2019 Community Health Needs Assessment Report

Primary Service Area

Prepared for:
Carson Tahoe Health

Carson Tahoe Regional Healthcare,
dba **Carson Tahoe Regional Medical Center**

Carson Tahoe Continuing Care Hospital, Inc.

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Table of Contents

Introduction

Professional Research Consultants, Inc.

Project Overview

Project Goals

This Community Health Needs Assessment, a follow-up to similar studies conducted in 2010, 2013, and 2016, is a systematic, data-driven approach to determining the health status, behaviors, and needs of residents in the Primary Service Area of Carson Tahoe Health (CTH), a Nevada nonprofit corporation, and its wholly-owned subsidiaries, Carson Tahoe Regional Healthcare (CTRH), a Nevada nonprofit corporation doing business as Carson Tahoe Regional Medical Center (CTRMC), and Carson Tahoe Continuing Care Hospital, Inc. (CTCCH), a Delaware nonprofit corporation. 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 that historically have 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 CTRH, CTRMC, and CTCCH (collectively Carson Tahoe Health) by Professional Research Consultants, Inc. (PRC). PRC is a nationally recognized healthcare consulting firm with extensive experience conducting Community Health Needs Assessments in hundreds of communities across the United States since 1994.

Methodology

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

PRC Community Health Survey

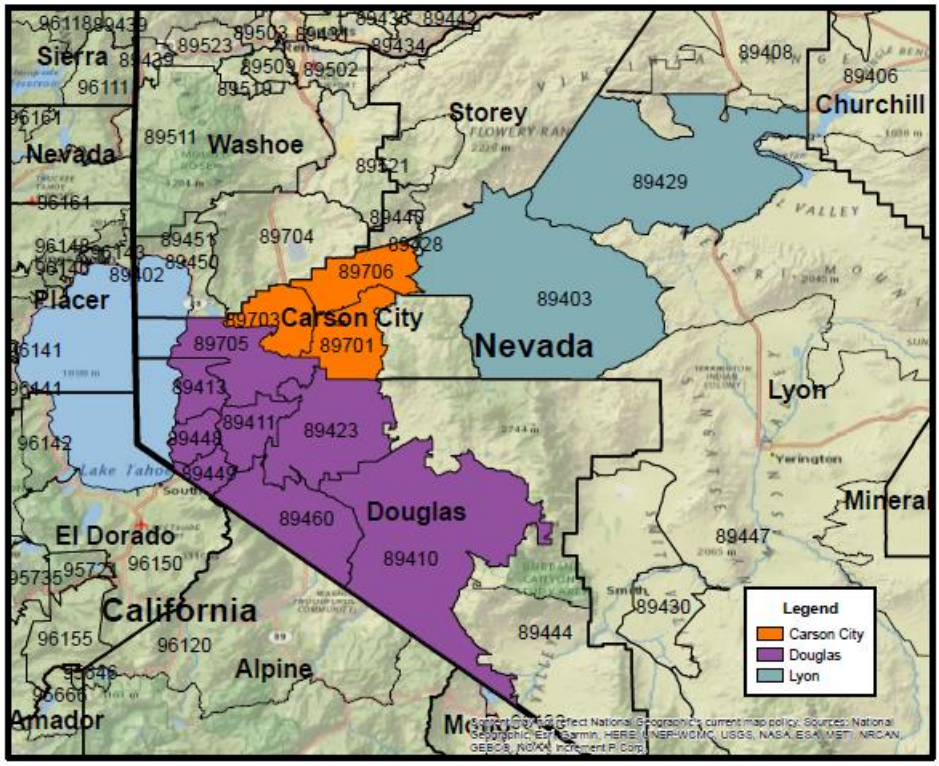
Survey Instrument

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 Carson Tahoe Health[1] and PRC and is similar to the 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 "Primary Service Area" in this report) is defined as residential ZIP Codes in Carson City and portions of Douglas and Lyon Counties in Nevada. This community definition, determined based on the ZIP Codes of residence of recent patients of Carson Tahoe Health, is illustrated in the following map. Note that all of the named facilities (CTRH, CTRMC, and CTCCH) use the same definition of community.

[1]CTH is the parent corporation having ownership and governance authority over CTRMC and CTCCH. CTRMC is a Nevada-licensed acute care hospital providing a wide variety of services, and CTCCH is a Nevada-licensed long-term acute care hospital providing care for patients who stay more than 25 days (on average).



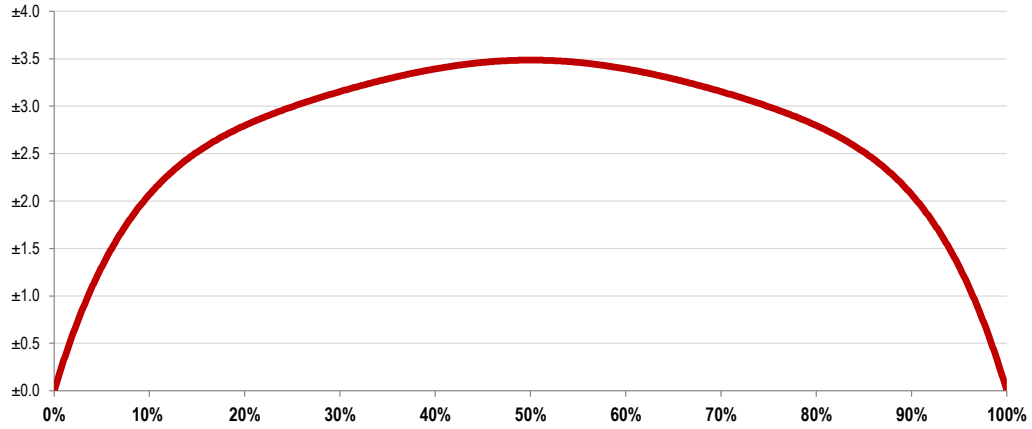
Sample Approach & Design

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

The sample design used for this effort consisted of a random sample of 800 individuals age 18 and older in the Primary Service Area, including 362 in Carson City, 299 in Douglas County, and 139 in Lyon County. All administration of the surveys, data collection and data analysis was conducted by PRC.

For statistical purposes, the maximum rate of error associated with a sample size of 800 respondents is ±3.5% at the 95 percent confidence level.

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 7.9% and 12.1% (10% ± 2.1%) 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% ± 3.5%) of the total population would respond "yes" if asked this question.

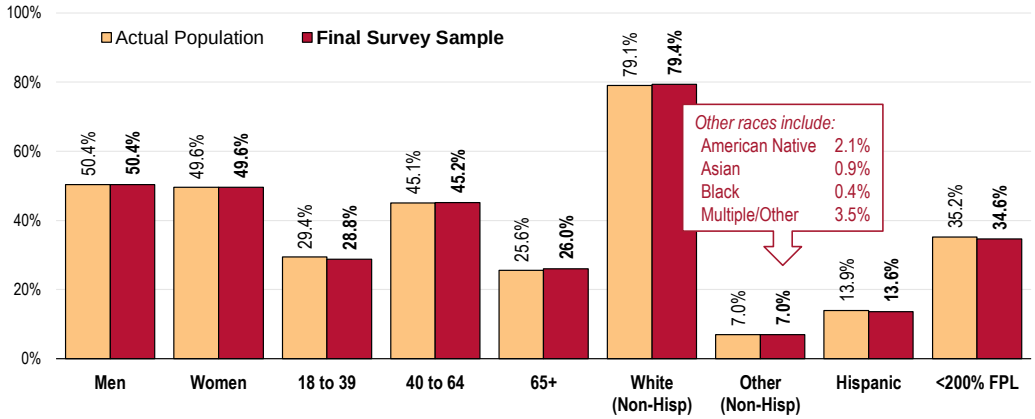
Sample Characteristics

To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. 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 sex, 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 Primary 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 & Survey Sample Characteristics

(Primary Service Area, 2019)



Sources:
- U.S. Census Bureau, 2011-2015 American Community Survey.
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc.

Notes:
- FPL is federal poverty level, based on guidelines established by the US Department of Health & Human Services.

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 2019 guidelines place the poverty threshold for a family of four at $25,750 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 (<200% of) the poverty threshold; "**mid/high income**" refers to those households living on incomes which are twice or more (≥200% of) the federal poverty level.

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

Online Key Informant Survey

To solicit input from key informants, those individuals who have a broad interest in the health of the community, an Online Key Informant Survey also was implemented as part of this process. A list of recommended participants was provided by Carson Tahoe Health; this list included names and contact information for physicians, public health representatives, other health professionals, social service providers, and a variety of other community leaders. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall.

Key informants were contacted by email, introducing the purpose of the survey and providing a link to take the survey online; reminder emails were sent as needed to increase participation. In all, 95 community stakeholders took part in the Online Key Informant Survey, as outlined in the following table:

Online Key Informant Survey Participation	
Key Informant Type	**Number Participating**
Physicians	37
Public Health Representatives	5
Other Health Providers	7
Social Services Providers	7
Other Community Leaders	39

Final participation included representatives of the organizations outlined below.

- Carson Tahoe Health
- Carson Tahoe Regional Medical Center
- Lyon County School District
- Ron Wood Family Resource Center
- American Cancer Society
- Carson City Chamber of Commerce
- Carson City Fire Department
- Carson City Health and Human Services
- Carson Medical Group
- Carson Surgical Group
- Carson Tahoe Emergency Department
- Carson Tahoe Emergency Physicians
- Carson Valley Chamber of Commerce
- Carson Valley Inn
- Carson Tahoe Regional Healthcare
- Douglas County Community Development
- Douglas County Social Services
- East Fork Fire Protection District
- FISH (Friends In Service Helping)
- Food for Thought, Inc.
- Healthy Communities Coalition
- High Sierra AHEC
- Immunize Nevada
- In Plain Sight Marketing, LLC
- JOIN Inc.
- Millard Realty, Rental Department
- Nevada Day Inc.
- Nevada JobConnect
- Nevada Medicaid
- Nevada Nurses Association
- Nevada State Immunization Program
- North Star Construction
- RJS Properties, Inc.
- Sierra Lutheran High School
- Storey County School District
- Tahoe Carson Radiology
- The Capital City C.I.R.C.L.E.S. Initiative- A NETworX USA Affiliate
- The Micromanipulator Company
- Washoe Tribe Head Start Program

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

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

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

Public Health, Vital Statistics & Other Data

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

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

Note that secondary data reflect compilations of city- and county-level data.

Benchmark Data

Trending

Similar surveys were administered in the Primary Service Area in 2010, 2013, and 2016 by PRC on behalf of Carson Tahoe Health. Trending data, as revealed by comparison to prior survey results, are provided throughout this report whenever available. Historical data for secondary data indicators are also included for the purposes of trending.

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 represent the most recent *BRFSS (Behavioral Risk Factor Surveillance System) Prevalence and Trends Data* published online by the Centers for Disease Control and Prevention. State-level vital statistics are also provided for comparison of secondary data indicators.

Nationwide Risk Factor Data

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

Healthy People 2020

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. For three decades, Healthy People has established benchmarks and monitored progress over time in order to:

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

Healthy People strives to:

- Identify nationwide health improvement priorities.
- Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress.
- Provide measurable objectives and goals that are applicable at the national, State, and local levels.
- Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge.
- Identify critical research, evaluation, and data collection needs.

Determining Significance

Differences noted in this report represent those determined to be significant. For survey-derived indicators (which are subject to sampling error), statistical significance is determined based on confidence intervals (at the 95 percent confidence level), using question-specific samples and response rates. For the purpose of this report, "significance" of secondary data indicators (which do not carry sampling error but might be subject to reporting error) is determined by a 15% variation from the comparative measure.

Information Gaps

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

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

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

Public Comment

Carson Tahoe Health made its prior Community Health Needs Assessment (CHNA) report publicly available through its website; through that mechanism, the hospital requested from the public written comments and feedback regarding the CHNA and implementation strategy. At the time of this writing, Carson Tahoe Health had not received any written comments. However, through population surveys and key informant feedback for this assessment, input from the broader community was considered and taken into account when identifying and prioritizing the significant health needs of the community. Carson Tahoe Health will continue to use its website as a tool to solicit public comments and ensure that these comments are considered in the development of future CHNAs.

IRS Form 990, Schedule H Compliance

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

IRS Form 990, Schedule H (2018)	See Report Page
Part V Section B Line 3a *A definition of the community served by the hospital facility*	8
Part V Section B Line 3b *Demographics of the community*	39
Part V Section B Line 3c *Existing health care facilities and resources within the community that are available to respond to the health needs of the community*	198
Part V Section B Line 3d *How data was obtained*	8
Part V Section B Line 3e *The significant health needs of the community*	17
Part V Section B Line 3f *Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups*	Addressed Throughout
Part V Section B Line 3g *The process for identifying and prioritizing community health needs and services to meet the community health needs*	18
Part V Section B Line 3h *The process for consulting with persons representing the community's interests*	11
Part V Section B Line 3i *The impact of any actions taken to address the significant health needs identified in the hospital facility's prior CHNA(s)*	205

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. From these data, opportunities for health improvement exist in the area with regard to the following health issues (see also the summary tables presented in the following section).

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

Areas of Opportunity Identified Through This Assessment	

Access to Healthcare Services	• Barriers to Access
	  ○ Appointment Availability
	  ○ Finding a Physician
	• Primary Care Physician Ratio
	• Emergency Room Utilization
	• Advance Directives
	• *Key Informants: Access to healthcare ranked as a top concern.*

Cancer	• Leading Cause of Death • Colorectal Cancer Deaths • Skin Cancer Prevalence • Cancer (Non-Skin) Prevalence • Cervical Cancer Screening [Age 21-65]
Diabetes	• Diabetes Deaths • *Key Informants: Diabetes ranked as a top concern.*
Heart Disease & Stroke	• Leading Cause of Death • High Blood Pressure Prevalence
Infant Health	• Infant Deaths
Injury & Violence	• Unintentional Injury Deaths ○ Including Motor Vehicle Crash Deaths • Firearm-Related Deaths
Kidney Disease	• Kidney Disease Deaths
Mental Health	• "Fair/Poor" Mental Health • Suicide Deaths • Diagnosed Depression • Access to Mental Health Providers • *Key Informants: Mental health ranked as a top concern.*

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Areas of Opportunity (continued)	
Nutrition, Physical Activity & Weight	• Fruit/Vegetable Consumption • Low Food Access • Overweight & Obesity [Adults] • Trying to Lose Weight [Overweight Adults] • Leisure-Time Physical Activity • Healthy Weight [Children] • Children's Physical Activity
Potentially Disabling Conditions	• Alzheimer's Disease Deaths • Activity Limitations • Caregiving • *Key Informants: Dementia/Alzheimer's disease ranked as a top concern.*
Respiratory Diseases	• Chronic Lower Respiratory Disease (CLRD) Deaths • Chronic Obstructive Pulmonary Disease (COPD) Prevalence
Substance Abuse	• Cirrhosis/Liver Disease Deaths • Unintentional Drug-Related Deaths • Personally Impacted by Substance Abuse (Self or Other's) • *Key Informants: Substance abuse ranked as a top concern.*
Tobacco Use	• Use of Vaping Products

Community Feedback on Prioritization of Health Needs

On August 21, 2010, Carson Tahoe Health convened a group of more than 40 community stakeholders (representing a cross-section of community-based agencies and organizations, as well as internal team members) to evaluate, discuss and prioritize health issues for community, based on findings of this Community Health Needs Assessment (CHNA). Professional Research Consultants, Inc. (PRC) began the meeting with a presentation of key findings from the CHNA, highlighting the significant health issues identified from the research (see Areas of Opportunity above). Following the data review, PRC answered any questions. Finally, participants were provided an overview of the prioritization exercise that followed.

In order to assign priority to the identified health needs (i.e., Areas of Opportunity), a wireless audience response system was used in which each participant was able to register his/her ratings using a small remote keypad. The participants were asked to evaluate each health issue along two criteria:

- Scope & Severity — The first rating was to gauge the magnitude of the problem in consideration of the following:
    - How many people are affected?
    - How does the local community data compare to state or national levels, or Healthy People 2020 targets?
    - To what degree does each health issue lead to death or disability, impair quality of life, or impact other health issues?

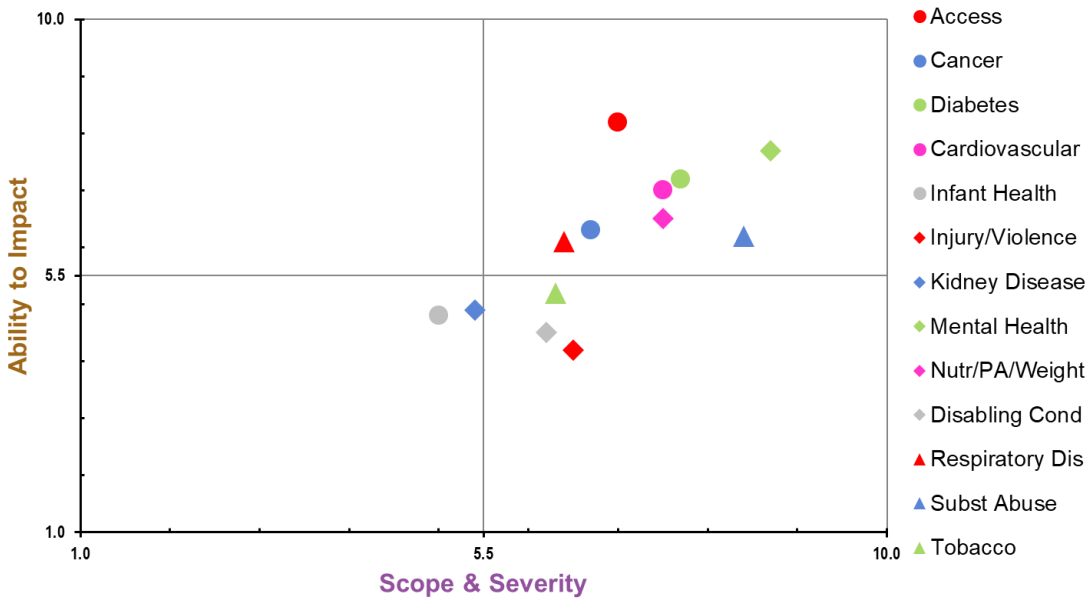
Ratings were entered on a scale of 1 (not very prevalent at all, with only minimal health consequences) to 10 (extremely prevalent, with very serious health consequences).

- Ability to Impact — A second rating was designed to measure the perceived likelihood of the hospital having a positive impact on each health issue, given available resources, competencies, spheres of influence, etc. Ratings were entered on a scale of 1 (no ability to impact) to 10 (great ability to impact).

Individuals' ratings for each criteria were averaged for each tested health issue, and then these composite criteria scores were averaged to produce an overall score. This process yielded the following prioritized list of community health needs:

1. **Mental Health**
2. **Access to Healthcare**
3. **Diabetes**
4. **Heart Disease & Stroke**
5. **Substance Abuse**
6. **Nutrition, Physical Activity & Weight**
7. **Cancer**
8. **Respiratory Diseases**
9. **Tobacco Use**
10. **Injury & Violence**
11. **Potentially Disabling Conditions**
12. **Kidney Disease**
13. **Infant Health**

Plotting these overall scores in a matrix illustrates the intersection of the Scope & Severity and the Ability to Impact scores. Below, those issues placing in the upper right quadrant represent health needs rated as most severe, with the greatest ability to impact.



Hospital Implementation Strategy

Carson Tahoe Health will use the information from this Community Health Needs Assessment to develop an Implementation Strategy to address the significant health needs in the community. While the hospital will likely not implement strategies for all of the health issues listed above, the results of this prioritization exercise will be used to inform the development of the hospital's action plan to guide community health improvement efforts in the coming years.

Note: An evaluation of the hospital's past activities to address the needs identified in prior CHNAs can be found as an appendix to this report.

Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in the Primary Service Area of Carson Tahoe Health, including comparisons among the individual communities, as well as trend data. These data are grouped by health topic.

Reading the Summary Tables

TREND SUMMARY
(Current vs. Baseline Data)

Survey Data Indicators: Trends for survey-derived indicators represent significant changes since 2010 (or the year the indicator was first measured). Note that survey data reflect the ZIP Code-defined Primary Service Area.

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 (typically representing the span of roughly a decade).

Note that secondary data reflect composite city- and county-level data.

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

The green columns [to the left of the Primary Service Area (PSA) column] provide comparisons among the three communities, identifying differences for each as "better than" (), "worse than" (), or "similar to" () the combined opposing areas.

The columns to the right of the Primary Service Area (PSA) column provide trending, as well as comparisons between local data and any available state and national findings, and Healthy People 2020 objectives. Again, symbols indicate whether Primary Service Area compares favorably (), unfavorably (), or comparably () to these external data.

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

Social Determinants	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
Linguistically Isolated Population (Percent)	5.0	1.8	1.5	2.8	6.1	4.5		
Population in Poverty (Percent)	16.7	10.9	15.3	14.4	14.9	15.1		
Children in Poverty (Percent)	27.1	16.5	20.7	21.9	21.3	21.2		
No High School Diploma (Age 25+, Percent)	12.7	7.0	15.0	11.6	14.6	13.0		
Unemployment Rate (Age 16+, Percent)	5.7	4.8	6.4	5.6	4.6	4.1		5.7
% Low Health Literacy	19.6	11.5	12.1	15.3		23.3		18.2

Note: In the green section, each subarea is compared against all other areas combined. 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.

better similar worse

Overall Health	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% "Fair/Poor" Overall Health	18.1	12.9	19.6	16.4	20.3	18.1		15.6

Note: In the green section, each subarea is compared against all other areas combined. 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.

better similar worse

Access to Health Services	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% [Age 18-64] Lack Health Insurance	8.5	9.6	8.0	8.8	19.4	13.7	0.0	18.8
% Left Local Area for Care in Past Year	8.1	17.9	17.7	13.4				
% Difficulty Accessing Healthcare in Past Year (Composite)	40.3	47.6	50.4	44.8		43.2		40.4
% Difficulty Finding Physician in Past Year	10.0	18.6	21.8	15.3		13.4		10.9
% Difficulty Getting Appointment in Past Year	22.2	29.6	25.5	25.5		17.5		14.3
% Cost Prevented Physician Visit in Past Year	15.1	14.5	22.6	16.2		15.4		18.3
% Transportation Hindered Dr Visit in Past Year	5.4	8.1	5.3	6.4		8.3		5.7
% Inconvenient Hrs Prevented Dr Visit in Past Year	10.1	9.8	11.6	10.3		12.5		12.1
% Language/Culture Prevented Care in Past Year	2.4	0.0	0.0	1.1		1.2		0.6
% Cost Prevented Getting Prescription in Past Year	15.8	9.0	21.4	14.2		14.9		16.3
% Skipped Prescription Doses to Save Costs	13.3	15.9	18.0	15.1		15.3		18.9

Access to Health Services (continued)	Disparity Among Communities			PSA	PSA vs. Benchmarks			TREND
	Carson City	Douglas County	Lyon County		vs. NV	vs. US	vs. HP2020	
% Difficulty Getting Child's Healthcare in Past Year	6.0	1.2		4.3		5.6		4.7
Primary Care Doctors per 100,000	88.0	69.4	21.2	59.8	64.2	87.8		56.0
% Have a Specific Source of Ongoing Care	73.9	70.5	77.9	73.3		74.1	95.0	70.9
% Have Had Routine Checkup in Past Year	70.3	71.9	64.0	69.8	67.9	68.3		57.1
% Child Has Had Checkup in Past Year	86.0	91.3		85.8		87.1		80.1
% Two or More ER Visits in Past Year	10.7	8.3	11.3	9.9		9.3		6.6
% Member of HH Received Long-Term Acute Care in Past 3 Years	6.2	3.8	9.5	5.9				4.0
% Use Social Media to Find Local Healthcare Info	14.5	10.9	15.4	13.3				9.9
% Use Other Internet Sites for Local Healthcare Info	50.5	58.2	53.0	53.9				52.1
% Rate Local Healthcare "Fair/Poor"	14.2	15.6	30.7	17.6		16.2		16.4
% Have Completed Advance Directive Documents	31.7	41.7	32.7	35.6		34.6		43.2

Cancer	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
Cancer (Age-Adjusted Death Rate)	187.2	120.0	178.0	159.7	156.6	155.6	161.4	185.6
Lung Cancer (Age-Adjusted Death Rate)				39.1	39.1	38.5	45.5	
Prostate Cancer (Age-Adjusted Death Rate)				21.0	18.2	18.9	21.8	
Female Breast Cancer (Age-Adjusted Death Rate)				18.8	21.3	20.1	20.7	
Colorectal Cancer (Age-Adjusted Death Rate)				16.6	16.6	13.9	14.5	
% Cancer (Other Than Skin)	10.8	10.1	7.6	10.0	6.5	7.1		7.8
% Skin Cancer	11.3	15.6	12.5	13.1	6.2	8.5		11.2
% [Women 50-74] Mammogram in Past 2 Years	73.4	80.2	70.3	75.9	73.3	77.0	81.1	80.0
% [Women 21-65] Pap Smear in Past 3 Years	71.6	66.1		68.1	74.8	73.5	93.0	79.6
% [Age 50-75] Colorectal Cancer Screening	74.2	75.2	70.3	73.9	62.2	76.4	70.5	68.5

