</div></div>					














Nutrition & Weight Status	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Eat 5+ Servings of Fruit or Vegetables per Day	41.1	<div>48.8</div>			<div>35.3</div>
% Drink Filtered Water	71.8				<div>70.3</div>
% Medical Advice on Nutrition in Past Year	34.5	<div>41.9</div>			<div>35.8</div>
% Healthy Weight (BMI 18.5-24.9)	29.2	<div>31.7</div>		<div>33.9</div>	<div>43.0</div>
% Overweight	69.6	<div>60.2</div>	<div>66.9</div>		<div>55.2</div>
% Obese	22.4	<div>24.5</div>	<div>28.5</div>	<div>30.6</div>	<div>20.4</div>
% Medical Advice on Weight in Past Year	20.6	<div>25.7</div>			<div>23.4</div>
% [Overweights] Counseled About Weight in Past Year	23.7	<div>30.9</div>			<div>29.4</div>
% [Overweights] Trying to Lose Weight Both Diet/Exercise	37.6	<div>38.6</div>			<div>43.5</div>
		<div>bettersimilarworse</div>			






























Oral Health	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% [Age 18+] Dental Visit in Past Year	66.5	<div>67.2</div>	<div>66.9</div>	<div>49.0</div>	<div>67.0</div>
% Child [Age 2-17] Dental Visit in Past Year	89.2	<div>79.2</div>		<div>49.0</div>	<div>70.6</div>
% Have Dental Insurance	63.6	<div>60.8</div>			<div>65.8</div>
		<div>bettersimilarworse</div>			



























Physical Activity	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% [Employed] Job Entails Mostly Sitting/Standing	60.2	<div><div></div><div>63.2</div></div>			<div><div></div><div>61.3</div></div>
% No Leisure-Time Physical Activity	20.3	<div><div></div><div>24.3</div></div>	<div><div></div><div>28.7</div></div>	<div><div></div><div>32.6</div></div>	<div><div></div><div>26.1</div></div>
% Meeting Physical Activity Guidelines	49.4	<div><div></div><div>42.7</div></div>			<div><div></div><div>54.2</div></div>
% Moderate Physical Activity	29.2	<div><div></div><div>23.9</div></div>			<div><div></div><div>33.8</div></div>
% Vigorous Physical Activity	38.3	<div><div></div><div>34.8</div></div>			<div><div></div><div>43.2</div></div>
% Medical Advice on Physical Activity in Past Year	40.5	<div><div></div><div>47.8</div></div>			<div><div></div><div>40.0</div></div>
		<div><div></div><div>better</div></div> <div><div></div><div>similar</div></div> <div><div></div><div>worse</div></div>			

Respiratory Diseases	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
CLRD (Age-Adjusted Death Rate)	64.0	 30.4	 42.4		 61.8
Pneumonia/Influenza (Age-Adjusted Death Rate)	10.8	 14.7	 16.4		 21.7
% Nasal/Hay Fever Allergies	38.6		 27.3		 35.3
% Sinusitis	15.1		 19.4		 13.2
% Chronic Lung Disease	10.7		 8.4		 8.3
% [Adult] Currently Has Asthma	8.9	 8.1	 7.5		 7.0
% [Child 0-17] Currently Has Asthma	5.0		 6.8		 7.1
		 better	 similar	 worse	

Sexually Transmitted Diseases	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Gonorrhea Incidence per 100,000	16.3	 62.1	 103.2		 27.3
Chlamydia Incidence per 100,000	329.8	 261.3	 409.8		 215.1
% [Unmarried 18-64] 3+ Sexual Partners in Past Year	4.7		 7.1		 7.9
% [Unmarried 18-64] Using Condoms	40.1		 18.9		 34.8
		 better	 similar	 worse	

Substance Abuse	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	15.0	 8.9	 9.2	 8.2	 15.2
% Current Drinker	51.3	 57.0	 58.8		 64.5
% Chronic Drinker (Average 2+ Drinks/Day)	9.1	 6.8	 5.6		 8.8
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	15.5	 18.6	 16.7	 24.3	 17.7
% Drinking & Driving in Past Month	2.2		 3.5		 4.0
% Driving Drunk or Riding with Drunk Driver	3.0		 5.5		 7.5
Drug-Induced Deaths (Age-Adjusted Death Rate)	20.4	 10.5	 12.6	 11.3	
% Illicit Drug Use in Past Month	2.3		 1.7	 7.1	 3.4
% Ever Sought Help for Alcohol or Drug Problem	5.3		 3.9		 5.9
		 better	 similar	 worse	