Note: In the green section, each subarea is compared against all other areas combined. 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.

better | similar | worse

Diabetes	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
Diabetes (Age-Adjusted Death Rate)	29.3	15.5	29.2	24.4	16.5	21.3	20.5	27.1
% Diabetes/High Blood Sugar	14.0	7.8	15.5	11.9	10.4	13.3		12.4
% Borderline/Pre-Diabetes	7.3	15.7	5.0	10.1		9.5		9.3
% [Diabetics] Taking Insulin				85.5				76.5
% [Non-Diabetes] Blood Sugar Tested in Past 3 Years	57.9	51.8	59.8	55.8		50.0		52.9

Note: In the green section, each subarea is compared against all other areas combined. 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.

	better	similar	worse

Heart Disease & Stroke	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
Diseases of the Heart (Age-Adjusted Death Rate)	196.7	128.9	190.3	171.4	202.0	166.3	156.9	179.4
Stroke (Age-Adjusted Death Rate)	38.1	27.2	51.3	37.5	36.3	37.5	34.8	34.9
% Heart Disease (Heart Attack, Angina, Coronary Disease)	8.3	7.6	6.6	7.7		8.0		10.6
% Stroke	2.8	3.4	5.6	3.5	3.0	4.7		2.8

Heart Disease & Stroke (continued)	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% Blood Pressure Checked in Past 2 Years	94.8	94.8	91.3	94.2		90.4	92.6	92.6
% Told Have High Blood Pressure (Ever)	41.9	38.3	38.7	40.0	32.7	37.0	26.9	36.3
% [HBP] Taking Action to Control High Blood Pressure	87.6	95.1	87.2	90.4		93.8		92.4
% Cholesterol Checked in Past 5 Years	90.1	94.6	90.5	91.8	84.8	85.1	82.1	83.9
% Told Have High Cholesterol (Ever)	32.9	41.5	36.1	36.7		36.2	13.5	36.6
% [HBC] Taking Action to Control High Blood Cholesterol	87.9	94.0	90.1	90.9		87.3		90.4
% 1+ Cardiovascular Risk Factor	86.7	86.1	85.3	86.2		87.2		83.8

Note: In the green section, each subarea is compared against all other areas combined. 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.

better similar worse

Infant Health & Family Planning	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
Low Birthweight Births (Percent)	7.0	8.4	7.4	7.5	8.2	8.2	7.8	7.6
Infant Death Rate				5.9	5.5	5.8	6.0	3.2
Births to Adolescents Age 15 to 19 (Rate per 1,000)	50.7	18.9	39.4	37.4	43.6	36.6		43.4

Note: In the green section, each subarea is compared against all other areas combined. 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.

better similar worse

Injury & Violence	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
Unintentional Injury (Age-Adjusted Death Rate)	80.0	43.4	62.8	62.9	46.4	46.7	36.4	45.0
Motor Vehicle Crashes (Age-Adjusted Death Rate)	20.2		19.4	16.5	11.2	11.4	12.4	
[65+] Falls (Age-Adjusted Death Rate)				61.5	59.1	62.1	47.0	
Firearm-Related Deaths (Age-Adjusted Death Rate)	15.3	12.5	19.2	15.7	16.1	11.6	9.3	
Homicide (Age-Adjusted Death Rate)				4.2	6.1	5.6	5.5	
Violent Crime Rate	257.0	138.5	272.8	225.9	610.1	379.7		

Kidney Disease	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
Kidney Disease (Age-Adjusted Death Rate)	19.5	8.3	15.5	14.4	9.4	13.2		12.1
% Kidney Disease	3.4	4.8	4.9	4.2	4.2	3.8		2.9

Note: In the green section, each subarea is compared against all other areas combined. 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.

better similar worse

Mental Health	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% "Fair/Poor" Mental Health	14.8	11.8	10.0	12.9		13.0		8.6
% Diagnosed Depression	19.9	19.2	17.8	19.3	15.6	21.6		19.2
% Symptoms of Chronic Depression (2+ Years)	37.3	27.6	29.3	32.3		31.4		28.3
% Typical Day Is "Extremely/Very" Stressful	12.7	11.4	6.9	11.2		13.4		8.5
Suicide (Age-Adjusted Death Rate)	25.9	19.7	22.5	22.8	20.0	13.6	10.2	24.1
Mental Health Providers per 100,000	198.0	100.9	127.4	144.3	175.1	202.8		
% Taking Rx/Receiving Mental Health Trtmt	17.0	17.0	8.4	15.5		13.9		13.6

Mental Health (continued)	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% Have Ever Sought Help for Mental Health	35.1	34.6	29.0	33.9		30.8		28.7
% [Those With Diagnosed Depression] Seeking Help	93.9	97.3		95.1		87.1		87.9
% Unable to Get Mental Health Svcs in Past Yr	6.4	4.8	1.9	5.0		6.8		3.3
Alzheimer's Disease (Age-Adjusted Death Rate)	39.4	29.9	23.4	31.5	28.3	30.2		23.6

Note: In the green section, each subarea is compared against all other areas combined. 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.

better similar worse

Nutrition, Physical Activity & Weight	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% Worried About Food in the Past Year	27.3	17.0	21.8	22.4		25.3		21.8
% 5+ Servings of Fruits/Vegetables per Day	32.1	31.2	23.6	30.3		33.5		47.0
% "Very/Somewhat" Difficult to Buy Fresh Produce	14.2	15.5	19.4	15.6		22.1		18.3
Population With Low Food Access (Percent)	25.1	49.1	38.6	37.0	24.1	22.4		
% No Leisure-Time Physical Activity	28.3	21.4	32.5	26.4	28.0	26.2	32.6	19.7

Nutrition, Physical Activity & Weight (continued)	Disparity Among Communities			PSA	PSA vs. Benchmarks			
	Carson City	Douglas County	Lyon County	PSA	vs. NV	vs. US	vs. HP2020	TREND
% Meeting Physical Activity Guidelines	25.7	27.8	31.3	27.5	19.5	22.8	20.1	
Recreation/Fitness Facilities per 100,000	16.3	14.9	13.5	14.9	10.1	11.0		
% Healthy Weight (BMI 18.5-24.9)	30.5	32.8	22.3	29.9	32.4	30.3	33.9	33.5
% Overweight (BMI 25+)	69.2	66.2	77.7	69.6	65.7	67.8		66.0
% [Overweights] Trying to Lose Weight	57.6	54.6	43.3	53.7		61.3		42.7
% [Overweights] Counseled About Weight in Past Year	30.3	36.5	23.7	31.2		29.0		29.4
% Obese (BMI 30+)	33.7	29.5	39.9	33.2	26.7	32.8	30.5	25.6
% Medical Advice on Weight in Past Year	24.9	27.8	19.8	25.1		24.2		23.3
% Medical Advice on Nutrition in Past Year	41.1	46.2	34.3	41.8				38.4
% Children [Age 5-17] Healthy Weight				55.7		58.4		71.3

Nutrition, Physical Activity & Weight (continued)	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% Children [Age 5-17] Overweight (85th Percentile)				31.4		33.0		28.7
% Children [Age 5-17] Obese (95th Percentile)				20.0		20.4	14.5	11.7
% Child [Age 2-17] Physically Active 1+ Hours per Day				39.6		50.5		46.4

Note: In the green section, each subarea is compared against all other areas combined. 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.

better similar worse

Oral Health	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% Have Dental Insurance	66.4	65.6	59.5	64.9		59.9		63.7
% [Age 18+] Dental Visit in Past Year	69.4	65.8	56.3	65.8	60.4	59.7	49.0	67.6
% Child [Age 2-17] Dental Visit in Past Year				94.2		87.0	49.0	80.4

Note: In the green section, each subarea is compared against all other areas combined. 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.

better similar worse

Potentially Disabling Conditions	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% Activity Limitations	31.4	25.0	27.4	28.3	20.3	25.0		25.8
% Sciatica/Chronic Back Pain	24.1	23.5	30.2	24.9		22.9		22.7
% Eye Exam in Past 2 Years	61.3	59.3	60.8	60.5		55.3		63.2
% 3+ Chronic Conditions	37.9	38.7	41.1	38.8		41.4		
% Caregiver to a Friend/Family Member	25.6	33.0	29.3	29.0		20.8		

Note: In the green section, each subarea is compared against all other areas combined. 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.

better similar worse

Respiratory Diseases	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
CLRD (Age-Adjusted Death Rate)	65.4	38.6	69.7	57.3	53.6	41.0		56.4
Pneumonia/Influenza (Age-Adjusted Death Rate)	22.0	9.1	19.3	16.1	19.7	14.3		18.0
% [Child 0-17] Currently Has Asthma	9.1	3.0		5.6		9.3		5.4
% Child [Age 0-17] Asthma (Ever Diagnosed)	16.8	4.1		9.7		11.1		9.7

Respiratory Diseases (continued)	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% COPD (Lung Disease)	14.5	10.1	14.2	12.8	7.0	8.6		10.0
% [Age 65+] Flu Vaccine in Past Year	72.1	77.4	59.7	72.2	57.6	76.8	70.0	68.3
% [Age 65+] Pneumonia Vaccine Ever	83.0	82.5	84.2	83.0	70.7	82.7	90.0	67.3
	Note: In the green section, each subarea is compared against all other areas combined. 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.				better	similar	worse	

Sexual Health	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
Chlamydia Incidence Rate	395.7	176.2	271.5	286.1	423.8	452.2		
Gonorrhea Incidence Rate	51.8	12.7	27.2	31.4	114.3	110.7		
HIV Prevalence Rate	330.0	85.1	80.9	170.2	331.8	353.2		
	Note: In the green section, each subarea is compared against all other areas combined. 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.				better	similar	worse	

Substance Abuse	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
Unintentional Drug-Related Deaths (Age-Adjusted Death Rate)	31.0	17.2	21.7	23.8	17.4	16.7	11.3	17.5
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	26.6	15.9	14.1	19.2	13.4	10.8	8.2	16.4
% Current Drinker	48.9	71.1	51.1	57.6	53.0	55.0		60.9
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	14.2	20.5	12.2	16.2	17.9	20.0	24.4	18.3
% Excessive Drinker	18.3	26.2	16.6	20.9		22.5	25.4	23.1
% Drinking & Driving in Past Month	0.6	0.2	0.8	0.5	4.1	5.2		3.0
% Illicit Drug Use in Past Month	1.9	6.1	3.4	3.7		2.5	7.1	2.9
% Ever Sought Help for Alcohol or Drug Problem	8.4	7.7	9.4	8.3		3.4		6.4
% Personally Impacted by Substance Abuse	48.4	53.7	48.7	50.4		37.3		43.0

Note: In the green section, each subarea is compared against all other areas combined. 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.

better similar worse

Tobacco Use	Disparity Among Communities: Carson City	Douglas County	Lyon County	PSA	PSA vs. Benchmarks: vs. NV	vs. US	vs. HP2020	TREND
% Current Smoker	17.0	14.4	24.6	17.3	17.6	16.3	12.0	18.4
% Someone Smokes at Home	10.9	12.0	15.0	12.0		10.7		11.2
% [Nonsmokers] Someone Smokes in the Home	3.8	4.1	9.0	4.8		4.0		4.4
% [Household With Children] Someone Smokes in the Home	2.9	11.8		8.1		7.2		7.0
% [Smokers] Have Quit Smoking 1+ Days in Past Year				45.6		34.7	80.0	49.3
% [Smokers] Received Advice to Quit Smoking				67.8		58.0		57.5
% Currently Use Vaping Products	9.5	6.2	7.8	7.9	5.4	3.8		4.9

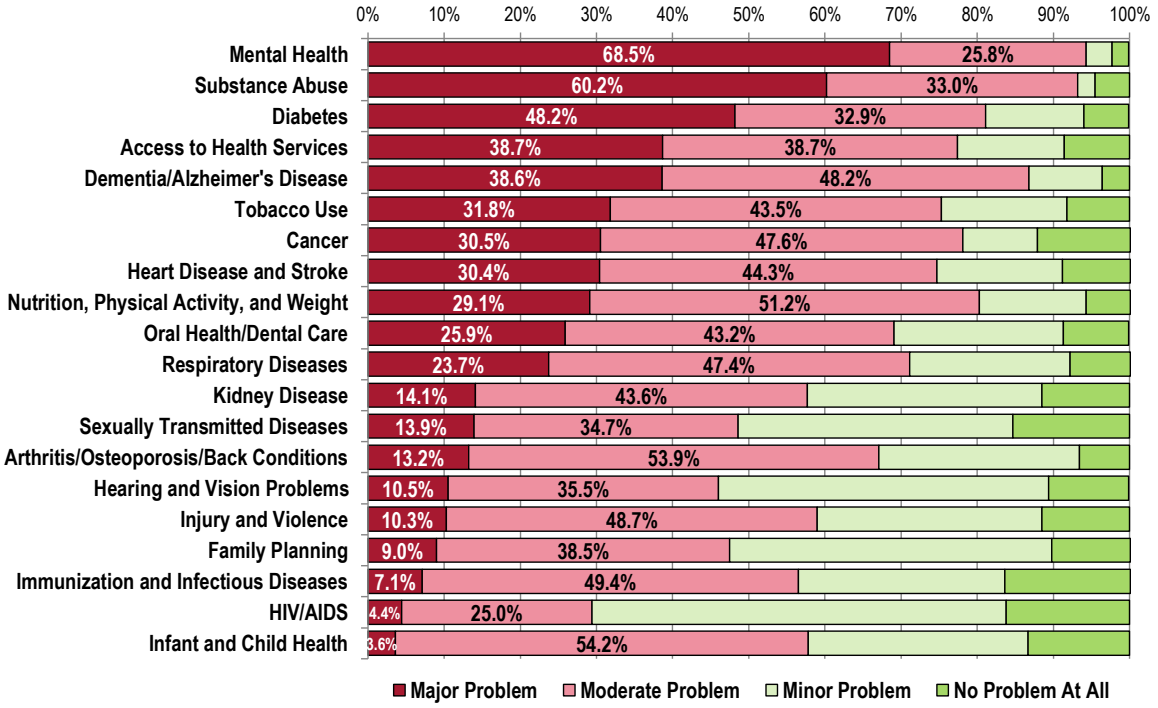
Note: In the green section, each subarea is compared against all other areas combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

better | similar | worse

Summary of Key Informant Perceptions

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

Key Informants: Relative Position of Health Topics as Problems in the Community



Community Description

Professional Research Consultants, Inc.

Population Characteristics

Total Population

The Primary Service Area, the focus of this Community Health Needs Assessment, includes the entirety (or significant portions) of Carson City, Douglas County, and Lyon County. Census data reveal that these three areas combined encompasses 2,855.62 square miles and houses a total population of 153,735 residents.

Total Population
(Estimated Population, 2012-2016)

	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Carson City	54,412	144.66	376.14
Douglas County	47,426	709.72	66.82
Lyon County	51,897	2,001.23	25.93
Primary Service Area (PSA)	153,735	2,855.62	53.84
Nevada	2,839,172	109,780.17	25.86
United States	318,558,162	3,532,068.58	90.19

Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Population Change 2000-2010

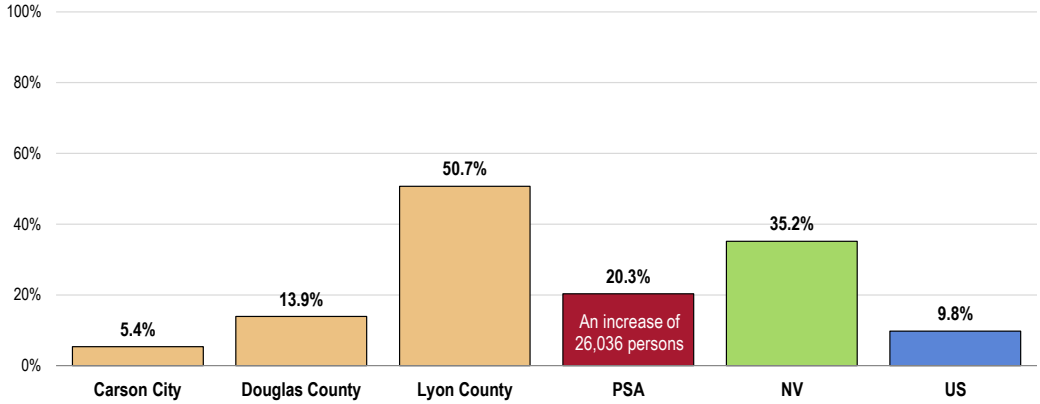
A significant positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

Between the 2000 and 2010 US Censuses, the population of the Primary Service Area increased by 26,036 persons, or 20.3%.

- **BENCHMARK:** A smaller proportional increase than seen statewide, though greater than the nation.
- **DISPARITY:** Notably high in Lyon County.

Change in Total Population

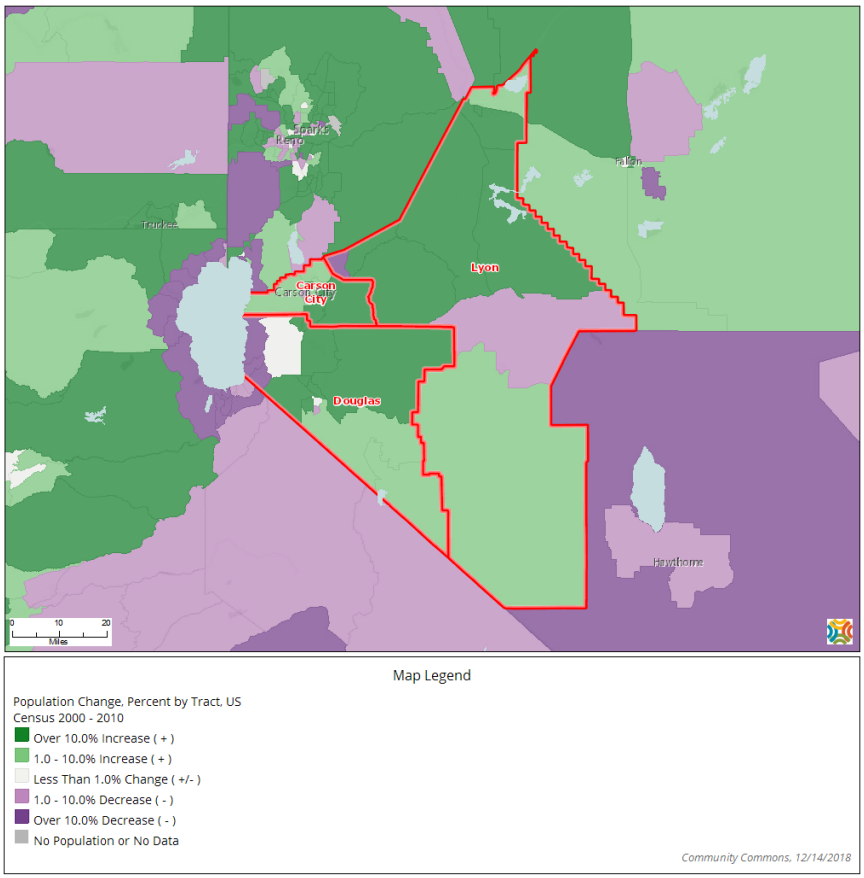
(Percentage Change Between 2000 and 2010)



Sources:
- US Census Bureau Decennial Census (2000-2010).
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes:
- A significant positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

This map shows the areas of greatest increase or decrease in population between 2000 and 2010.



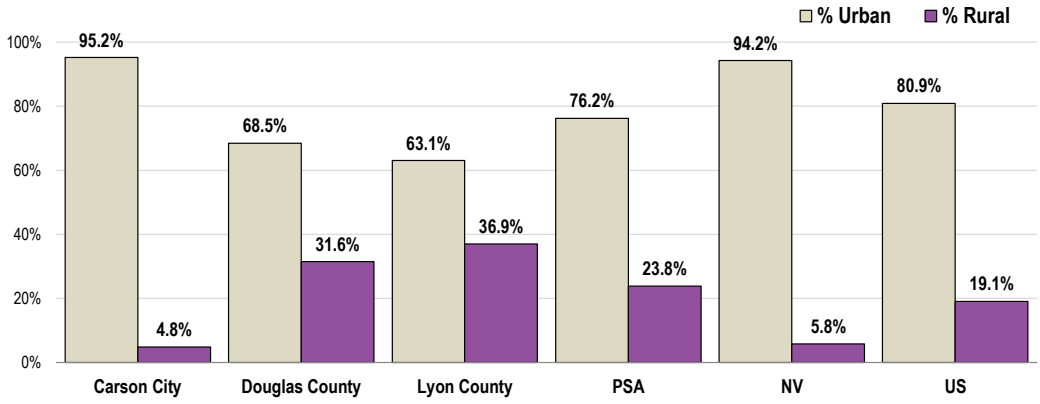
Urban/Rural Population

Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban.

The Primary Service Area is predominantly urban, with 76.2% of the population living in areas designated as urban.

- **BENCHMARK:** Less urban than the state and nation.
- **DISPARITY:** Carson City is proportionally more urban, whereas Lyon and Douglas counties are proportionally more rural.

Urban and Rural Population
(2010)



Sources:
- US Census Bureau Decennial Census.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

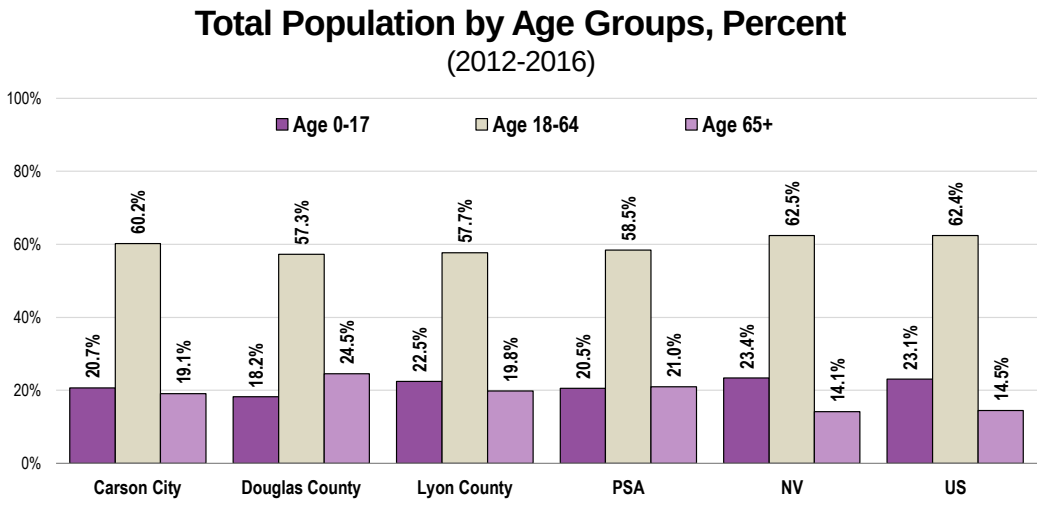
Notes:
- This indicator reports the percentage of population living in urban and rural areas. Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban.

Age

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

In the Primary Service Area, 20.5% of the population are children age 0-17; another 58.5% are age 18 to 64, while 21.0% are age 65 and older.

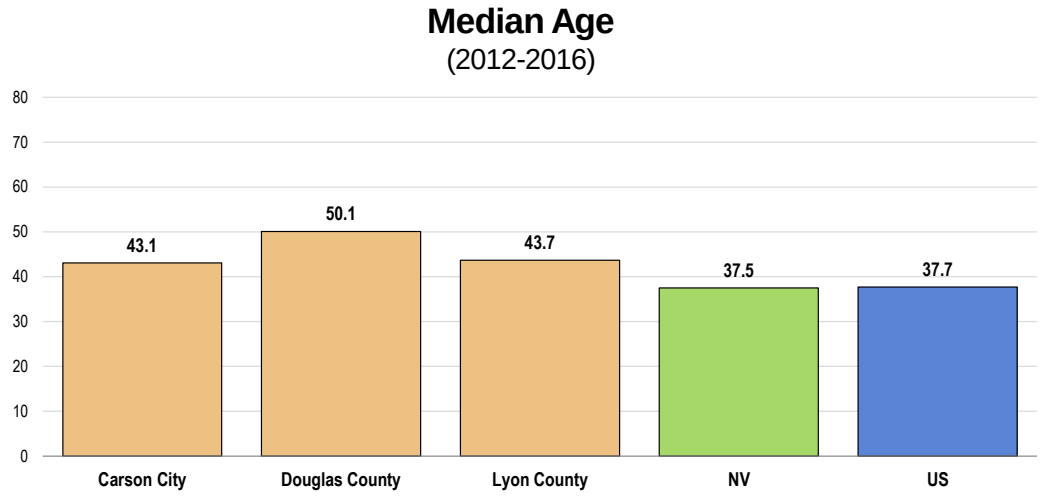
- **BENCHMARK:** The Primary Service Area population age 65+ is significantly higher than the Nevada or US proportions.
- **DISPARITY:** The population of older adults is highest in Douglas County.



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

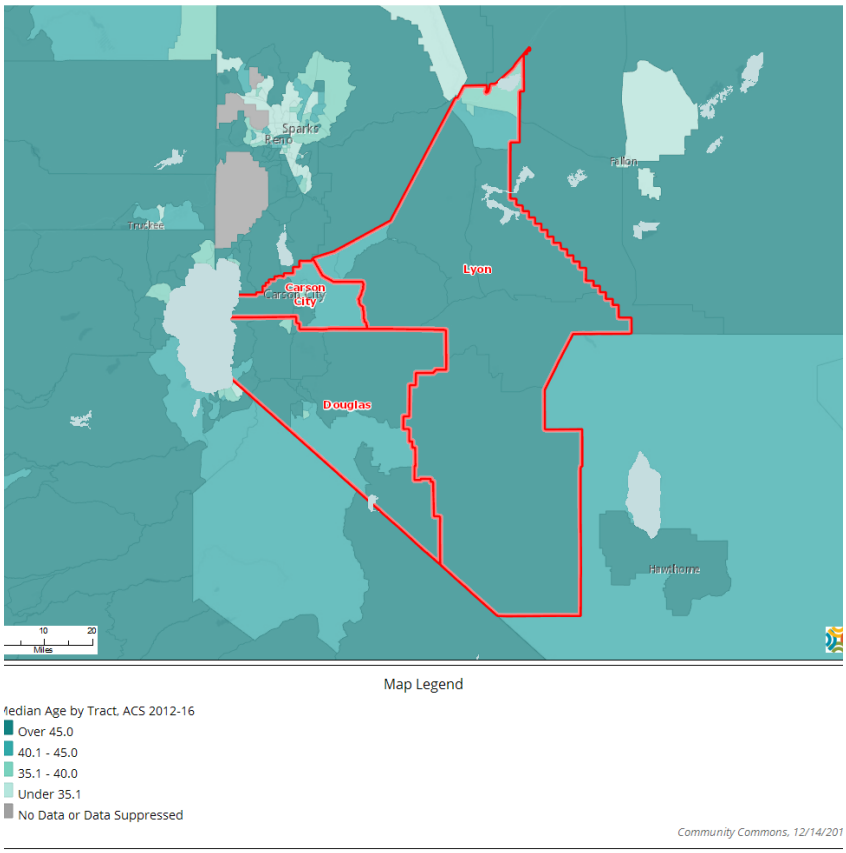
Median Age

The areas comprising the Primary Service Area are each "older" than the state and the nation in that the median age is higher.



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

The following map provides an illustration of the median age in the Primary Service Area, segmented by census tract.



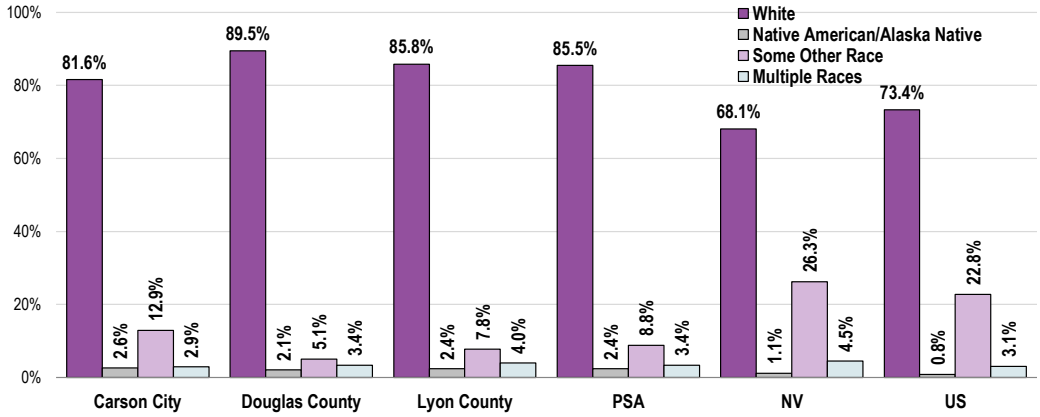
Race & Ethnicity

Race

In looking at race independent of ethnicity (Hispanic or Latino origin), 85.5% of residents of the Primary Service Area are White and 2.4% are Native American/Alaska Native.

- **BENCHMARK:** Nevada is significantly less White or Native American/Alaska Native, while the state and national are each far more "Other" or multiple race.
- **DISPARITY:** Carson City is proportionally more "Other" race, and Lyon County is proportionally more multiple race.

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



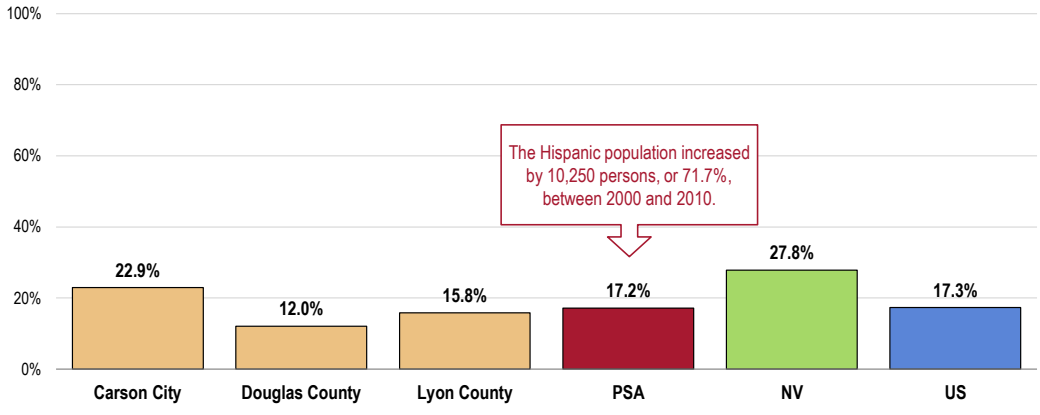
Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Ethnicity

A total of 17.2% of Primary Service Area residents are Hispanic or Latino.

- **BENCHMARK:** Below the proportion seen statewide.
- **DISPARITY:** Highest in Carson City.

Hispanic Population
(2012-2016)



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

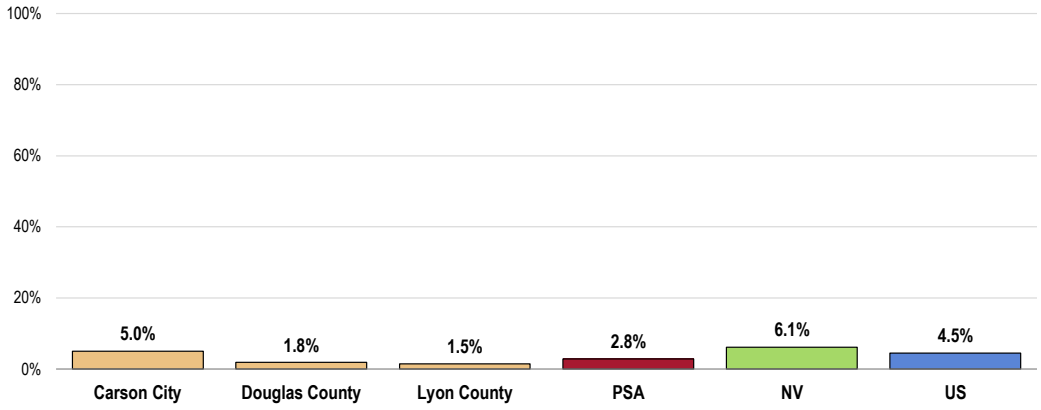
Notes:
- Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

Linguistic Isolation

A total of 2.8% of the Primary Service Area population age 5 and older live in a home in which no person age 14 or older is proficient in English (speaking only English, or speaking English "very well").

- **BENCHMARK:** Significantly lower than the Nevada and US proportions.
- **DISPARITY:** Linguistic isolation is highest in Carson City.

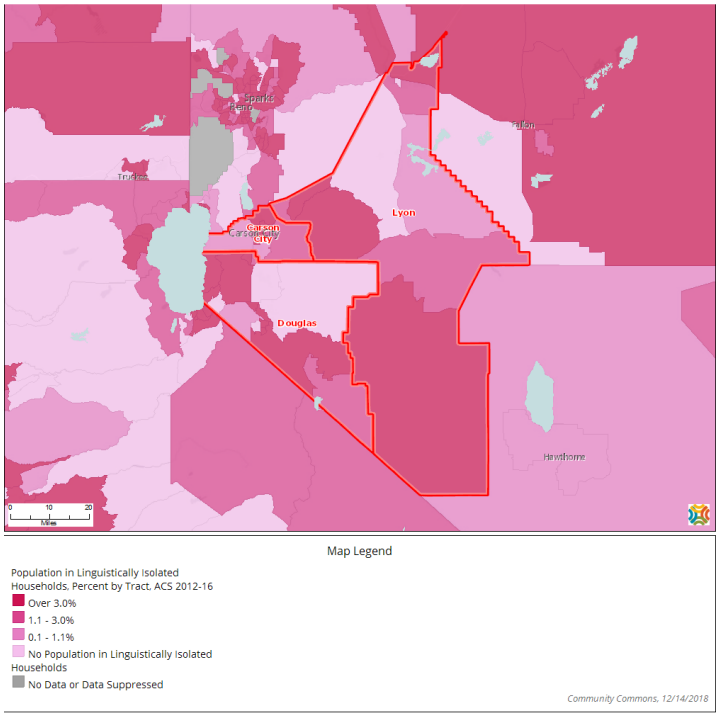
Linguistically Isolated Population
(2012-2016)



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes:
- This indicator reports the percentage of the population age 5+ who live in a home in which no person age 14+ speaks only English, or in which no person age 14+ speak a non-English language and speak English "very well."

Note the following map illustrating linguistic isolation throughout the Primary Service Area.



Social Determinants of Health

About Social Determinants

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

— Healthy People 2020 (www.healthypeople.gov)

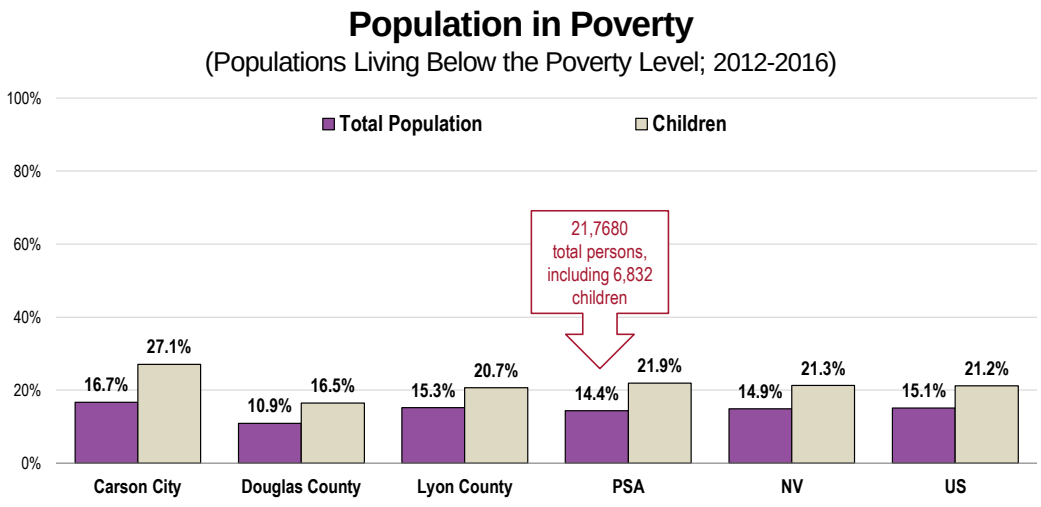
Poverty

The latest census estimate shows 14.4% of the Primary Service Area total population living below the federal poverty level.

- **DISPARITY:** Lowest in Douglas County.

Among just children (ages 0 to 17), this percentage in the Primary Service Area is 21.9% (representing an estimated 6,832 children).

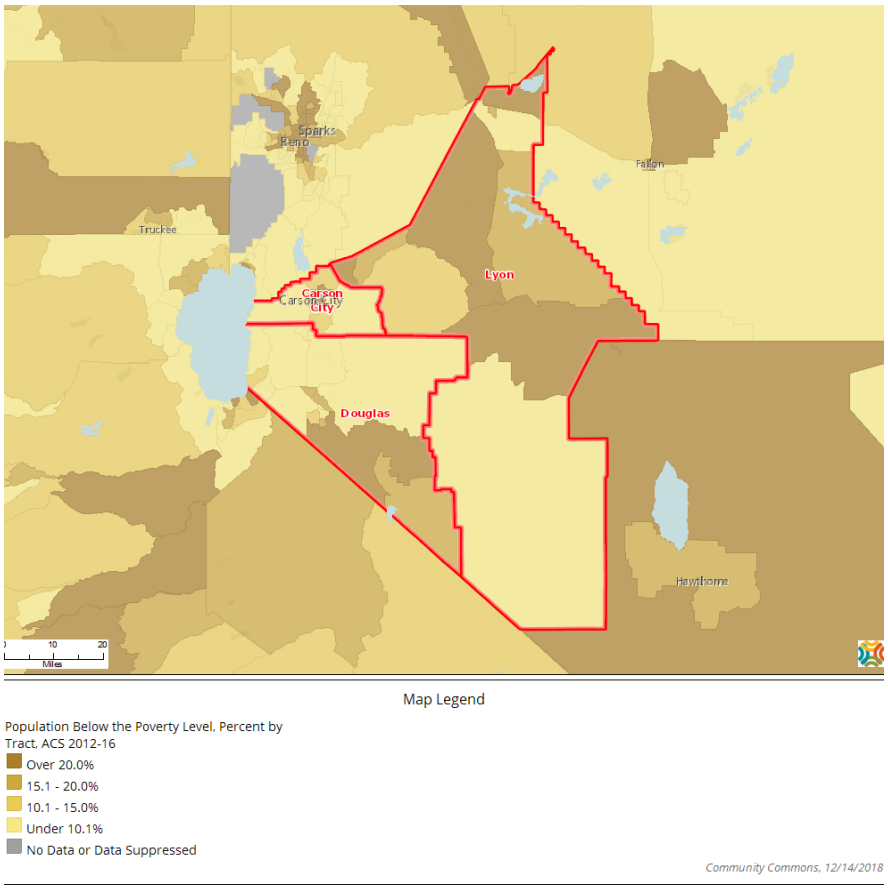
- **DISPARITY:** Highest in Carson City.



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

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

The following map highlights the concentration of persons living below the federal poverty level.



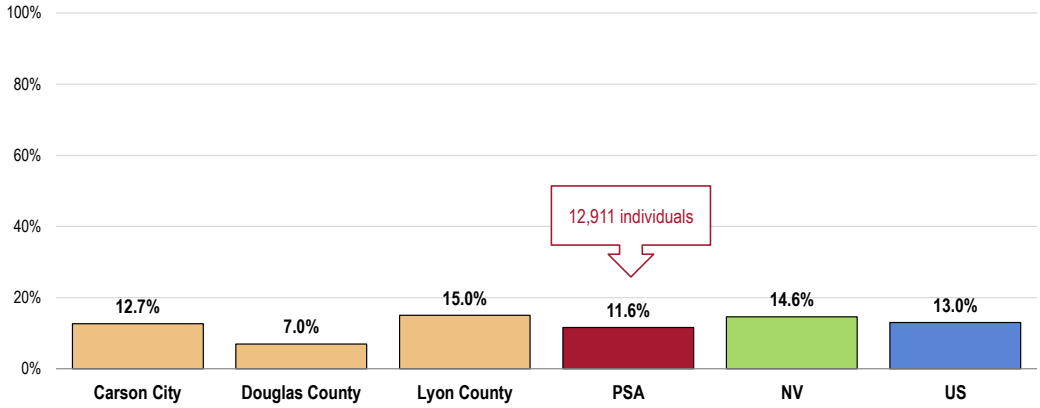
Education

Among the Primary Service Area population age 25 and older, an estimated 11.6% (almost 13,000 people) do not have a high school education.

- **BENCHMARK:** More favorable than the Nevada proportion.
- **DISPARITY:** Least favorable in Lyon County.

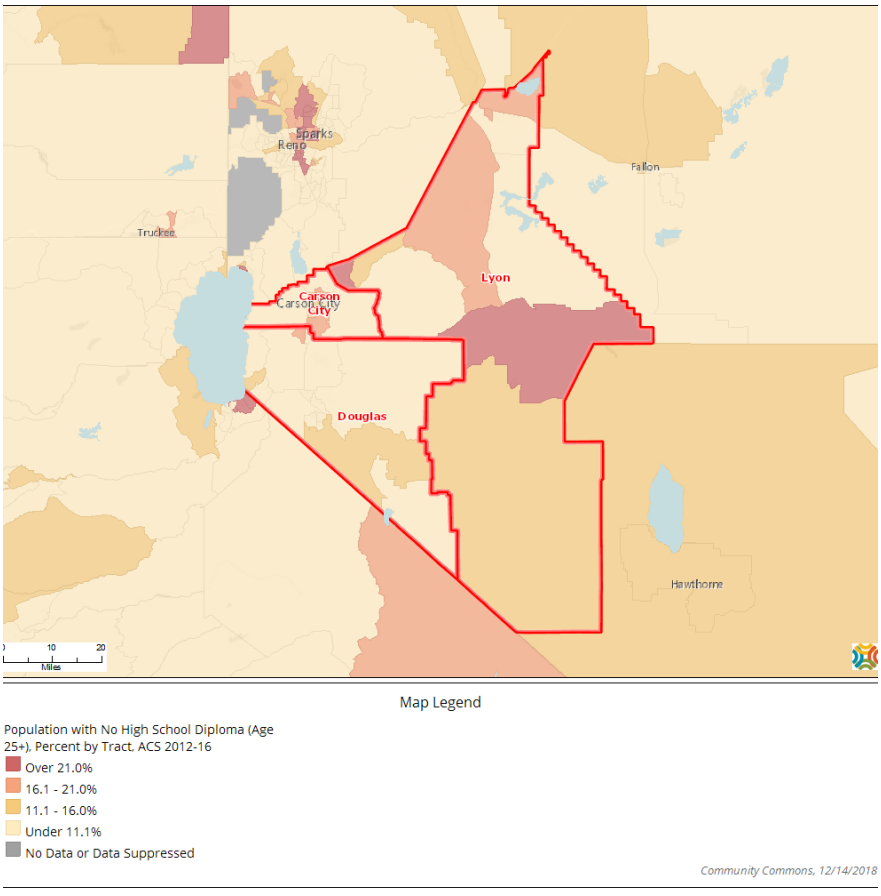
Population With No High School Diploma

(Population Age 25+ Without a High School Diploma or Equivalent, 2012-2016)



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes:
- This indicator is relevant because educational attainment is linked to positive health outcomes.



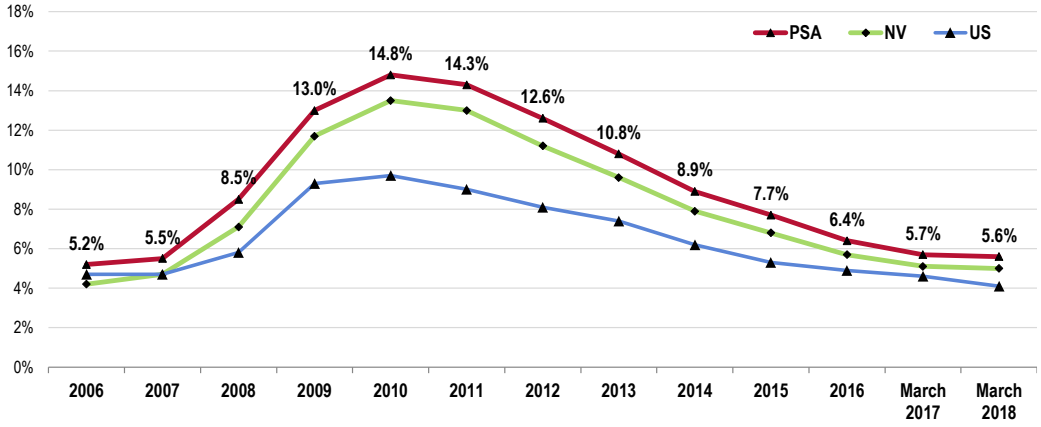
Employment

According to data derived from the US Department of Labor, the unemployment rate in the Primary Service Area as of March 2018 was 5.6%.

- **BENCHMARK:** Above state and national rates.
- **DISPARITY:** Lowest in Douglas County (not shown).
- **TREND:** Represents a significant decline in unemployment since 2010.

Unemployment Rate

(Percent of Non-Institutionalized Population Age 16+ Unemployed, Not Seasonally-Adjusted)



Sources:
- US Department of Labor, Bureau of Labor Statistics.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes:
- This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

Food Access

Low Food Access

Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store.

NOTE:

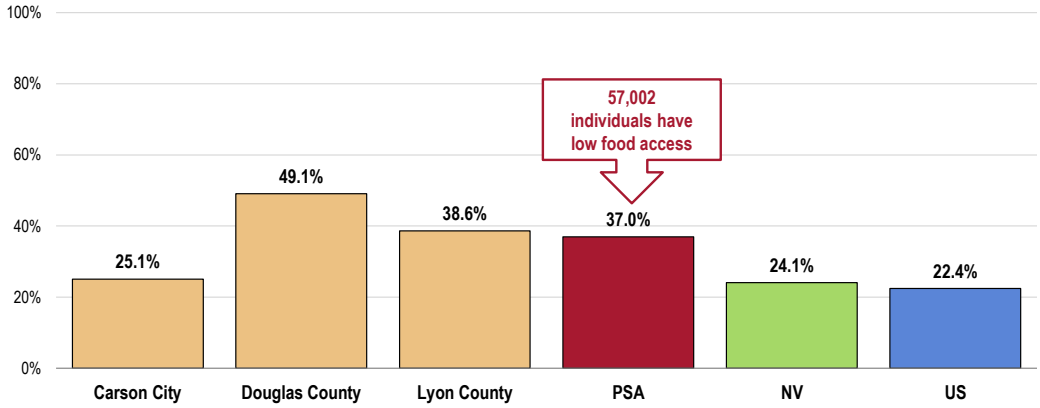
For indicators derived from the population-based survey administered as part of this project, text describes significant differences determined through statistical testing. The reader can assume that differences (against or among local findings) that are not mentioned are ones that are not statistically significant.

US Department of Agriculture data show that 37.0% of the Primary Service Area population (representing over 57,000 residents) have low food access, meaning that they do not live near a supermarket or large grocery store.

- **BENCHMARK:** Significantly higher than state or national proportions.
- **DISPARITY:** Highest in Douglas County.

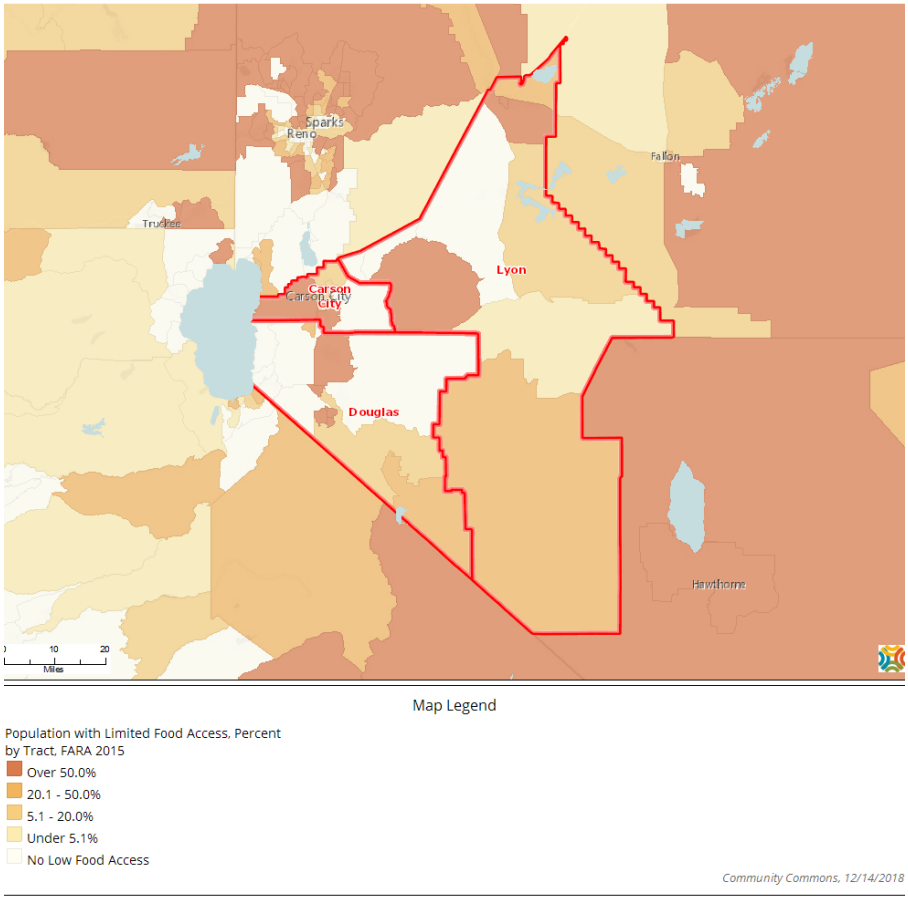
Population With Low Food Access

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



Sources:
- US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas (FARA).
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes:
- This indicator reports the percentage of the population with low food access. Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity.