Tobacco Use	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Current Smoker	21.0	 22.9	 16.6	 12.0	 23.0
% Someone Smokes at Home	11.3		 13.6		 14.1
% [Non-Smokers] Someone Smokes in the Home	4.6		 5.7		 6.7
% Smoke Cigars	5.2		 4.2	 0.2	 4.4
% Use Smokeless Tobacco	2.9		 2.8	 0.3	 3.6
		 better  similar  worse			

Vision	Carson City	Carson City vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Blindness/Trouble Seeing	10.3		 6.9		 9.5
% Eye Exam in Past 2 Years	56.8		 57.5		 63.2
		 better  similar  worse			

# Appendix II: Douglas County Summary Table

## TREND SUMMARY

(Current vs. Baseline Data)

### Survey Data Indicators:

Trends for survey-derived indicators represent significant changes in Douglas County since first measured (2001, in most cases).

### Other (Secondary) Data

**Indicators:** Trends for other

Douglas County indicators (e.g., public health data) represent point-to-point changes between the most current reporting period and the earliest presented in this report or previous reports (typically representing the span of roughly a decade).

















The following tables provide an overview of indicators in **Douglas County, Nevada**, including trend data.















### Reading the Summary Tables































- In the following charts, Douglas County results are shown in the larger, blue column.
- The columns to the right of the Douglas County column provide trending, as well as comparisons to any available state and national findings, and Healthy People 2020 targets. Again, symbols indicate whether Carson City 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	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% [Age 18-64] Lack Health Insurance	23.1	☀️ 32.1	☔️ 14.9	☔️ 0.0	☁️ 16.7
% [Insured] Insurance Covers Prescriptions	88.2		☔️ 93.9		☁️ 92.6
% [Insured] Went Without Coverage in Past Year	7.7		☁️ 4.8		☁️ 4.6
% Difficulty Accessing Healthcare in Past Year (Composite)	40.8		☁️ 37.3		☁️ 32.3
% Inconvenient Hrs Prevented Dr Visit in Past Year	11.6		☁️ 14.3		☁️ 10.8
% Cost Prevented Getting Prescription in Past Year	14.8		☁️ 15.0		☁️ 11.3
% Cost Prevented Physician Visit in Past Year	21.6		☔️ 14.0		☔️ 9.6
% Difficulty Getting Appointment in Past Year	16.3		☁️ 16.5		☁️ 15.9
% Difficulty Finding Physician in Past Year	10.2		☁️ 10.7		☁️ 9.1
% Transportation Hindered Dr Visit in Past Year	5.5		☁️ 7.7		☁️ 3.2
% Skipped Prescription Doses to Save Costs	17.8		☁️ 14.8		☁️ 15.9











































Access to Health Services (continued)	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Difficulty Getting Child's Healthcare in Past Year	12.2		 1.9		 3.7
% [Age 18+] Have a Specific Source of Ongoing Care	74.1		 76.3	 95.0	 67.1
% Have Had Routine Checkup in Past Year	56.1		 67.3		 60.2
% Child Has Had Checkup in Past Year	69.6		 87.0		 83.2
% Two or More ER Visits in Past Year	5.1		 6.5		 8.9
% Rate Local Healthcare "Fair/Poor"	16.8		 15.3		 17.4
% Member of HH Received Inpatient Care/Past 2 Years	28.5				
% Member of HH Received Long-Term Acute Care/3 Yrs	2.9				
% Member of HH Received Surgical Care/Past 3 Yrs	47.8				
					
		better	similar	worse	

Arthritis, Osteoporosis & Chronic Back Conditions	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% [50+] Arthritis/Rheumatism	31.1		 35.4		 41.7
% [50+] Osteoporosis	9.5		 11.4	 5.3	 9.2
% Sciatica/Chronic Back Pain	21.3		 21.5		 26.0
% Migraine/Severe Headaches	15.6		 16.9		 14.3
% Chronic Neck Pain	12.2		 8.3		 8.0
					
		better	similar	worse	





























Cancer	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Cancer (Age-Adjusted Death Rate)	152.5	 182.5	 175.6	 160.6	 164.3
% Skin Cancer	12.6	 5.4	 8.1		 14.4
% Cancer (Other Than Skin)	7.8	 6.9	 5.5		 5.0
% [Men 50+] Prostate Exam in Past 2 Years	76.2		 70.5		 87.2
% [Women 50-74] Mammogram in Past 2 Years	75.9	 69.9	 79.9	 81.1	 85.2
% [Women 21-65] Pap Smear in Past 3 Years	77.1	 78.4	 84.7	 93.0	 81.7
% [Age 50+] Sigmoid/Colonoscopy Ever	74.0	 61.5	 72.0		 52.8
% [Age 50+] Blood Stool Test in Past 2 Years	23.7	 17.2	 28.3		 54.4
% [Age 50-75] Colorectal Cancer Screening	71.3			 70.5	
 better  similar  worse					









