Difficulty Accessing Fresh Produce

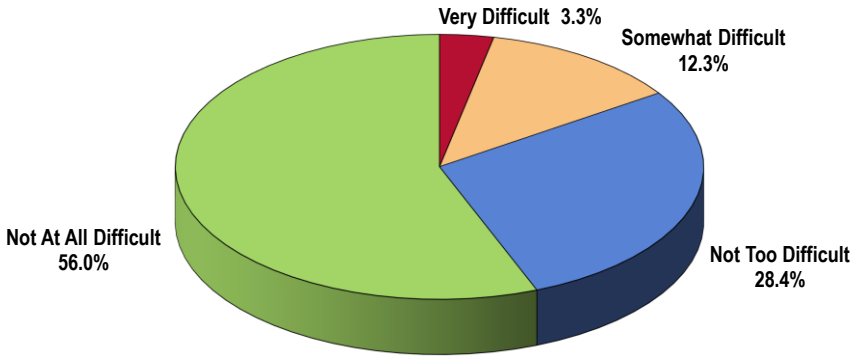
Most Primary Service Area adults report little or no difficulty buying fresh produce at a price they can afford.

Respondents were asked:

"How difficult is it for you to buy fresh produce like fruits and vegetables at a price you can afford? Would you say: Very Difficult, Somewhat Difficult, Not Too Difficult, or Not At All Difficult?"

Level of Difficulty Finding Fresh Produce at an Affordable Price

(Primary Service Area, 2019)

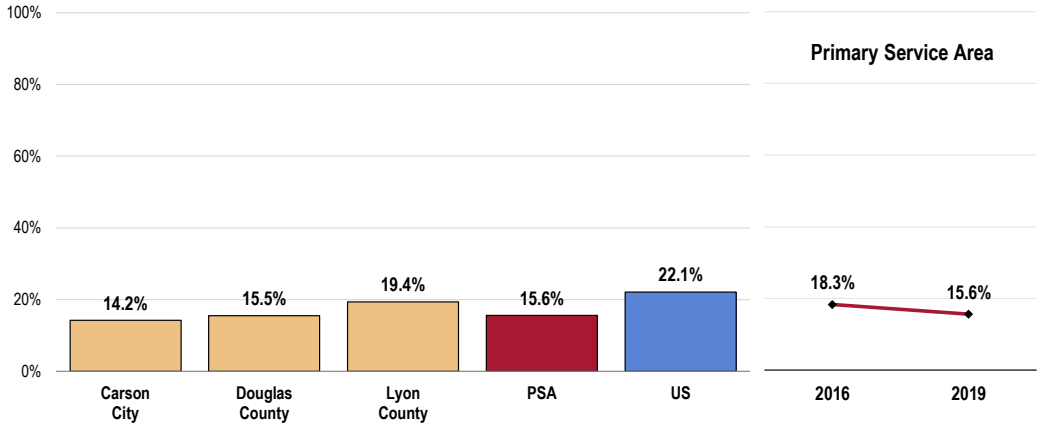


Sources: • 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 86]
Notes: • Asked of all respondents.

However, 15.6% of Primary Service Area adults find it "very" or "somewhat" difficult to access affordable fresh fruits and vegetables.

- **BENCHMARK:** More favorable than the nation.
- **DISPARITY:** More prevalent among low-income residents, women, and White individuals.

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



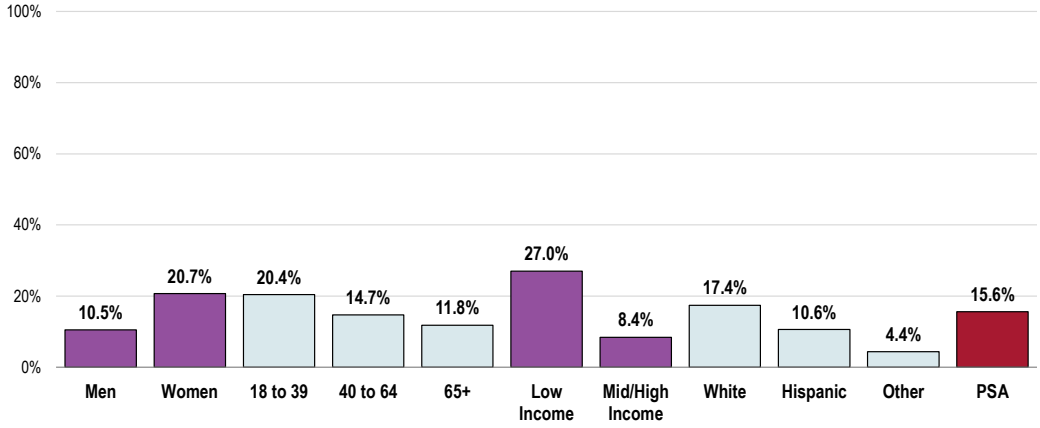
Sources: • 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 189]
• 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

NOTE:

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

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

(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 189]

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.

Food Insecurity

In the past year, 22.4% of Primary Service Area residents "often" or "sometimes" worried about whether their food would run out before they had money to buy more.

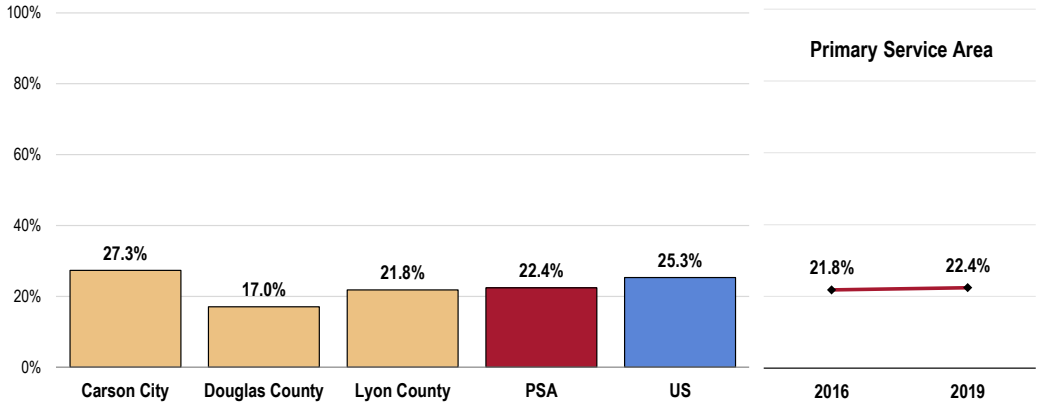
- **DISPARITY:** Within the service area, Carson City reports the highest levels of food insecurity. The prevalence is also notably high among low-income individuals, younger adults (under age 40), "Other" race residents, and women.

Surveyed adults were asked:

"Now I am going to read a statement that people have made about their food situation. Please tell me whether this statement was "Often True," "Sometimes True," or "Never True" for you in the past 12 months:

I worried about whether our food would run out before we got money to buy more."

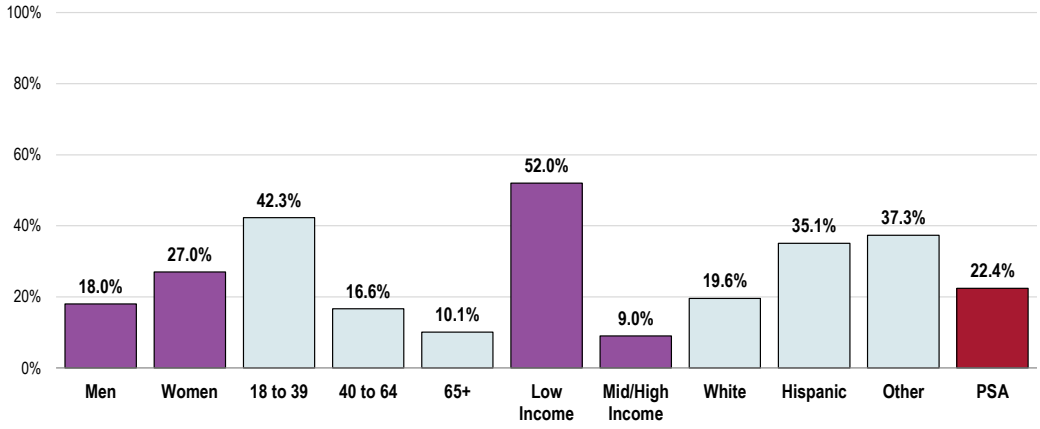
Food Insecurity



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 87]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Includes "often true" and "sometimes true" responses.

Food Insecurity
(Primary Service Area, 2019)



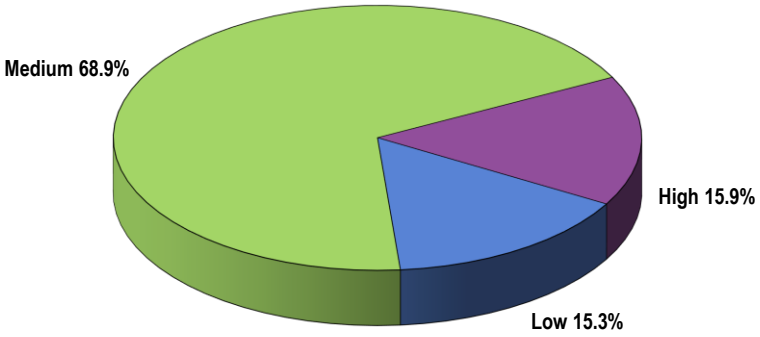
Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 87]
Notes: ● Asked of all respondents.
● Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
● Income categories reflect 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 "often true" and "sometimes true" responses.

Health Literacy

Most surveyed adults in the Primary Service Area are found to have a moderate level of health literacy.

Low health literacy is defined as those respondents who "seldom/never" find written or spoken health information easy to understand, and/or who "always/nearly always" need help reading health information, and/or who are "not at all confident" in filling out health forms.

Level of Health Literacy
(Primary Service Area, 2019)

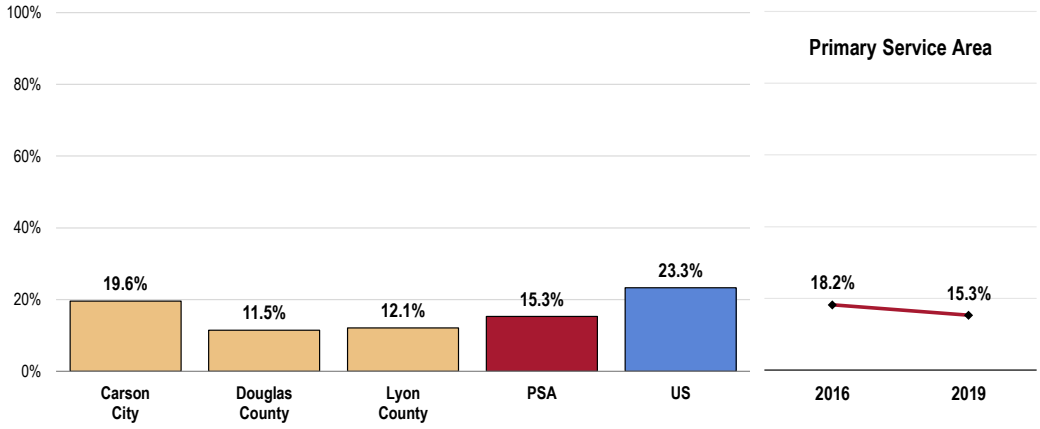


Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 172]
Notes: ● Asked of all respondents.
● Respondents with low health literacy are those who "seldom/never" find written or spoken health information easy to understand, and/or who "always/nearly always" need help reading health information, and/or who are "not at all confident" in filling out health forms.

A total of 15.3% are determined to have low health literacy.

- **BENCHMARK:** Better than found nationally.
- **DISPARITY:** Notably worse in Carson City and among service area men.

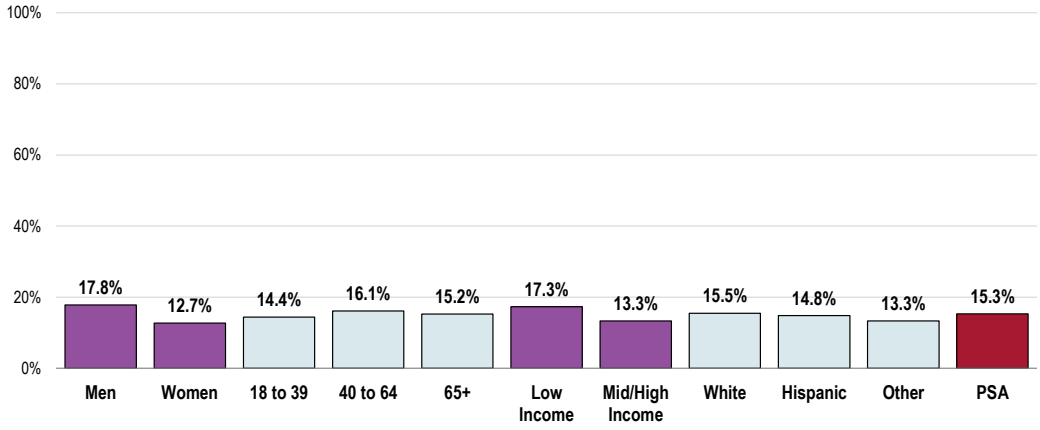
Low Health Literacy



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 172]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- Respondents with low health literacy are those who "seldom/never" find written or spoken health information easy to understand, and/or who "always/nearly always" need help reading health information, and/or who are "not at all confident" in filling out health forms.

Low Health Literacy
(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 172]

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

General Health Status

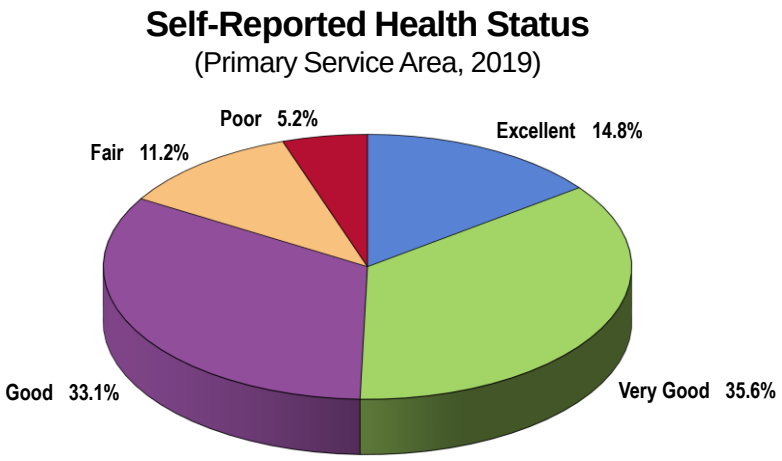
Professional Research Consultants, Inc.

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?"

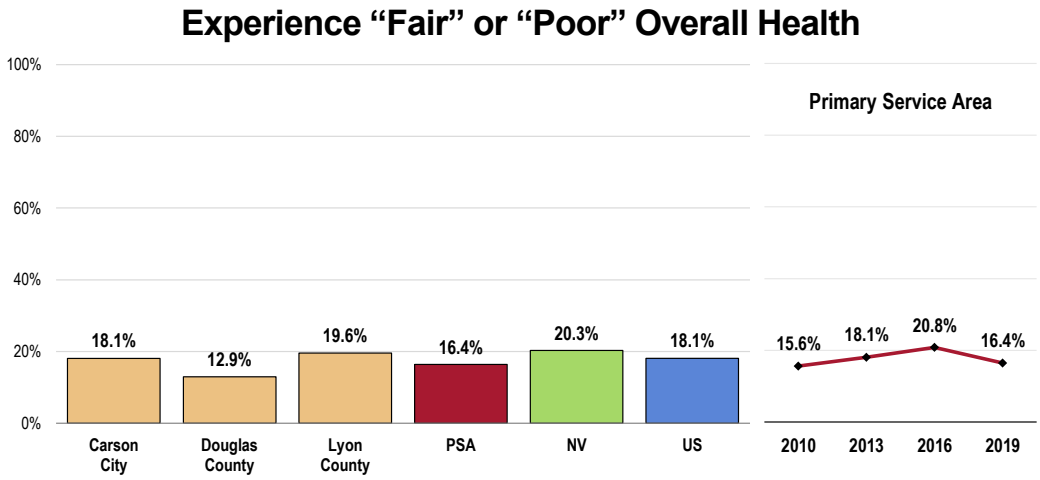
Most Primary Service Area residents rate their overall health favorably (responding "excellent," "very good," or "good").



Sources: • 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
Notes: • Asked of all respondents.

However, 16.4% of Primary Service Area adults believe that their overall health is "fair" or "poor."

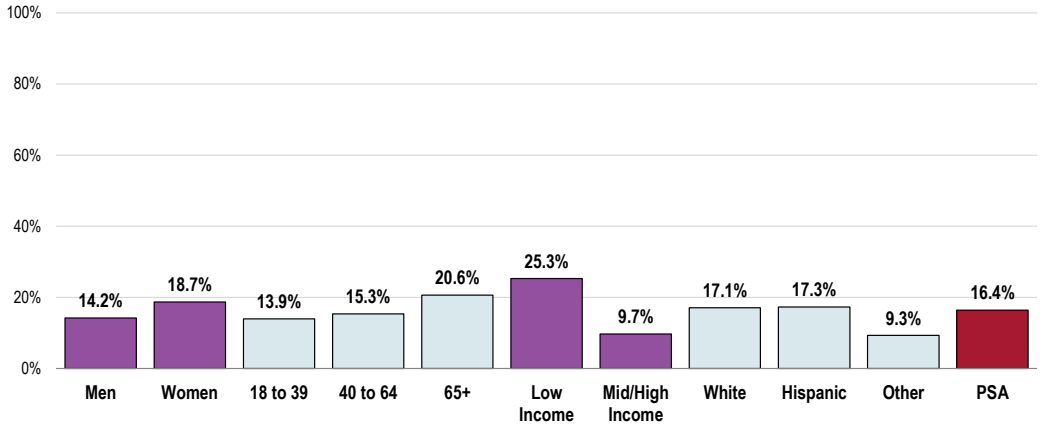
- **BENCHMARK:** More favorable than the state.
- **DISPARITY:** Most favorable in Douglas County and among higher-income residents.



Sources: • 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
• 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Experience "Fair" or "Poor" Overall Health

(Primary Service Area, 2019)



Sources:
- 2019 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.

Mental Health

About Mental Health & Mental Disorders

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society. Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning. Mental disorders contribute to a host of problems that may include disability, pain, or death. Mental illness is the term that refers collectively to all diagnosable mental disorders. Mental disorders are among the most common causes of disability. The resulting disease burden of mental illness is among the highest of all diseases.

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

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

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

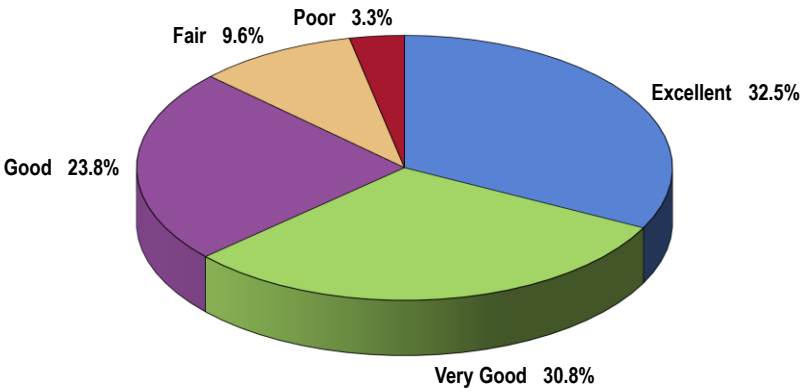
— Healthy People 2020 (www.healthypeople.gov)

Mental Health Status

"Now thinking about your mental health, which includes stress, depression, and problems with emotions, would you say that, in general, your mental health is: Excellent, Very Good, Good, Fair, or Poor?"

Most Primary Service Area adults rate their overall mental health favorably ("excellent," "very good," or "good").

Self-Reported Mental Health Status
(Primary Service Area, 2019)

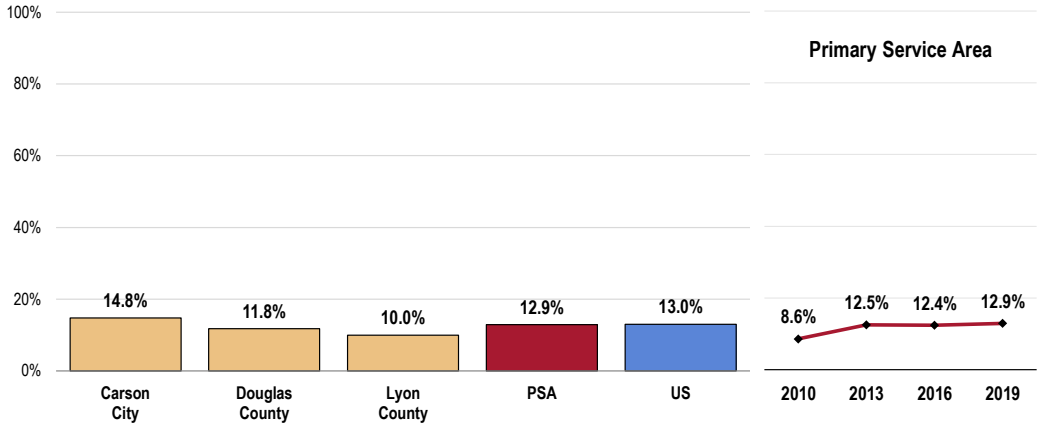


Sources: • 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]
Notes: • Asked of all respondents.

However, 12.9% believe that their overall mental health is "fair" or "poor."

- **TREND:** Significantly higher than 2010 findings (although similar to 2013 and 2016 findings).

Experience "Fair" or "Poor" Mental Health



Sources: • 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]
• 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

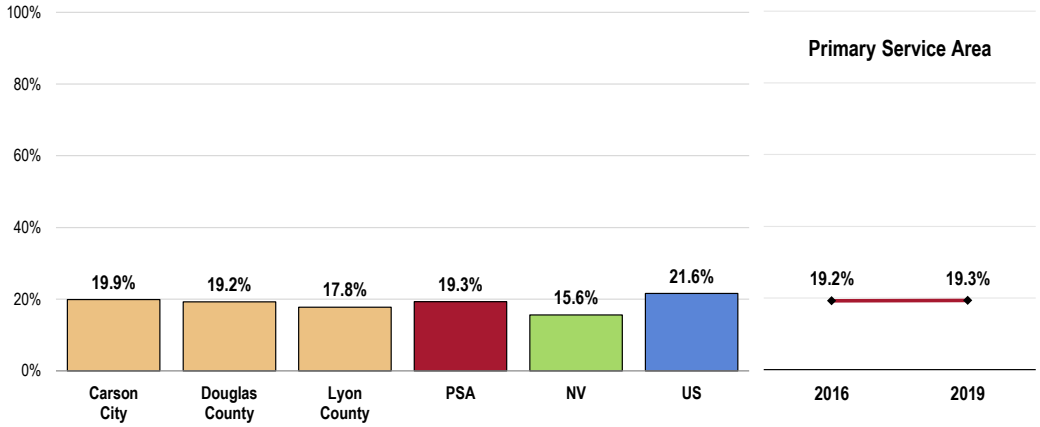
Depression

Diagnosed Depression

A total of 19.3% of Primary Service Area adults have been diagnosed by a physician as having a depressive disorder (such as depression, major depression, dysthymia, or minor depression).

- **BENCHMARK:** Above the Nevada proportion.

Have Been Diagnosed With a Depressive Disorder



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

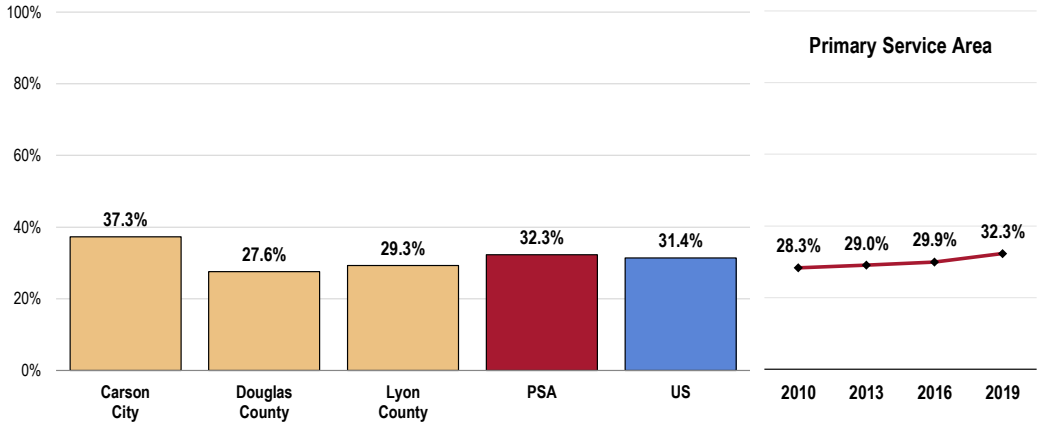
Notes:
- Asked of all respondents.
- Depressive disorders include depression, major depression, dysthymia, or minor depression.

Symptoms of Chronic Depression

A total of 32.3% of Primary 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 (symptoms of chronic depression).

- **DISPARITY:** Chronic depression is highest in Carson City, as well as among low-income individuals and women.

Have Experienced Symptoms of Chronic Depression

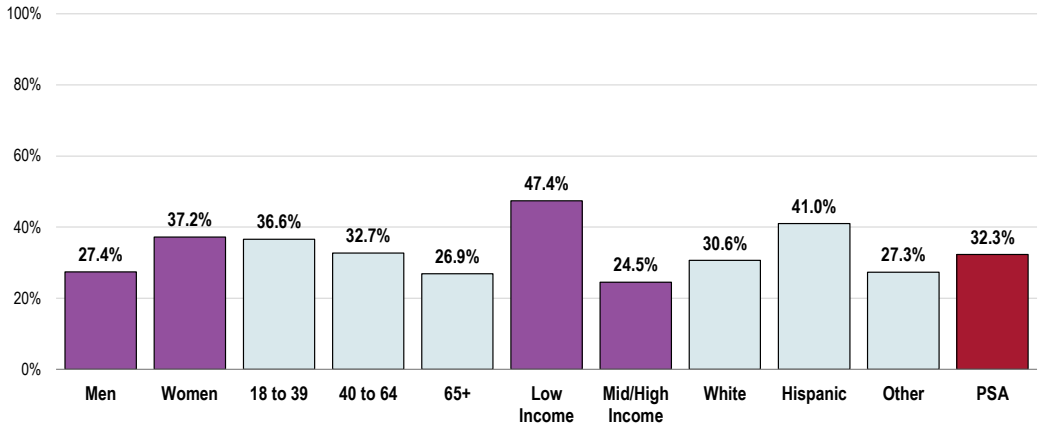


Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 100]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

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

Have Experienced Symptoms of Chronic Depression

(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 100]

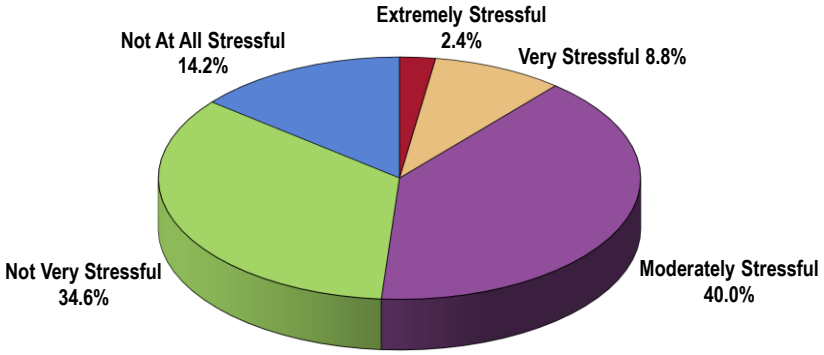
Notes:
- Asked of all respondents.
- Chronic depression includes periods of two or more years during which the respondent felt depressed or sad on most days, even if (s)he felt okay sometimes.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects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

Stress

A majority of surveyed adults characterize most days as no more than "moderately" stressful.

Perceived Level of Stress On a Typical Day

(Primary Service Area, 2019)

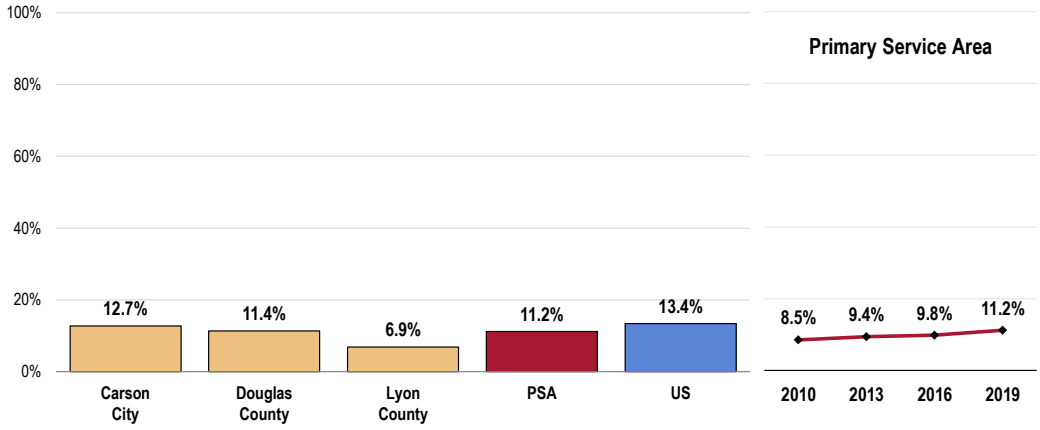


Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 101]
Notes: ● Asked of all respondents.

In contrast, 11.2% of Primary Service Area adults feel that most days for them are "very" or "extremely" stressful.

- **DISPARITY:** Stress levels are lowest in Lyon County and also among older adults in the service area (age 65+).

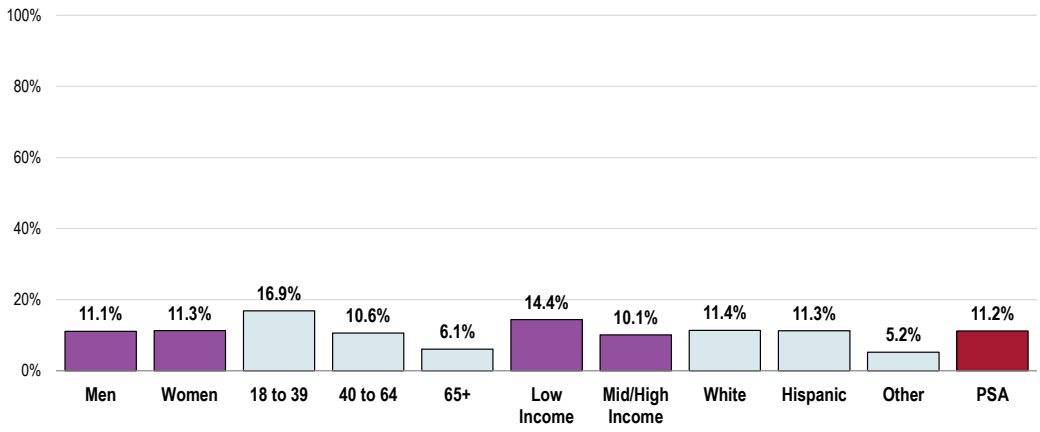
Perceive Most Days As "Extremely" or "Very" Stressful



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 101]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Perceive Most Days as "Extremely" or "Very" Stressful

(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 101]

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

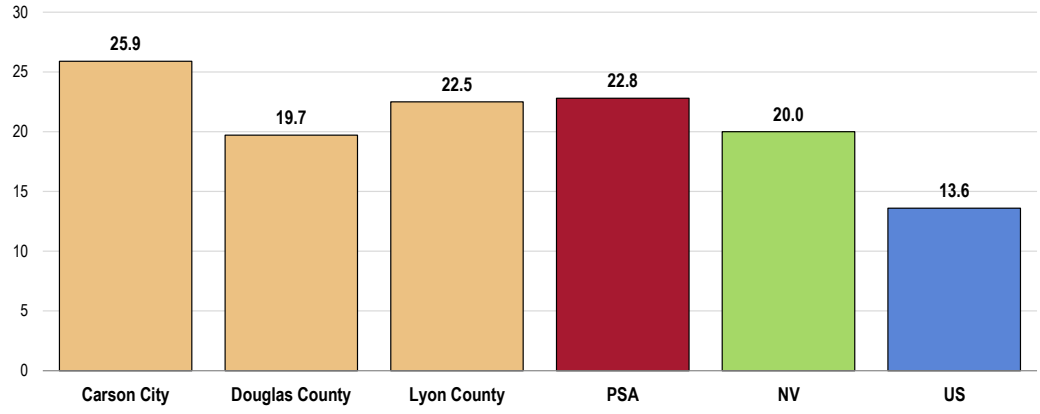
Between 2015 and 2017, there was an annual average age-adjusted suicide rate of 22.8 deaths per 100,000 population in the Primary Service Area.

- **BENCHMARK:** Notably higher than seen nationally; more than double the Healthy People 2020 objective of 10.2 or lower.

Suicide: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 10.2 or Lower



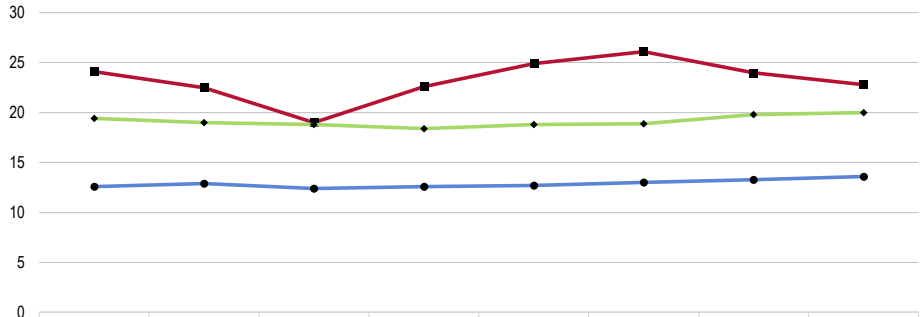
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MHMD-1]

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

Suicide: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 10.2 or Lower



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	24.1	22.5	19.0	22.6	24.9	26.1	24.0	22.8
NV	19.4	19.0	18.8	18.4	18.8	18.9	19.8	20.0
US	12.6	12.9	12.4	12.6	12.7	13.0	13.3	13.6

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MHMD-1]

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

Mental Health Treatment

Mental Health Providers

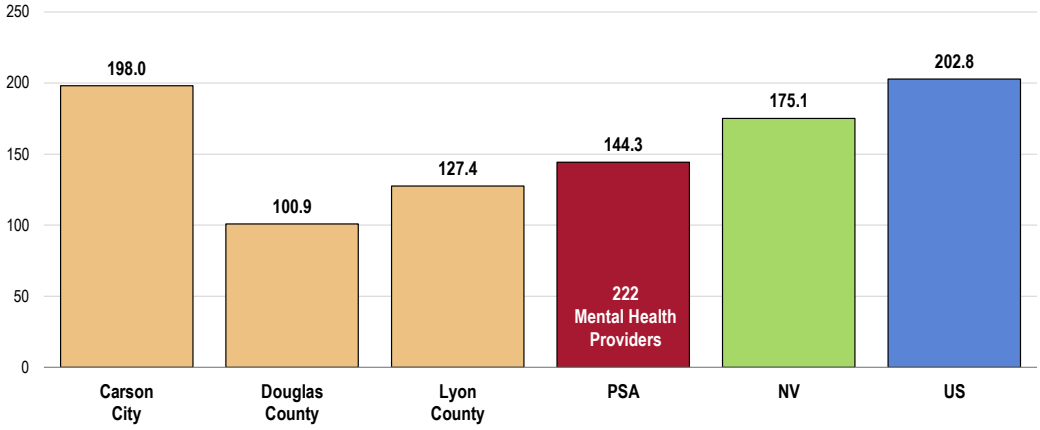
In the Primary Service Area in 2018, there were 144.3 mental health providers for every 100,000 population.

Here, "mental health providers" includes psychiatrists, psychologists, clinical social workers, and counsellors who specialize in mental health care.

- **BENCHMARK:** Significantly below state and national rates.
- **DISPARITY:** Access is lowest in Douglas County and highest in Carson City.

Access to Mental Health Providers

(Number of Mental Health Providers per 100,000 Population, 2018)



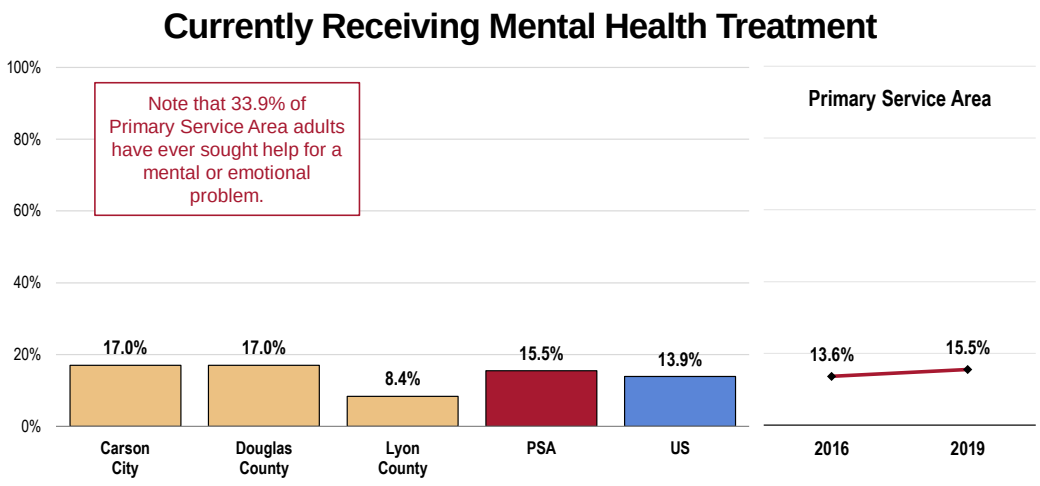
Sources:
- University of Wisconsin Population Health Institute, County Health Rankings.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes:
- This indicator reports the rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers, and counsellors that specialize in mental health care.

Currently Receiving Treatment

A total of 15.5% are currently taking medication or otherwise receiving treatment from a doctor or other health professional for some type of mental health condition or emotional problem.

- **DISPARITY:** Least common in Lyon County.



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 103-104]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

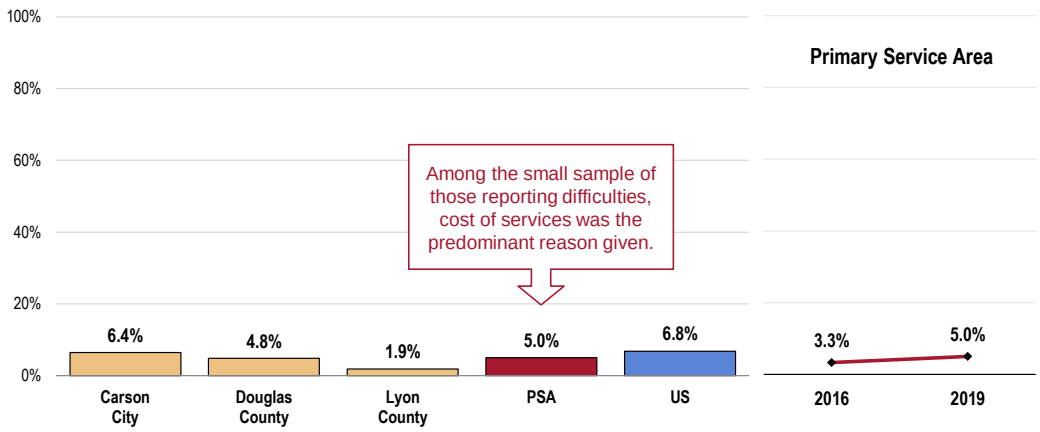
Notes:
- Asked of all respondents.
- "Treatment" can include taking medications for mental health.

Difficulty Accessing Mental Health Services

A total of 5.0% of Primary Service Area adults report a time in the past year when they needed mental health services, but were not able to get them.

- **DISPARITY:** Notably low in Lyon County. By demographics, the prevalence is higher among women, low-income residents, and White individuals.

Unable to Get Mental Health Services When Needed in the Past Year

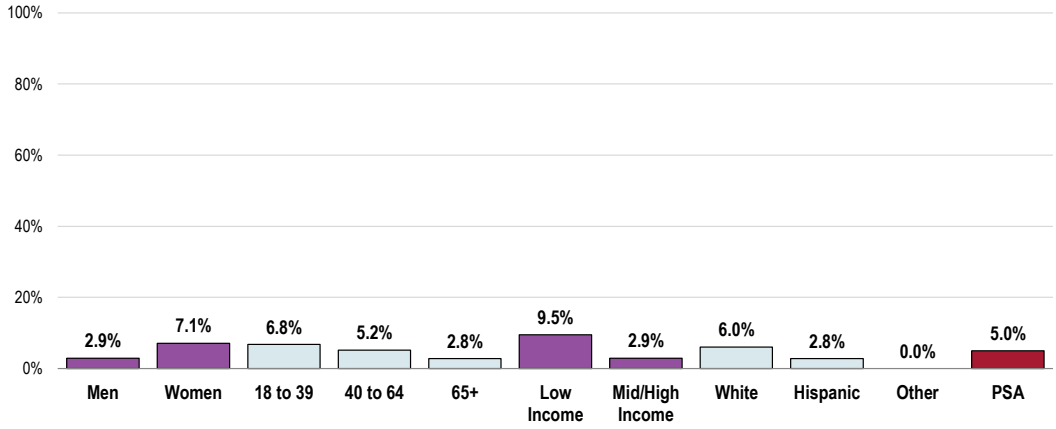


Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 105, 106]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Unable to Get Mental Health Services When Needed in the Past Year

(Primary Service Area, 2019)

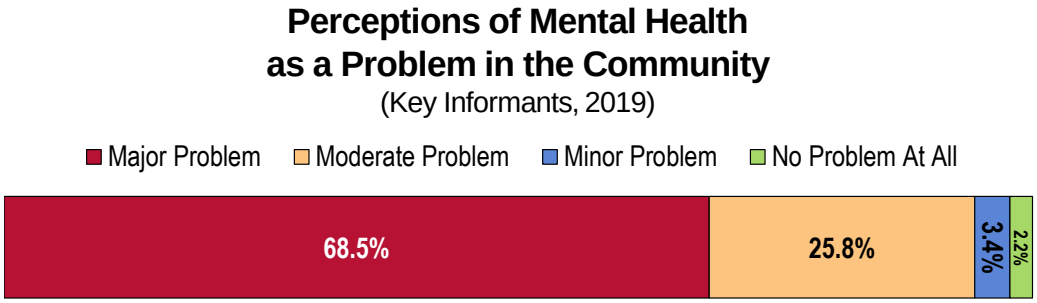


Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 105]

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

Key Informant Input: Mental Health

More than two-thirds of key informants taking part in an online survey characterized *Mental Health* as a "major problem" in the community.



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

Top Concerns

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

Access to Care/Services

There is little to no attention paid to it for the average person; substance abuse is rampant with no rehab facilities for the uninsured, who need it most; it is unaddressed with the homeless population, many of whom are on the streets due to it. I believe NV is at the bottom of the 50 states in care. — Other Health Provider

Rural clinics have to prioritize care to the seriously and persistently mentally ill and those at imminent risk of harm to self or others. Their staffing is not adequate to manage any of the population outside of that. With most running so fast, we are identifying more and more of a need, but the provider base is not there to deal with complicated multi-diagnoses, children, dementia patients, etc. — Social Services Provider

All individuals that live in Carson, Douglas, and Lyon Counties need easy access to mental health services. Due to the large distance to travel for service, it can be a problem for accessing mental health services. — Public Health Representative

Many clients have a variety of mental health issues, and there is a lack of services available to both adults and youth. Long wait lists. Providers that take Medicaid and Medicare are limited. The stigma of having mental health issues are widespread by peers, businesses, community at-large. — Social Services Provider

The programs keep closing their doors. There are so many more services needed in these communities. — Other Health Provider

Behavioral health services and psychiatric services when primary care providers cannot manage the patient. — Physician

Accessing mental health care quickly is a major challenge. This is true for individuals with or without insurance coverage. — Other Health Provider

Lack of facilities and treatment centers. This especially applies to veterans who are looking for VA access and must travel to Reno. — Community/Business Leader

People from other counties are dropped off in Carson City at behavioral health. After treatment, they are released onto our streets. — Community/Business Leader

Access to facilities, there is just not much available or a big awareness for the disease. — Community/Business Leader

It seems there are few resources, specifically for people in the general population, out on their own. No one to call for follow-up. VRC does a good job with veterans. — Community/Business Leader

Insufficient resources for mental health. Must build capacity and services other than inpatient care. — Community/Business Leader

Access to long-term care and counseling. We have crisis centers, but lack infrastructure to continued care for the mental health, including affordable housing for those in need. — Public Health Representative

Facilities are available but are understaffed. — Community/Business Leader

Difficulty getting patients in on a timely basis, stigma, overlooked. — Physician

Access to mental health is a national crisis and not exclusive to Carson County. — Physician

Not enough services available to address the problem. — Community/Business Leader

Access to outpatient care, therapy and finances to obtain medications. — Physician

One clinic that is close to impossible to get into. — Community/Business Leader

Insufficient care and treatment facilities. — Community/Business Leader

Outpatient care. — Physician

Access to services. — Physician

Lack of access to care. — Community/Business Leader

Lack of Providers

Limited access, due to low numbers of providers. Provider burnout due to high patient ratios. Limited knowledge about community-based services. — Community/Business Leader

Finding a mental health professional who is taking new patients. — Public Health Representative

Shortage of providers and limited number of beds. — Community/Business Leader

Lack of providers, stigma, follow up and transportation. — Community/Business Leader

Access to care with a shortage of mental health providers, especially for low-income. — Physician

Obtaining access to a psychiatrist. — Physician

Few providers or services. — Physician

No providers. — Physician

Prevalence/Incidence

As a high school principal, I see a significant decline in the mental health of our teens. — Community/Business Leader

PTSD, those off medications, disruptive folks in the courts and jail, undiagnosed folks, increased availability of self-medicating options such as pot, heroin and booze. Not enough psychiatrists, adult and youth. Not enough long-term treatment or housing in the area. — Community/Business Leader

Growing problem all over the country. Keeping people on their medications. Emergency treatment. Permanent fixes. — Community/Business Leader

I get a lot of patients with this problem. — Physician

Cost/Insurance Issues

Insurance or lack thereof. — Physician

Lack of access to care for Medicaid and uninsured. Lack of providers. — Physician

Lack of free-care option. — Physician

Funding

Programs are often underfunded and have even more limited access to funding. Behavioral health has increased capacity but is still often stretched thin. Limited number of providers. Tremendous prevalence of mental health disorders. — Physician

From what I know, Douglas County has a Suicide Prevention Network facility with programs to help support those who need it. However, it is fully funded by donation. When you have weekly suicides increasing in the area, this needs to be funded through the government and state. Far too many people need help. When you look for resources, most of those resources are in Reno- an hour away. People with depression, mental issues, etc. will not make the effort to drive an hour away. They need someone within arms-length to save them. Regular doctors cannot support these individuals because they don't have the training to understand the state the person is in. This is by far one of the most important items that needs to be fixed in our country. I've lost 10 to suicide, personally, not to mention the overwhelming numbers of children in the last 20 years. This has to be fixed / supported. — Community/Business Leader

Substance Abuse

> *Young people with opioid addiction. Access to drugs. Growing homeless population. Introduction of Mental Health Court in Carson City. — Community/Business Leader*

> *Drugs and alcohol. — Community/Business Leader*

Access to Medications/Supplies

> *Access to prescribed medicine and counselors and therapists that accept Medicaid. High self-pay costs. — Social Services Provider*

Diagnosis/Treatment

> *Lots of undiagnosed people and people scared they'll be locked away, not to mention the lack of good mental health care here. — Community/Business Leader*

Death, Disease & Chronic Conditions

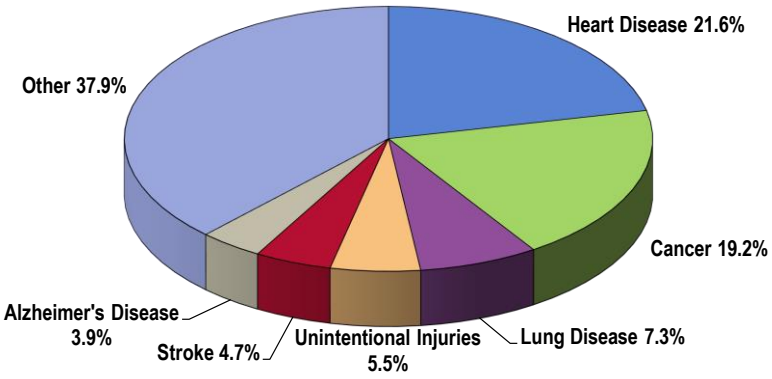
Professional Research Consultants, Inc.