Diabetes	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Diabetes Mellitus (Age-Adjusted Death Rate)	17.4	 25.8	 21.7	 19.6	 12.1
% Diabetes/High Blood Sugar	8.0	 10.3	 10.1		 6.0
 better  similar  worse					








































Dementias, Including Alzheimer's Disease	Douglas County	Douglas County vs. Benchmarks			TREND
		vs. NV	vs. US	vs. HP2020	
Alzheimer's Disease (Age-Adjusted Death Rate)	15.4	 17.7	 23.5		 15.8
		 better	 similar	 worse	
Educational & Community-Based Programs	Douglas County	Douglas County vs. Benchmarks			TREND
		vs. NV	vs. US	vs. HP2020	
% Attended Health Event in Past Year	18.9		 22.2		 17.2
% Use Social Media for Local Healthcare Info	7.3				
		 better	 similar	 worse	
Family Planning	Douglas County	Douglas County vs. Benchmarks			TREND
		vs. NV	vs. US	vs. HP2020	
% of Births to Unwed Mothers	31.3	 40.0	 40.4		 26.4
Teenage Birth Rate (15-19)/1,000	25.7				
		 better	 similar	 worse	
General Health Status	Douglas County	Douglas County vs. Benchmarks			TREND
		vs. NV	vs. US	vs. HP2020	
% "Fair/Poor" Physical Health	13.1	 20.2	 16.8		 10.3
% Activity Limitations	21.3	 23.2	 17.0		 19.9
		 better	 similar	 worse	











Hearing & Other Sensory or Communication Disorders	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Deafness/Trouble Hearing	15.9		 9.6		 11.6
					
		better	similar	worse	
Heart Disease & Stroke	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Diseases of the Heart (Age-Adjusted Death Rate)	150.9	 203.1	 185.8	 152.7	 154.4
Stroke (Age-Adjusted Death Rate)	28.7	 36.6	 40.6	 33.8	 30.0
% Heart Disease (Heart Attack, Angina, Coronary Disease)	8.1		 6.1		 6.0
% Stroke	3.0	 3.2	 2.7		 1.4
% Blood Pressure Checked in Past 2 Years	94.1		 94.7	 94.9	 97.0
% Told Have High Blood Pressure (Ever)	35.9	 30.8	 34.3	 26.9	 27.7
% [HBP] Taking Action to Control High Blood Pressure	96.3		 89.1		 75.9
% Cholesterol Checked in Past 5 Years	85.0	 71.5	 90.7	 82.1	 83.2
% Told Have High Cholesterol (Ever)	34.7	 37.3	 31.4	 13.5	 30.4
% [HBC] Taking Action to Control High Blood Cholesterol	93.8		 89.1		 57.9
% 1+ Cardiovascular Risk Factor	84.3		 86.3		 86.1
					
		better	similar	worse	

































Immunization & Infectious Diseases	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Ever Vaccinated for Hepatitis B	33.3		 38.4	 34.5	
 better  similar  worse					
Injury & Violence Prevention	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Unintentional Injury (Age-Adjusted Death Rate)	50.8	 28.1	 38.7	 36.0	 48.5
% Child [Age 0-17] "Always" Uses Seat Belt/Car Seat	99.3		 91.6		 97.4
Firearm-Related Deaths (Age-Adjusted Death Rate)	16.4	 5.4	 10.2	 9.2	
Violent Crime per 100,000	161.9	 322.9	 431.4		 160.3
Domestic Violence Offenses per 100,000	542.4	 832.0			
 better  similar  worse					
Maternal, Infant & Child Health	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Less Than Adequate Prenatal Care	25.3				
% of Low Birthweight Births	7.5	 10.6	 8.2	 7.8	 9.2
% Alcohol Use During Pregnancy	0.8				
% Tobacco Use During Pregnancy	7.7				
% of C-Section Births	26.1				
 better  similar  worse					

