Leading Causes of Death

Distribution of Deaths by Cause

Together, heart disease and cancers accounted for more than four in 10 deaths in the Primary Service Area in 2017.

Leading Causes of Death
(Primary Service Area, 2017)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.

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

Age-Adjusted Death Rates for Selected Causes

About Age-Adjusted Death Rates

In order to compare mortality in the region with other localities (in this case, STATENAME 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 objectives.

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

The following chart outlines 2015-2017 annual average age-adjusted death rates per 100,000 population for selected causes of death in the Primary Service Area.

Each of these is discussed in greater detail in subsequent sections of this report.

Age-Adjusted Death Rates for Selected Causes

(2015-2017 Deaths per 100,000 Population)

	PSA	Nevada	US	HP2020
Diseases of the Heart	171.4	202.0	166.3	156.9*
Malignant Neoplasms (Cancers)	159.7	156.6	155.6	161.4
Unintentional Injuries	62.9	46.4	46.7	36.4
Chronic Lower Respiratory Disease (CLRD)	57.3	53.6	41.0	n/a
Cerebrovascular Disease (Stroke)	37.5	36.3	37.5	34.8
Alzheimer's Disease	31.5	28.3	30.2	n/a
Diabetes	24.4	16.5	21.3	20.5*
Unintentional Drug-Related Deaths	23.8	17.4	16.7	11.3
Intentional Self-Harm (Suicide)	22.8	20.0	13.6	10.2
Motor Vehicle Deaths	19.4	16.5	11.2	12.4
Cirrhosis/Liver Disease	19.2	13.4	10.8	8.2
Firearm-Related	16.1	11.6	0.0	9.3
Pneumonia/Influenza	16.1	19.7	14.3	n/a
Kidney Disease	14.4	9.4	13.2	n/a
Homicide/Legal Intervention	4.2	6.1	5.6	5.5

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- 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.

Cardiovascular Disease

About Heart Disease & Stroke

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

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

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

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

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

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

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

— Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Heart Disease & Stroke Deaths

Heart Disease Deaths

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

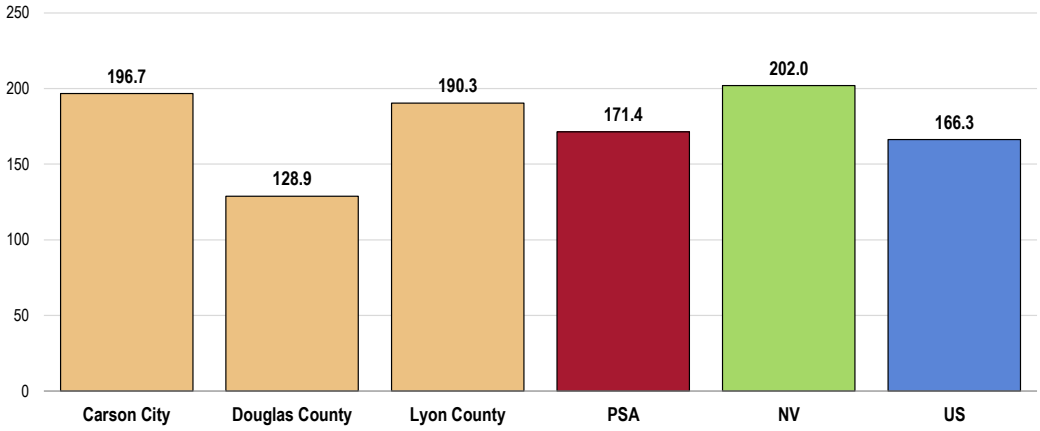
Between 2015 and 2017, there was an annual average age-adjusted heart disease mortality rate of 171.4 deaths per 100,000 population in the Primary Service Area.

- **BENCHMARK:** More favorable than the state rate.
- **DISPARITY:** Notably more favorable in Douglas County.

Heart Disease: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 156.9 or Lower (Adjusted)



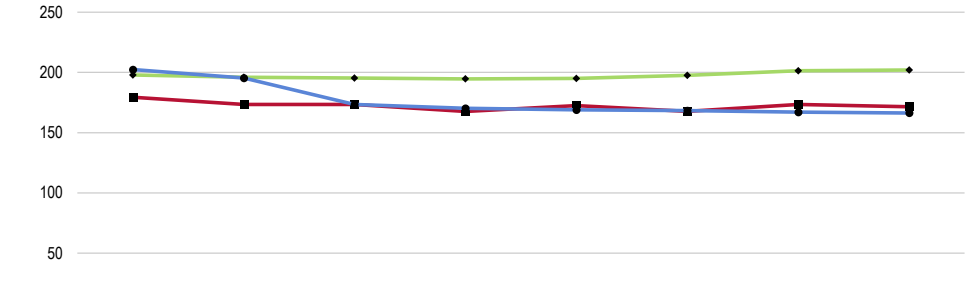
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-2]

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

Heart Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 156.9 or Lower (Adjusted)



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	179.4	173.5	173.4	167.6	172.5	167.7	173.4	171.4
NV	198.0	196.1	195.4	194.6	194.9	197.7	201.3	202.0
US	202.4	195.2	173.4	170.3	169.1	168.4	167.0	166.3

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-2]

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

Stroke Deaths

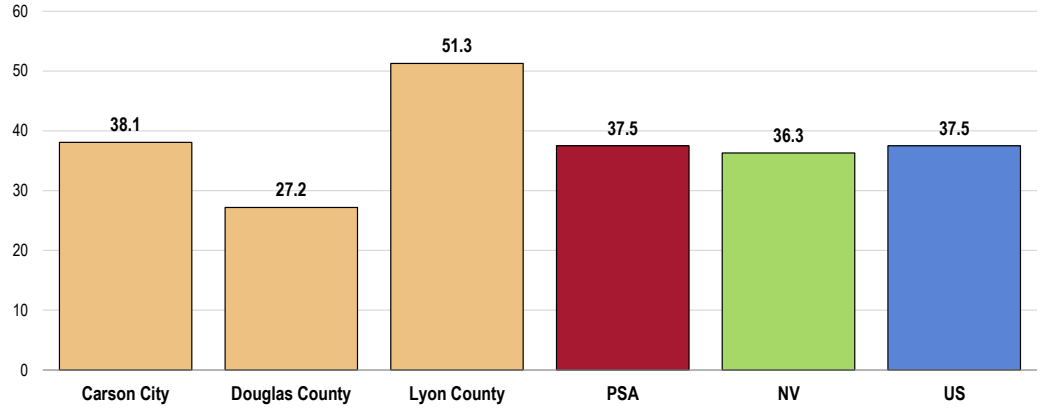
Between 2015 and 2017, there was an annual average age-adjusted stroke mortality rate of 37.5 deaths per 100,000 population in the Primary Service Area.

- **DISPARITY:** Highest in Lyon County.

Stroke: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 34.8 or Lower



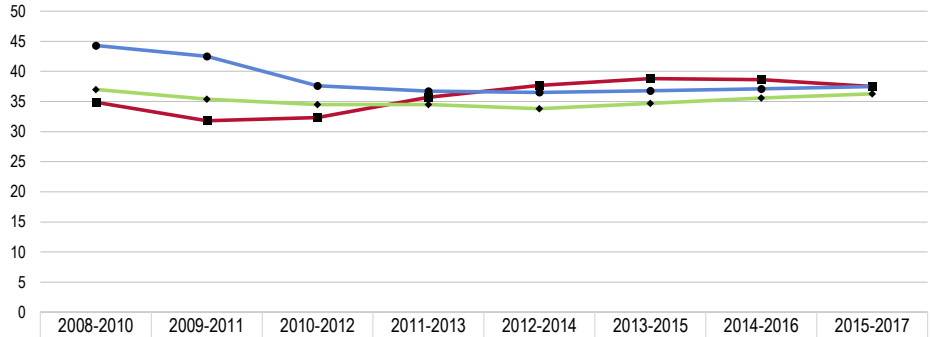
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-3]

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

Stroke: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 34.8 or Lower



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	34.9	31.8	32.3	35.7	37.7	38.8	38.6	37.5
NV	37.0	35.4	34.5	34.5	33.8	34.7	35.6	36.3
US	44.3	42.5	37.6	36.7	36.5	36.8	37.1	37.5

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-3]

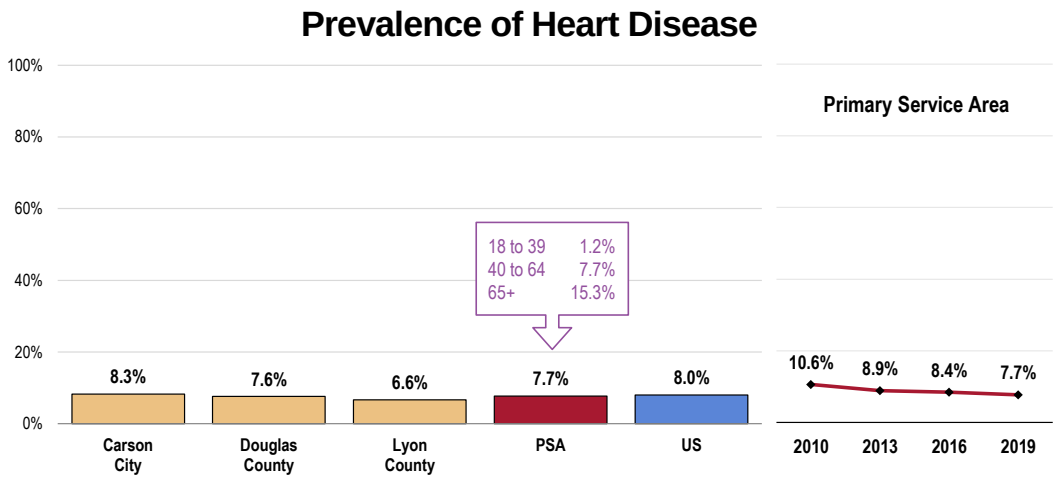
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Prevalence of Heart Disease & Stroke

Prevalence of Heart Disease

A total of 7.7% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina, or heart attack.

- **DISPARITY:** Note the strong correlation with age.
- **TREND:** Represents a decrease in prevalence over time.



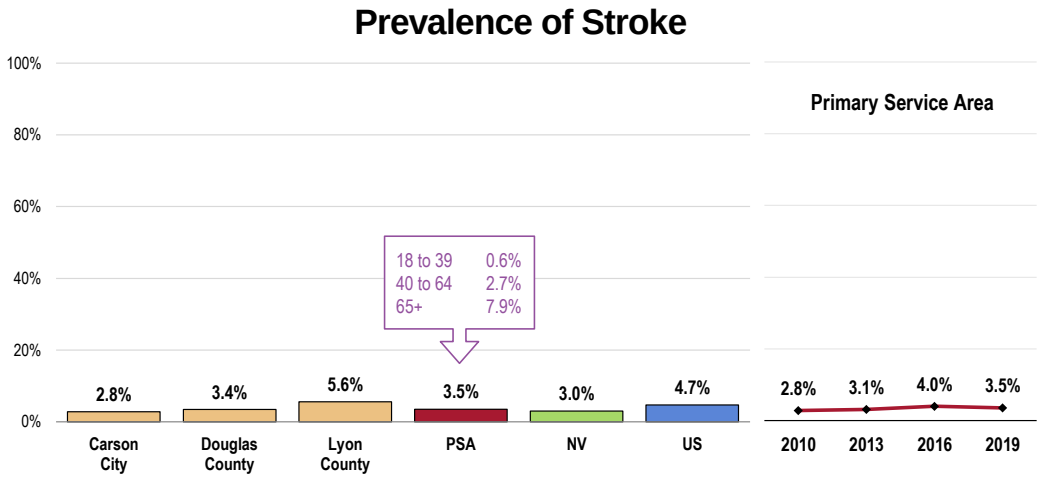
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 128]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

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

Prevalence of Stroke

A total of 3.5% of surveyed adults report that they suffer from or have been diagnosed with cerebrovascular disease (a stroke).

- **DISPARITY:** Increases significantly with age.



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Cardiovascular Risk Factors

About Cardiovascular Risk

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

— Healthy People 2020 (www.healthypeople.gov)

Blood Pressure & Cholesterol

Four in 10 Primary Service Area adults (40.0%) have been told at some point that their blood pressure was high.

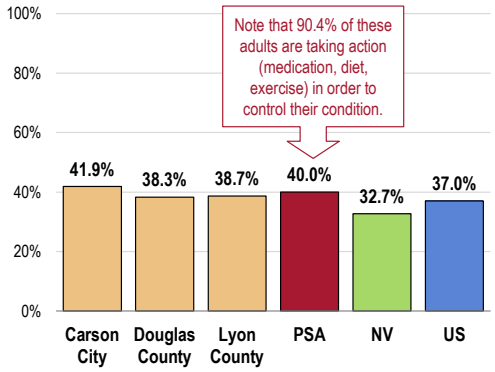
- **BENCHMARK:** Above state findings. Fails to satisfy the Healthy People 2020 objective of 26.9% or lower.

A total of 36.7% of adults have been told by a health professional that their cholesterol level was high.

- **BENCHMARK:** Far from satisfying the Healthy People 2020 objective of 13.5% or lower.
- **DISPARITY:** Highest in Douglas County.

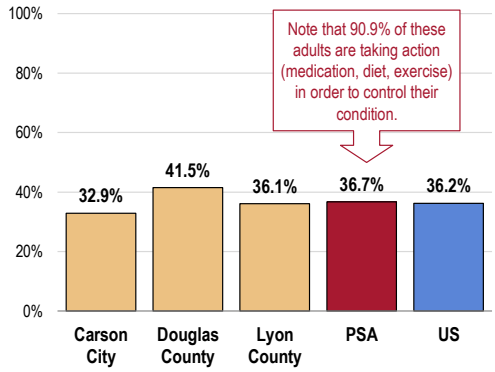
Prevalence of High Blood Pressure

Healthy People 2020 = 26.9% or Lower



Prevalence of High Blood Cholesterol

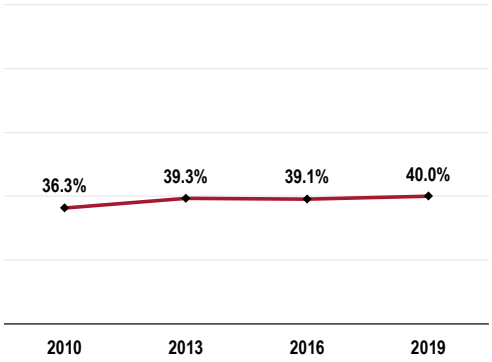
Healthy People 2020 = 13.5% or Lower



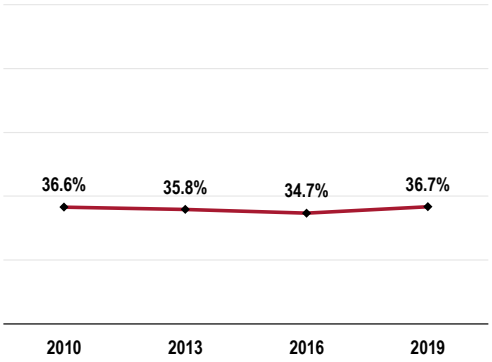
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 41, 44, 129, 130]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives HDS-5.1, HDS-7]

Notes:
- Asked of all respondents.

Prevalence of High Blood Pressure
(Primary Service Area)
Healthy People 2020 = 26.9% or Lower



Prevalence of High Blood Cholesterol
(Primary Service Area)
Healthy People 2020 = 13.5% or Lower



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 129, 130]
● US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives HDS-5.1, HDS-7]
Notes: ● Asked of all respondents.

Total Cardiovascular Risk

About Cardiovascular Risk

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

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

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

Three health-related behaviors contribute markedly to cardiovascular disease:

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

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

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

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

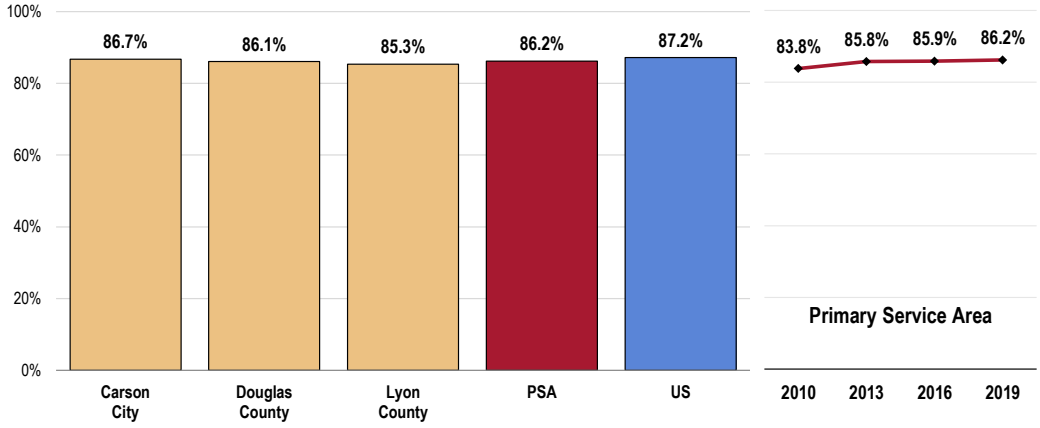
— National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

RELATED ISSUE:
See also *Nutrition*, *Physical Activity*, *Weight Status,* and *Tobacco Use* in the **Modifiable Health Risks** section of this report.

A total of 86.2% of Primary 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.

- **DISPARITY:** More common among men and adults age 40+.

Present One or More Cardiovascular Risks or Behaviors

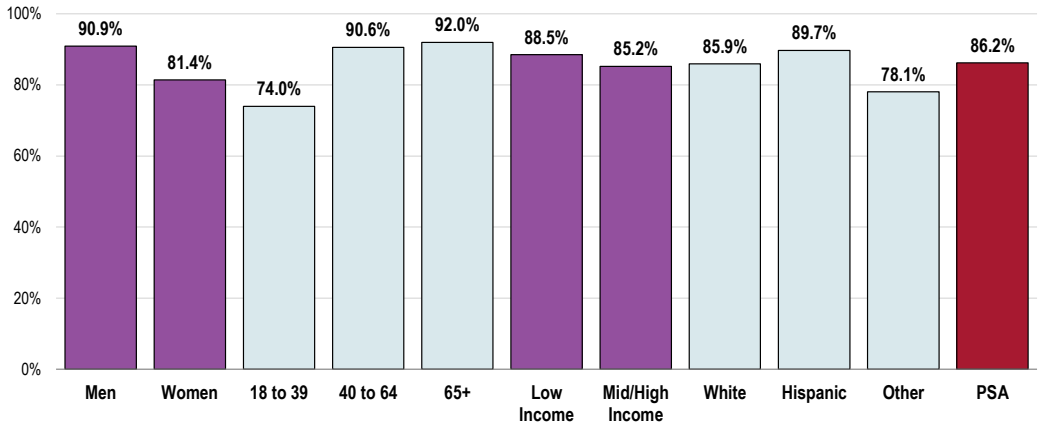


Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 131]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Reflects 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) high blood pressure; 4) high blood cholesterol; and/or 5) being overweight/obese.

Present One or More Cardiovascular Risks or Behaviors

(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 131]

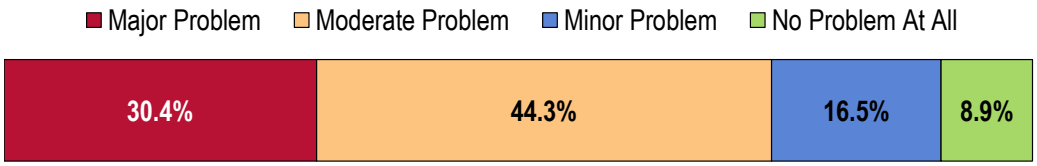
Notes:
- Reflects all respondents.
- Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) high blood pressure; 4) high blood cholesterol; and/or 5) being overweight/obese.
- Hispanics can be of any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

Key Informant Input: Heart Disease & Stroke

The greatest share of key informants taking part in an online survey characterized *Heart Disease & Stroke* as a "moderate problem" in the community.

Perceptions of Heart Disease and Stroke as a Problem in the Community

(Key Informants, 2019)



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

Top Concerns

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

Access to Care/Services

The majority of patients have to be taken to a hospital 40 miles away. The local hospital, CTH, needs to enhance its Emergency Department to become a Stroke Specialty Emergency Department. — Community/Business Leader

Access to care. Distance to care during an event, such as a stroke or heart attack. — Public Health Representative

Not enough community resources. Difficulty in access to primary care. — Physician

No hospital. — Community/Business Leader

Aging Population

Lots of older people and smokers that suffer from heart conditions. — Community/Business Leader

Aging community and lifestyle. — Community/Business Leader

Aging population. — Physician

Nutrition

Poor eating habits, medical resources, knowledge, etc. The foods consumed from birth-up are causing too many problems. While this can be genetic (as both my father and mother-in-law have both had massive heart attacks in the past two years), the rural communities do not have accommodations to support this major issue. — Community/Business Leader

The general population in our community suffer from a poor diet, lack of local primary and cardiology care, and there is very little emphasis placed on exercise and health. — Community/Business Leader

Diet and elderly population. — Physician

Prevalence/Incidence

While I have not personally had heart issues or strokes, I know of many people who have either suffered themselves from these issues, or had family members who suffered from them, sometimes with fatal results. — Community/Business Leader

Prevalence of the disease, limited access to prompt follow-up. Scheduling backups for stress tests. — Physician

I get a lot of patients with this problem. — Physician

Co-occurrences

> *Many clients use tobacco, alcohol and are overweight. — Social Services Provider*
>
> *Due to obesity. — Physician*

Early Diagnosis/Prevention

> *These are end-stage diseases. If one is to be effective in treatment, one needs to start treatment before the onset of the disease. Too few people take advantage of instructions and help before it's too late. — Physician*

Leading Cause of Death

> *Number one cause of death due to unpreventable causes like heredity and preventable causes like modern diets and low physical activity levels. Also, lack of awareness among women as to their risk. — Other Health Provider*

Cancer

About Cancer

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

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

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

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

— Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Cancer Deaths

All Cancer Deaths

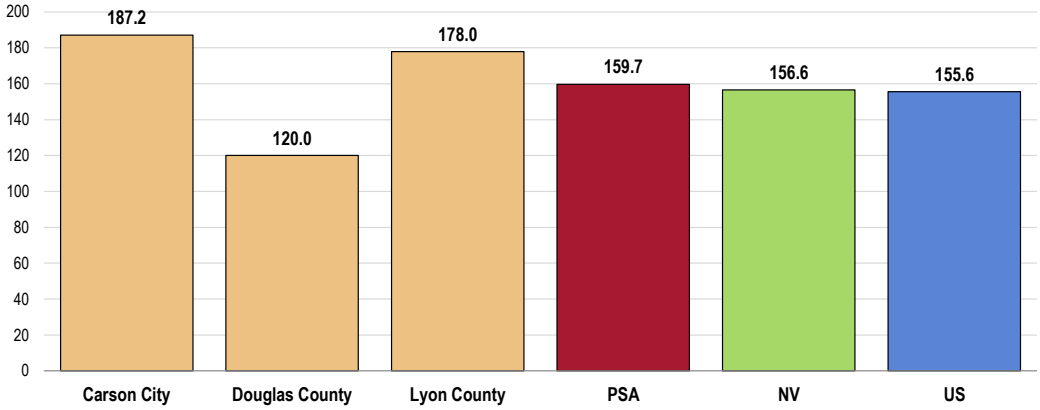
Between 2015 and 2017, there was an annual average age-adjusted cancer mortality rate of 159.7 deaths per 100,000 population in the Primary Service Area.

- **DISPARITY:** Favorably low in Douglas County.
- **TREND:** Marks a significant decrease over time.

Cancer: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 161.4 or Lower



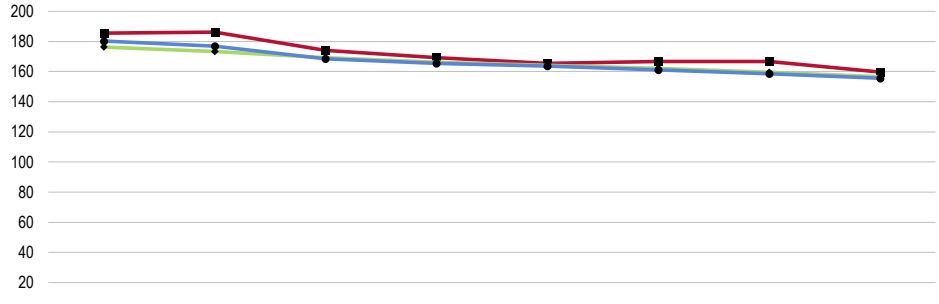
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-1]

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

Cancer: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 161.4 or Lower



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	185.6	186.2	174.0	169.2	165.4	166.8	166.7	159.7
NV	176.3	173.2	169.3	166.1	164.2	162.1	159.7	156.6
US	180.3	177.0	168.6	165.4	163.6	161.0	158.5	155.6

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-1]

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

Cancer Deaths by Site

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

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

- BENCHMARKS: The 2015-2017 annual average age-adjusted colorectal cancer death rate is significantly higher than the national rate.
- Each of the other cancer death rates by site is similar to or better than its related benchmarks and Healthy People 2020 objective.

Age-Adjusted Cancer Death Rates by Site

(2015-2017 Annual Average Deaths per 100,000 Population)

	Primary Service Area	Nevada	US	HP2020
ALL CANCERS	159.7	156.6	155.6	161.4
Lung Cancer	39.1	39.1	38.5	45.5
Prostate Cancer	21.0	18.2	18.9	21.8
Female Breast Cancer	18.8	21.3	20.1	20.7
Colorectal Cancer	16.6	16.6	13.9	14.5

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov

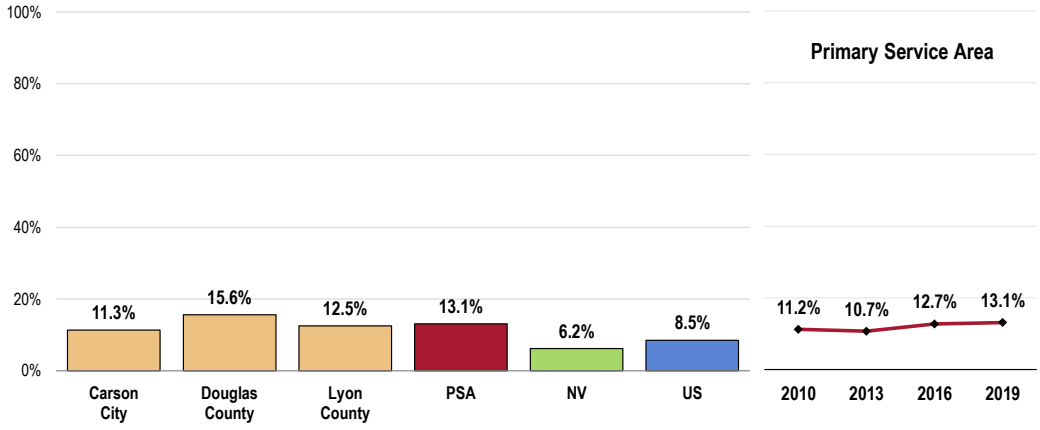
Prevalence of Cancer

Skin Cancer

A total of 13.1% of surveyed Primary Service Area adults report having been diagnosed with skin cancer.

- **BENCHMARK:** Notably higher than state and US findings.

Prevalence of Skin Cancer



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 28]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

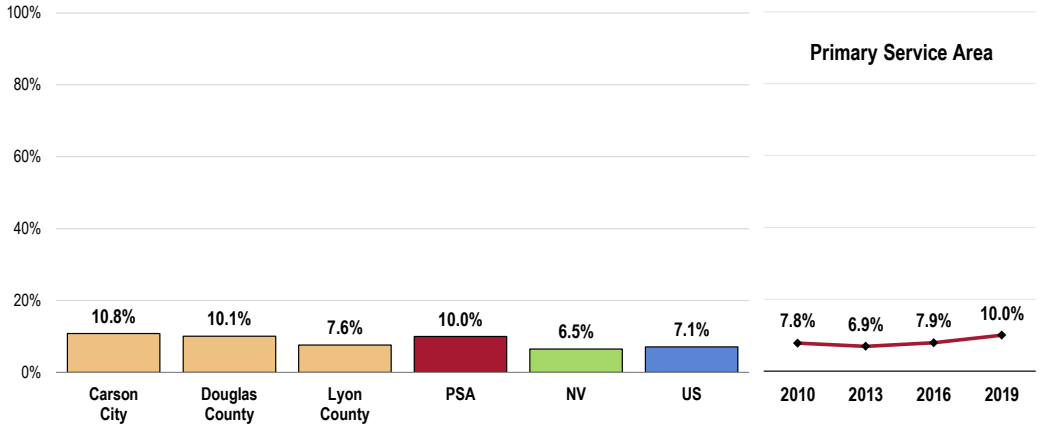
Notes:
- Asked of all respondents.

Other Cancers

A total of 10.0% of survey respondents have been diagnosed with some type of (non-skin) cancer.

- **BENCHMARK:** Above the Nevada and US prevalence.
- **TREND:** Higher than the low reported in 2013, though similar to other prior findings.

Prevalence of Cancer (Other Than Skin Cancer)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 27]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Cancer Risk

RELATED ISSUE:
See also *Nutrition*, *Physical Activity*, *Weight Status*, and *Tobacco Use* in the **Modifiable Health Risks** section of this report.

About Cancer Risk

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

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

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

Cancer Screenings

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

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

Female Breast Cancer

The US Preventive Services Task Force (USPSTF) recommends biennial screening mammography for women aged 50 to 74 years.

Cervical Cancer

The US Preventive Services Task Force (USPSTF) strongly recommends screening for cervical cancer every 3 years with cervical cytology alone in women aged 21 to 29 years.

Colorectal Cancer

The US Preventive Services Task Force (USPSTF) recommends screening for colorectal cancer starting at age 50 years and continuing until age 75 years.

— 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.

Among women age 50-74, three-quarters (75.9%) have had a mammogram within the past 2 years.

- **BENCHMARK:** Fails to satisfy the Healthy People 2020 objective of 81.1% or higher.

Among Primary Service Area women age 21 to 65, 68.1% have had a Pap smear within the past 3 years.

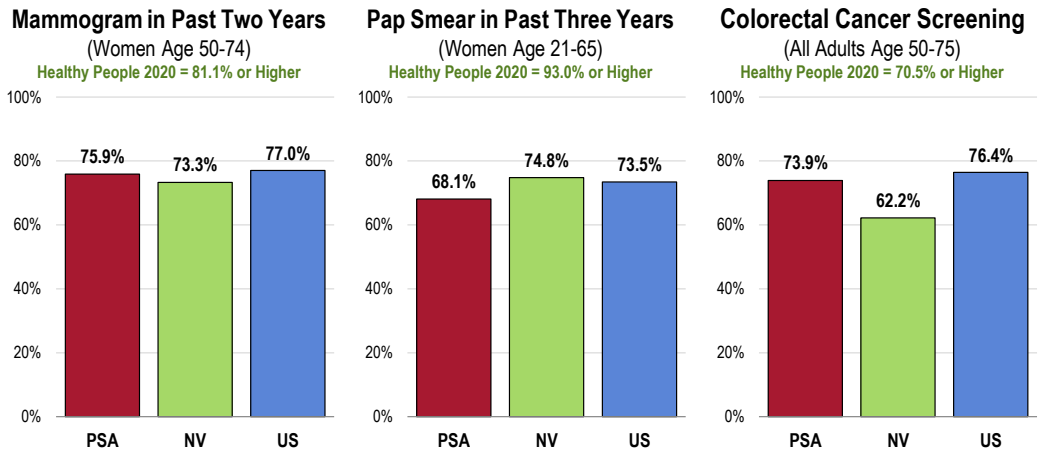
- **BENCHMARK:** Less favorable than the state proportion. Fails to satisfy the Healthy People 2020 objective of 93.0% or higher.
- **TREND:** Represents a significant decrease over time.

Among all adults age 50-75, 73.9% have had appropriate colorectal cancer screening.

- **BENCHMARK:** More favorable than seen across Nevada.

"Appropriate colorectal cancer screening" includes a fecal occult blood test within the past year and/or a lower endoscopy (sigmoidoscopy or colonoscopy) within the past 10 years.

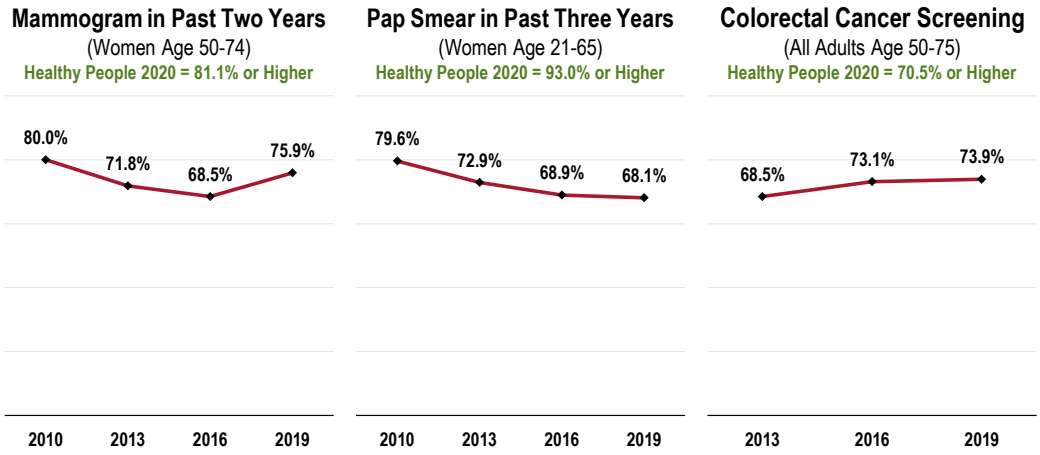
Cancer Screenings



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 133, 134, 137]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives C-15, C-16, C-17]

Notes:
- Each indicator is shown among the gender and/or age group specified.

Cancer Screenings: Primary Service Area Trends

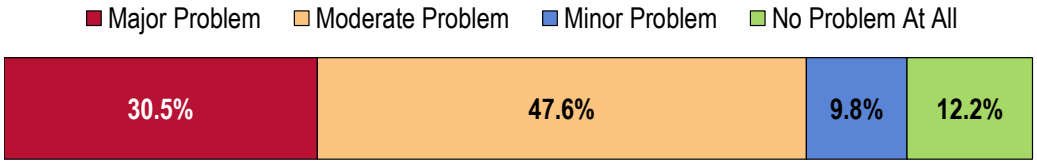


Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 133, 134, 137]
● US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives C-15, C-16, C-17]
Notes: ● Each indicator is shown among the gender and/or age group specified.

Key Informant Input: Cancer

The greatest share of key informants taking part in an online survey characterized *Cancer* as a "moderate problem" in the community.

Perceptions of Cancer as a Problem in the Community
(Key Informants, 2019)



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

Top Concerns

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

Prevalence/Incidence

> *There is a high prevalence combined with a limited number of providers. Also, availability of infusion facilities seems to limit the number of patients who can receive treatment at any given time. — Physician*
>
> *I know of many people who have had cancer or related issues. Some are able to receive the help they need, but others succumb to their cancer after many months or years of upheaval in their families and great expense. — Community/Business Leader*

Carson Tahoe Center is really busy with new patients, and many friends have some form of cancer. — Community/Business Leader

Every other person in our lives will have or has cancer in their lives of one form or another. I know far to many that live with it or have passed from it, even early on. There needs to be more screenings and test at an earlier age than what the government says to do. Examples, my 30-year-old friends are getting and dying from breast cancer. My twin sister has melanoma, diagnosed at 30. It's affecting people earlier than assumed. — Community/Business Leader

Working in Lyon County, there was a new case of cancer, whether it's lungs, kidney, pancreas, or gallbladder, or blood cancers every month or more. — Physician

I am not sure if it is just in this community as far as higher cases, but it sure seems like it is just a matter of time before you get some kind of cancer. — Community/Business Leader

I know too many people in this community who have suffered from misdiagnosis and mistreatment of cancer. — Community/Business Leader

The predominance of cancer in the area. — Community/Business Leader

It affects lots of people, not only here, but nationwide. — Community/Business Leader

Cancer is a major problem throughout the country. — Community/Business Leader

Elderly population, lots of cancer. — Physician

I get a lot of patients with this problem. — Physician

Access to Care/Services

I understand that those with cancer are getting treatment elsewhere, either over the mountains in California or east in Utah. I understand also that there is some treatment options north in Reno, but that is very limited. — Community/Business Leader

Limited providers of cancer care in this area leads to limited access to quality cancer care. — Physician

There are the new providers, with the new diagnosis of each, and too long to be seen by a specialist. — Physician

Limited diagnostic resources available. — Community/Business Leader

No hospital. — Community/Business Leader

Tobacco Use

Large population of elderly persons who have smoked or drank alcoholic beverages for a lengthy period of time. They tend to not have regular medical care due to a lack of money, transportation, and access, so a diagnosis often fatally delayed. — Community/Business Leader

Gambling and smoking in casinos. Poor community education. — Physician

Respiratory Disease

About Asthma & COPD

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

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

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

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

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

Risk factors for asthma currently being investigated include:

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

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

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

— Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Respiratory Disease Deaths

Chronic Lower Respiratory Disease Deaths (CLRD)

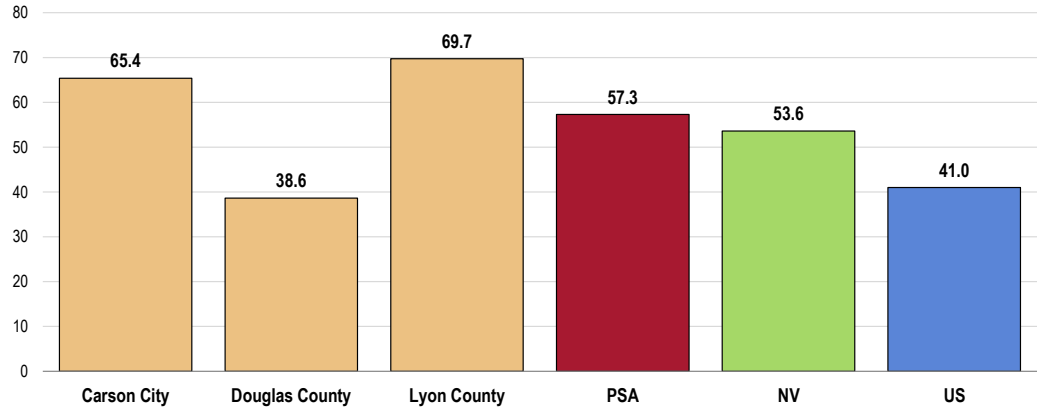
Note: Chronic lower respiratory disease (CLRD) includes lung diseases such as emphysema, chronic bronchitis, and asthma.

Between 2015 and 2017, there was an annual average age-adjusted CLRD mortality rate of 57.3 deaths per 100,000 population in the Primary Service Area.

- **BENCHMARK:** Significantly above the US rate.
- **DISPARITY:** Lowest in Douglas County.

CLRD: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

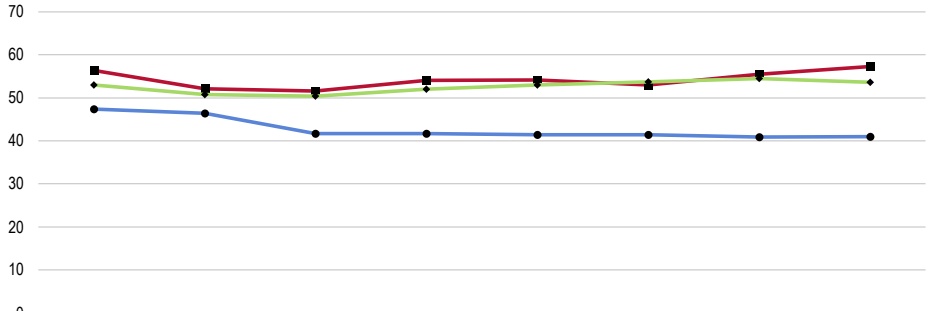


Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.

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

CLRD: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	56.4	52.1	51.6	54.1	54.2	53.0	55.5	57.3
NV	53.0	50.8	50.4	52.0	53.0	53.7	54.5	53.6
US	47.4	46.4	41.7	41.7	41.4	41.4	40.9	41.0

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.

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

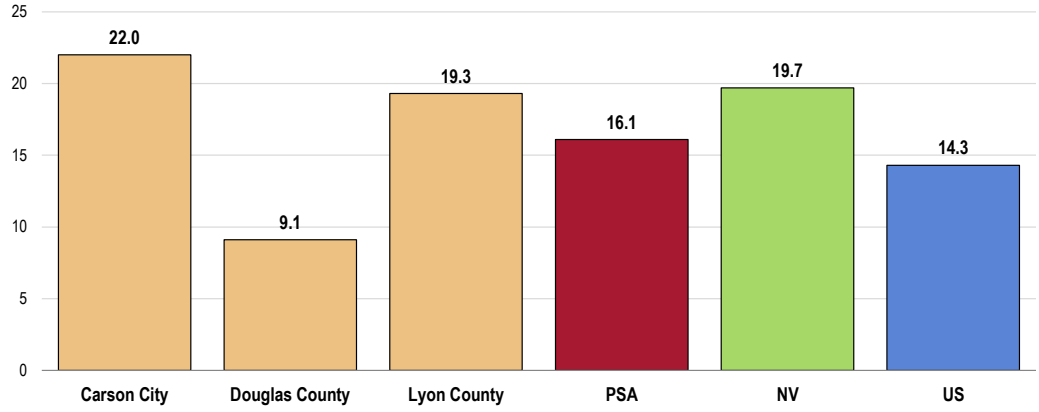
Pneumonia/Influenza Deaths

Between 2015 and 2017, the Primary Service Area reported an annual average age-adjusted pneumonia influenza mortality rate of 16.1 deaths per 100,000 population.

- **BENCHMARK:** Better than the Nevada rate.
- **DISPARITY:** Notably low in Douglas County.

Pneumonia/Influenza: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

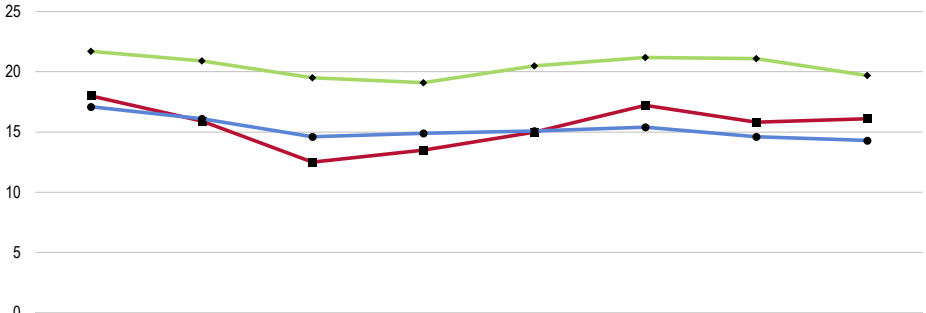


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.

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.

Pneumonia/Influenza: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	18.0	15.9	12.5	13.5	15.0	17.2	15.8	16.1
NV	21.7	20.9	19.5	19.1	20.5	21.2	21.1	19.7
US	17.1	16.1	14.6	14.9	15.1	15.4	14.6	14.3

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.

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.

Influenza & Pneumonia Vaccination

About Influenza & Pneumonia

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)

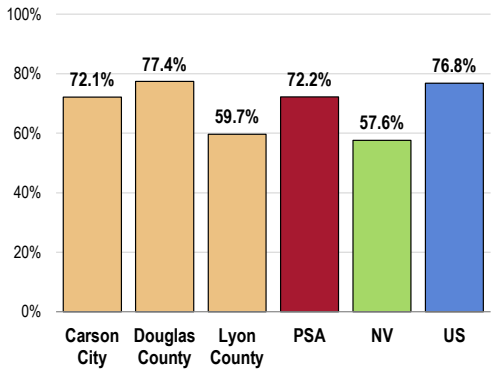
Among Primary Service Area adults age 65 and older, 72.2% received a flu shot within the past year.

- **BENCHMARK:** Higher than the state proportion.
- **DISPARITY:** Vaccination is lowest in Lyon County.

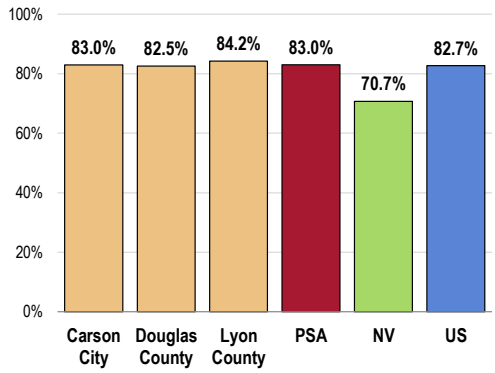
Among Primary Service Area adults age 65 and older, 83.0% have received a pneumonia vaccination at some point in their lives.

- **BENCHMARK:** Above the state proportion, though it fails to satisfy the Healthy People 2020 objective of 90.0% or higher.
- **TREND:** A significant increase over time (not shown).

Older Adults:
Flu Vaccination in the Past Year
(Adults Age 65+)
Healthy People 2020 = 70.0% or Higher



Older Adults:
Ever Had a Pneumonia Vaccine
(Adults Age 65+)
Healthy People 2020 = 90.0% or Higher



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 144, 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): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IID-12.12]

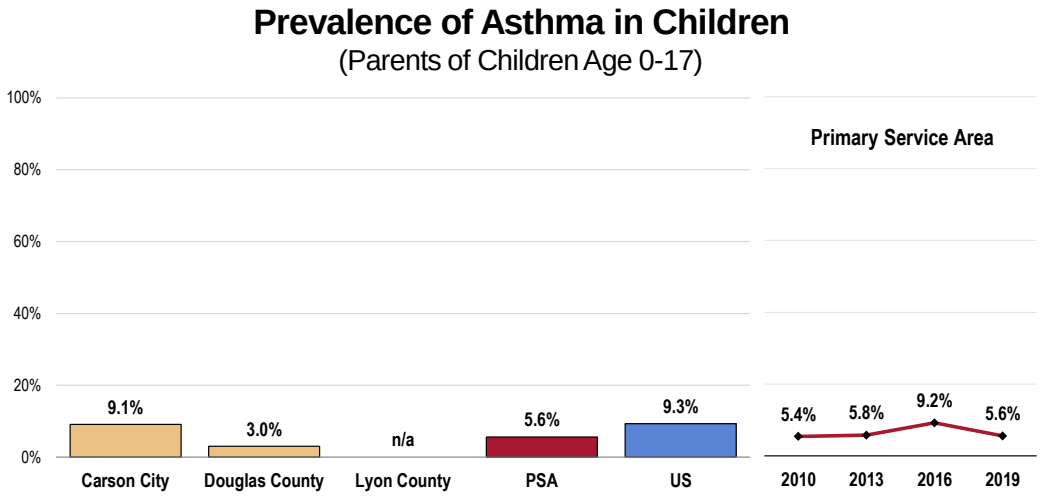
Notes:
- Reflects respondents 65 and older.

Prevalence of Respiratory Disease

Child Asthma

Among Primary Service Area children under age 18, 5.6% currently have asthma.

- No significant differences to report.