Mental Health & Mental Disorders	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% "Fair/Poor" Mental Health	12.4		 11.7		 5.2
% Major Depression	9.0		 11.7		 10.7
% Symptoms of Chronic Depression (2+ Years)	27.8		 26.5		 23.3
Suicide (Age-Adjusted Death Rate)	26.7		 11.6	 10.2	 13.4
% Have Ever Sought Help for Mental Health	25.3		 24.4		 23.7
% Typical Day Is "Extremely/Very" Stressful	7.7		 11.5		 6.6
		 better	 similar	 worse	
Nutrition & Weight Status	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Eat 5+ Servings of Fruit or Vegetables per Day	47.0		 48.8		 41.7
% Drink Filtered Water	54.4				 61.8
% Medical Advice on Nutrition in Past Year	38.1		 41.9		 44.1
% Healthy Weight (BMI 18.5-24.9)	30.9		 31.7	 33.9	 43.6
% Overweight	67.5	 60.2	 66.9		 52.5
% Obese	26.2	 24.5	 28.5	 30.6	 17.0
% Medical Advice on Weight in Past Year	17.7		 25.7		 25.3
% [Overweights] Counseled About Weight in Past Year	23.4		 30.9		 31.4
% [Overweights] Trying to Lose Weight Both Diet/Exercise	40.8		 38.6		 48.1
		 better	 similar	 worse	

Oral Health	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% [Age 18+] Dental Visit in Past Year	70.6	 67.2	 66.9	 49.0	 74.0
% Child [Age 2-17] Dental Visit in Past Year	80.2		 79.2	 49.0	 61.8
% Have Dental Insurance	58.2		 60.8		 61.8
 better  similar  worse					
Physical Activity	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% [Employed] Job Entails Mostly Sitting/Standing	65.6		 63.2		 63.2
% No Leisure-Time Physical Activity	19.5	 24.3	 28.7	 32.6	 14.9
% Meeting Physical Activity Guidelines	50.3		 42.7		 59.4
% Moderate Physical Activity	27.7		 23.9		 34.9
% Vigorous Physical Activity	40.0		 34.8		 43.2
% Medical Advice on Physical Activity in Past Year	44.2		 47.8		 47.1
 better  similar  worse					
Respiratory Diseases	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
CLRD (Age-Adjusted Death Rate)	34.5	 30.4	 42.4		 35.0
Pneumonia/Influenza (Age-Adjusted Death Rate)	16.9	 14.7	 16.4		 8.7
% Nasal/Hay Fever Allergies	31.6		 27.3		 39.4
% Sinusitis	10.2		 19.4		 13.8

Respiratory Diseases (continued)	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Chronic Lung Disease	9.3	<div><div></div><div>8.4</div></div>			<div><div></div><div>10.0</div></div>
% [Adult] Currently Has Asthma	5.3	<div><div></div><div>8.1</div></div>	<div><div></div><div>7.5</div></div>	<div><div></div><div>7.6</div></div>	
% [Child 0-17] Currently Has Asthma	3.1	<div><div></div><div>6.8</div></div>			<div><div></div><div>2.7</div></div>
	<div><div></div><div>better</div></div> <div><div></div><div>similar</div></div> <div><div></div><div>worse</div></div>				

Sexually Transmitted Diseases	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Chlamydia Incidence per 100,000	154.9	<div> 261.3</div>	<div> 409.8</div>		<div> 142.7</div>
% [Unmarried 18-64] 3+ Sexual Partners in Past Year	8.4		<div> 7.1</div>		<div> 3.4</div>
% [Unmarried 18-64] Using Condoms	22.3		<div> 18.9</div>		<div> 45.1</div>
		<div> better</div>	<div> similar</div>	<div> worse</div>	

Substance Abuse	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	16.1	 8.9	 9.2	 8.2	
% Current Drinker	61.7	 57.0	 58.8		 70.2
% Chronic Drinker (Average 2+ Drinks/Day)	5.5	 6.8	 5.6		 15.0
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	13.5	 18.6	 16.7	 24.3	 20.4
% Drinking & Driving in Past Month	1.0		 3.5		 4.5
% Driving Drunk or Riding with Drunk Driver	2.9		 5.5		 2.2
Drug-Induced Deaths (Age-Adjusted Death Rate)	24.3	 10.5	 12.6	 11.3	

Substance Abuse (continued)	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Illicit Drug Use in Past Month	2.1				2.5
		1.7	7.1		
% Ever Sought Help for Alcohol or Drug Problem	2.3				4.6
		3.9			
					
		better	similar	worse	
Tobacco Use	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Current Smoker	12.9				
		22.9	16.6	12.0	22.2
% Someone Smokes at Home	10.6				
		13.6			5.7
% [Non-Smokers] Someone Smokes in the Home	6.7				
		5.7			1.7
% Smoke Cigars	2.3				
		4.2	0.2		3.4
% Use Smokeless Tobacco	4.6				
		2.8	0.3		1.0
					
		better	similar	worse	
Vision	Douglas County	Douglas County vs. Benchmarks			
		vs. NV	vs. US	vs. HP2020	TREND
% Blindness/Trouble Seeing	6.4				
		6.9			6.3
% Eye Exam in Past 2 Years	65.2				
		57.5			62.4
					
		better	similar	worse	