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 139]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

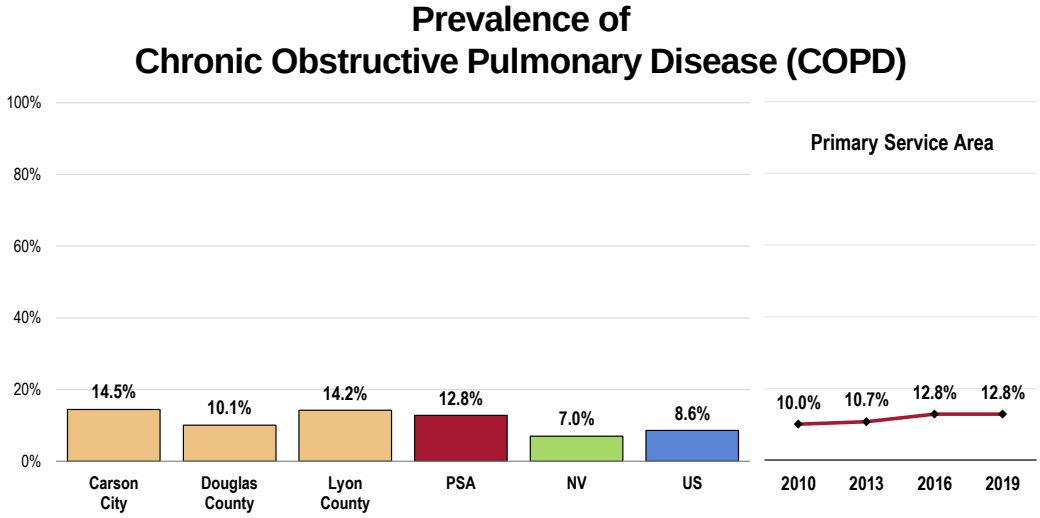
Notes:
- Asked of all respondents with children 0 to 17 in the household.
- Includes children who have ever been diagnosed with asthma, and whom are reported to still have asthma.
- The sample for Lyon County is too small to be shown here.

Chronic Obstructive Pulmonary Disease (COPD)

Note: COPD includes lung diseases such as emphysema and chronic bronchitis.

A total of 12.8% of Primary Service Area adults suffer from chronic obstructive pulmonary disease (COPD, including emphysema and bronchitis).

- **BENCHMARK:** Higher than state and US findings.



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 24]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

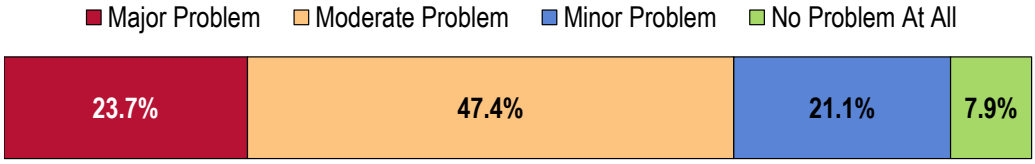
Notes:
- Asked of all respondents.
- Includes children who have ever been diagnosed with asthma, and whom are reported to still have asthma.
- Includes those having ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema.
- In 2010 and 2013 data, the term "chronic lung disease" was used, which also included bronchitis or emphysema.

Key Informant Input: Respiratory Disease

The greatest share of key informants taking part in an online survey characterized *Respiratory Disease* as a "moderate problem" in the community.

Perceptions of Respiratory Diseases as a Problem in the Community

(Key Informants, 2019)



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

Top Concerns

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

Tobacco Use

Large percentage of adults and young people who smoke cigarettes. Dusty and windy environment. Large concentration of allergens. — Community/Business Leader

Many clients smoke tobacco or have limited lung capacity due to illness, age or disability. Many clients come in with portable oxygen. Limits daily activities. — Social Services Provider

Excessive smoking, poor follow-up and compliance. — Physician

There are still quite a few people, especially young people, who smoke or do drugs, which contribute to respiratory issues. — Community/Business Leader

Smoking. — Physician

Environmental Issues

Indirectly, the lack of housing with our climate creates a lot of lung ailments such as pneumonia and the flu, and hygiene-related ailments. — Community/Business Leader

Air quality, rampant forest fires, smoking and vaping. — Other Health Provider

Fire season. — Physician

Prevalence/Incidence

I see a large representation of clientele in and around the community dependent on oxygen. — Social Services Provider

COPD, smoking, silica, lots of oxygen tank use, casinos. — Physician

Access for Medicaid/Medicare Patients

This is a major problem for people with Medicaid, in particular. — Physician

Access to Care/Services

No hospital. — Community/Business Leader

Comorbidities

COPD directly related to the growing number of the aging population that do or have been smokers. — Community/Business Leader

Hygiene

Cough and sneeze hygiene is lacking in the general community. — Public Health Representative

Injury & Violence

About Injury & Violence

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

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

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

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

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

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

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

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

Efforts to prevent violence may focus on:

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

— Healthy People 2020 (www.healthypeople.gov)

Unintentional Injury

Age-Adjusted Unintentional Injury Deaths

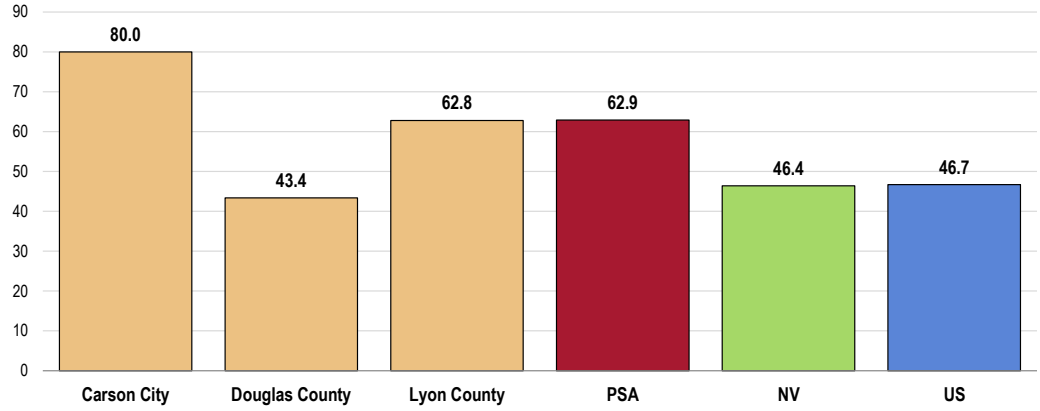
Between 2015 and 2017, there was an annual average age-adjusted unintentional injury mortality rate of 62.9 deaths per 100,000 population in the Primary Service Area.

- **BENCHMARK:** Significantly above the state and national rates; far from satisfying the related Healthy People 2020 objective (36.4 or lower).
- **DISPARITY:** Notably high in Carson City.
- **TREND:** Represents a significant increase over the past decade, particularly since the 2012-2014 reporting period.

Unintentional Injuries: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 36.4 or Lower



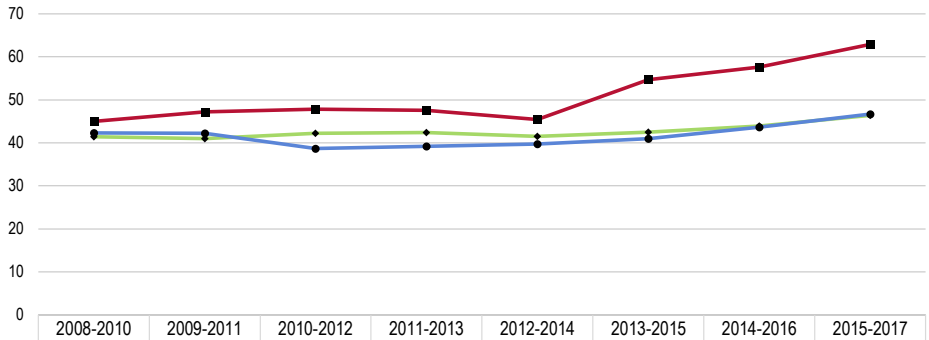
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-11]

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

Unintentional Injuries: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 36.4 or Lower



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	45.0	47.2	47.8	47.6	45.4	54.7	57.6	62.9
NV	41.4	41.0	42.2	42.4	41.5	42.5	43.9	46.4
US	42.3	42.2	38.7	39.2	39.7	41.0	43.7	46.7

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-11]

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

Leading Causes of Unintentional Injury Deaths

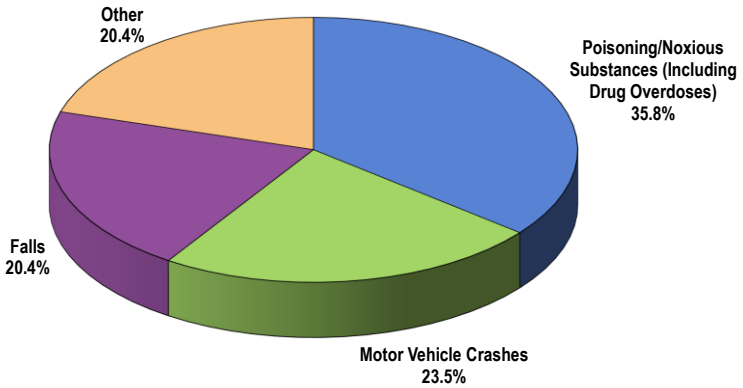
RELATED ISSUE:

For more information about unintentional drug-related deaths, see also *Substance Abuse* in the **Modifiable Health Risks** section of this report.

Poisoning (including unintentional drug overdose), motor vehicle crashes, and falls accounted for most unintentional injury deaths in the Primary Service Area between 2015 and 2017.

Leading Causes of Unintentional Injury Deaths

(Primary Service Area, 2015-2017)



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.

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

Intentional Injury (Violence)

Age-Adjusted Homicide Deaths

RELATED ISSUE:

See also *Mental Health*: *Suicide* in the **General Health Status** section of this report.

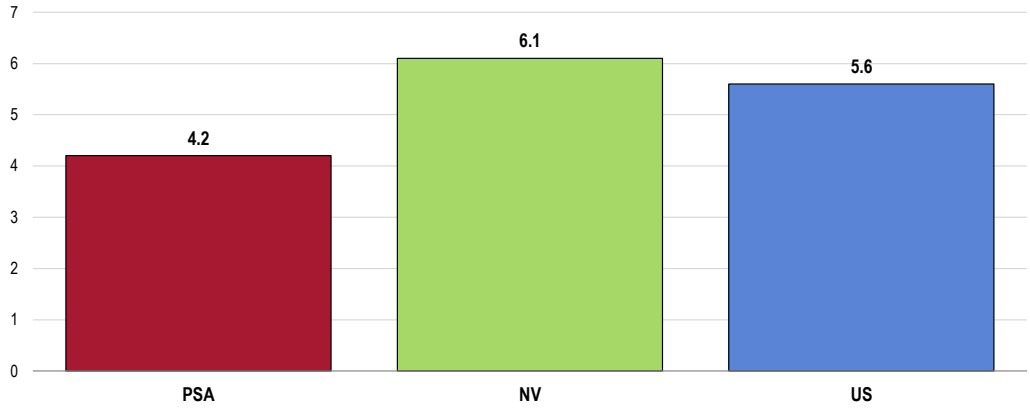
Between 2015 and 2017, there was an annual average age-adjusted homicide rate of 4.2 deaths per 100,000 population in the Primary Service Area.

- **BENCHMARK:** More favorable than Nevada and US rates; satisfies the related Healthy People 2020 objective of 5.5 or lower.

Homicide: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 5.5 or Lower



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-29]

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

Violent Crime Rates

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

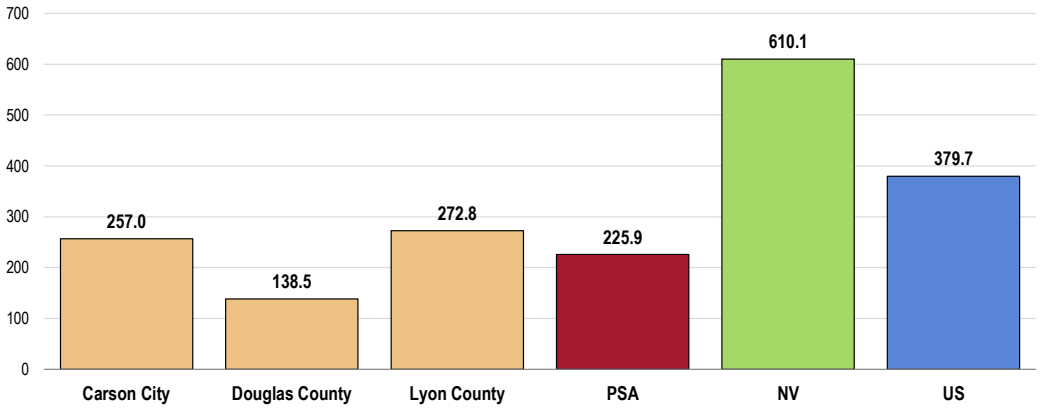
Note that the quality of crime data can vary widely from location to location, depending on the consistency and completeness of reporting among various jurisdictions.

Between 2012 and 2014, there were a reported 225.9 violent crimes per 100,000 population in the Primary Service Area.

- **BENCHMARK:** Far lower than across the state or nation.
- **DISPARITY:** Lowest in Douglas County.

Violent Crime

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



Sources:
- Federal Bureau of Investigation, FBI Uniform Crime Reports.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

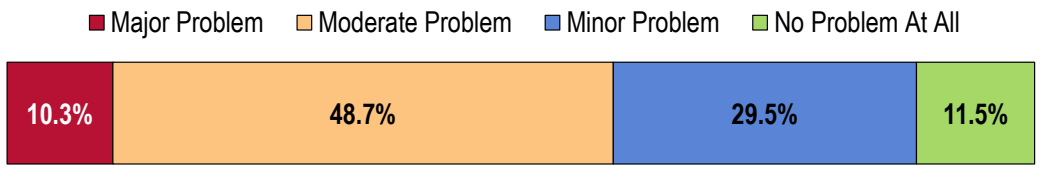
Notes:
- This indicator reports the rate of violent crime offenses reported by the sheriff's office or county police department per 100,000 residents. Violent crime includes homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety.
- Participation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

Key Informant Input: Injury & Violence

Just under half of key informants taking part in an online survey characterized *Injury & Violence* as a "moderate problem" in the community.

Perceptions of Injury and Violence as a Problem in the Community

(Key Informants, 2019)



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

Notes:
- Asked of all respondents.

Top Concerns

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

Substance Abuse

> *Injury and violence are prominent with substance abusers and family members of substance abusers. — Social Services Provider*
>
> *Drugs and alcohol abuse. — Physician*

Domestic/Family Violence

> *Advocates for domestic violence and the sheriff's office identifies this as one of their major problems. — Community/Business Leader*

Trauma

> *Trauma and violence in the hospital against healthcare workers. — Physician*

Diabetes

About Diabetes

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

Diabetes mellitus:

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

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

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

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

— Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Diabetes Deaths

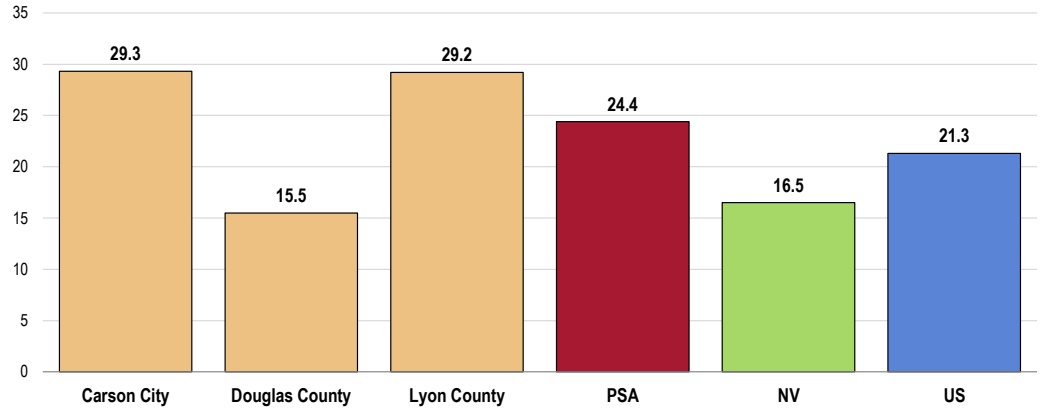
Between 2015 and 2017, there was an annual average age-adjusted diabetes mortality rate of 24.4 deaths per 100,000 population in the Primary Service Area.

- **BENCHMARK:** Far higher than the statewide rate. Fails to satisfy the related Healthy People 2020 objective of 20.5 or lower.
- **DISPARITY:** Favorably low in Douglas County.

Diabetes: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 20.5 or Lower (Adjusted)



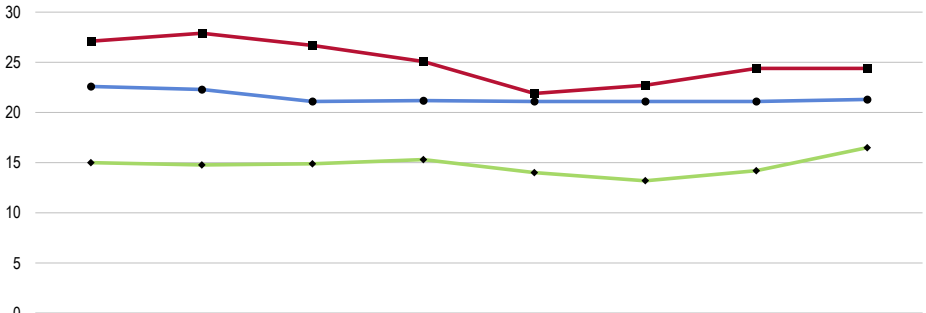
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective D-3]

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

Diabetes: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 20.5 or Lower (Adjusted)



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	27.1	27.9	26.7	25.1	21.9	22.7	24.4	24.4
NV	15.0	14.8	14.9	15.3	14.0	13.2	14.2	16.5
US	22.6	22.3	21.1	21.2	21.1	21.1	21.1	21.3

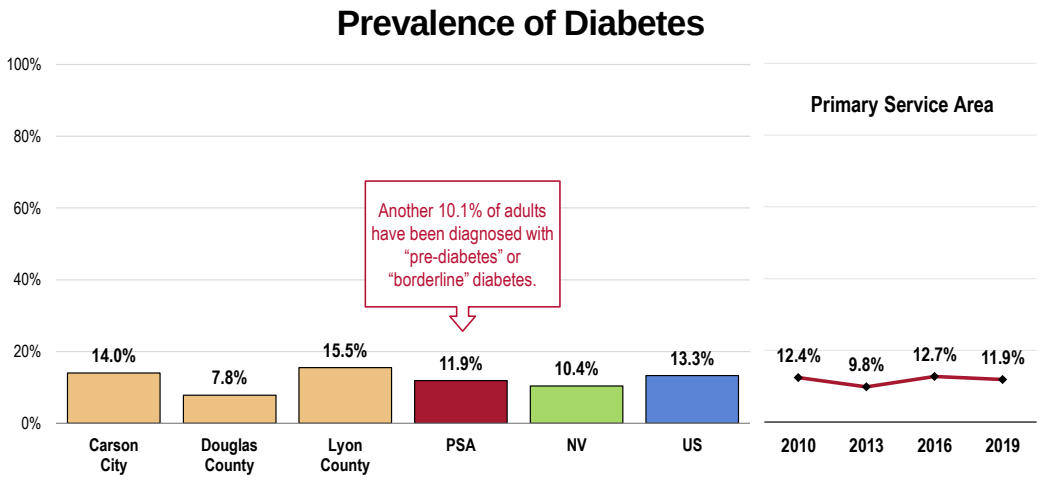
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective D-3]

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

Prevalence of Diabetes

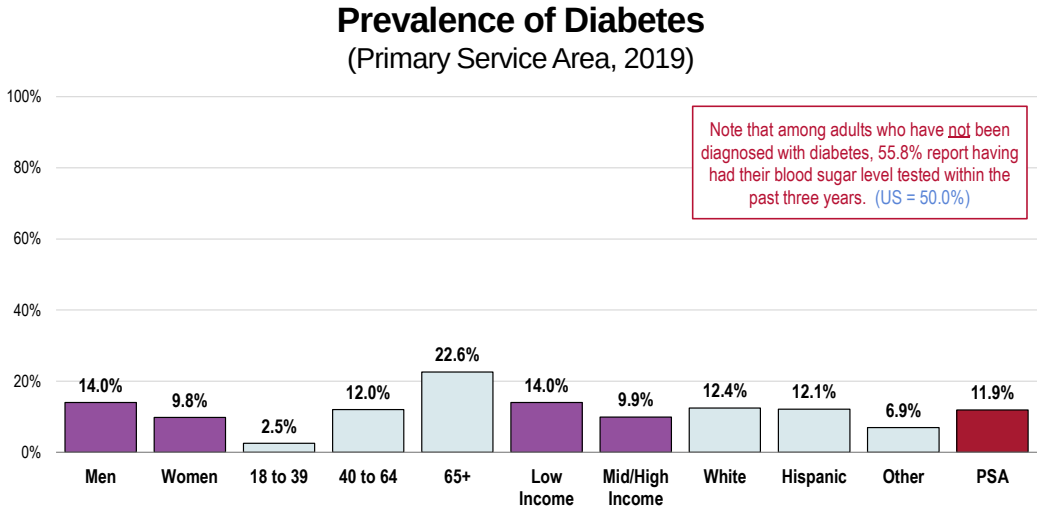
A total of 11.9% of Primary Service Area adults report having been diagnosed with diabetes.

- **DISPARITY:** This prevalence is lowest in Douglas County and shows a strong correlation with age.



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 140]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 37, 140]

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

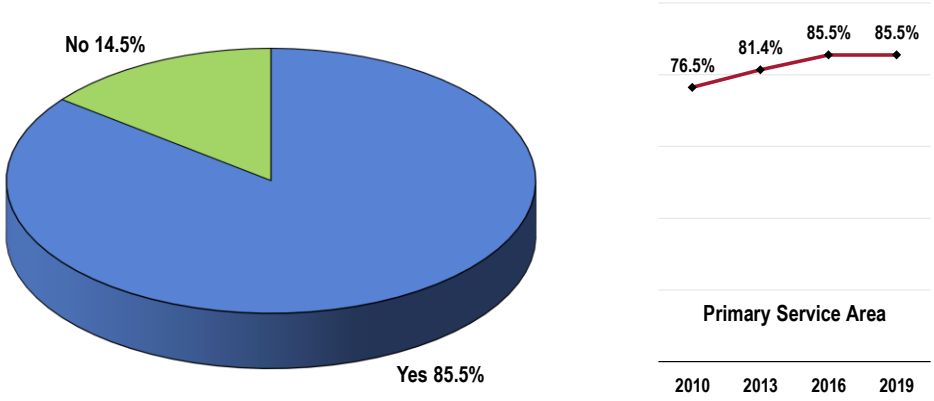
Diabetes Treatment

Of those diagnosed with diabetes, 85.5% report taking insulin or another medication to treat their condition.

- TREND: The increase over time is not statistically significant.

Taking Insulin or Other Medication to Manage Diabetes

(Primary Service Area Diabetics, 2019)



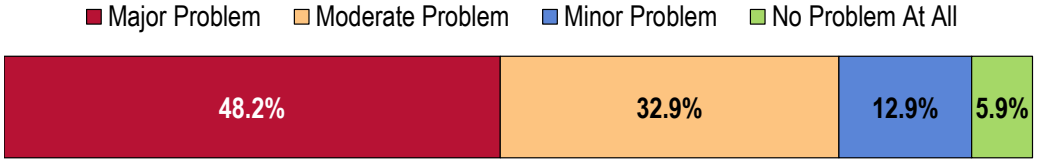
Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 308]
Notes: ● Asked of respondents with diabetes.

Key Informant Input: Diabetes

Just under half of key informants taking part in an online survey characterized *Diabetes* as a "major problem" in the community.

Perceptions of Diabetes as a Problem in the Community

(Key Informants, 2019)



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

Top Concerns

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

Access to Care/Services

Access to primary care providers. The cost of medications, insulin and supplies, and good culturally competent education. — Physician

Access to care. Good education about the importance of exercise and diet. Lack of exercise options for some people. Lack of dietary guidance for many people. A lack of affordable, healthy food options. — Physician

Access to an endocrinologist, high cost of medications. No inpatient diabetes education available in the medical center. One of the endocrinologists does not accept government-run insurance programs. — Physician

Timely access to certified diabetes educators. — Physician

Access to good care locally. — Public Health Representative

No hospital. — Community/Business Leader

Awareness/Education

Lack of diabetes education, knowledge on how best to monitor the disease. Lack of resources. — Community/Business Leader

Access to education and healthy foods. Also, incentives to be healthy and in control of diabetes. We should not just keep allowing access for being reactive to diseases, but be proactive. — Public Health Representative

I don't think there is enough awareness, especially for our youth. I do not know of any programs that are focusing on helping youth in the area that are at-risk of developing diabetes. — Community/Business Leader

Not enough education resources to give adequate information on diabetic management and meal planning. — Physician

Disease Management

Compliance to the medication and not enough resources for the patient to access diabetic education, and for some, acquiring the medication. — Physician

Following medical advice, cost of insulin, poor diet. — Community/Business Leader

Treatment compliance. Poor diets and medication adherence. — Physician

Non-compliant patients. — Physician

Lifestyle

Many individuals, both adults and youth, are pre-diabetic or diabetic, but do not necessarily change their lifestyles, nutrition or physical activity. — Social Services Provider

Poor eating habits, medical resources and knowledge. The foods consumed from birth on up are causing too many problems. — Community/Business Leader

The lifestyle of the area does not support those with diabetes. — Community/Business Leader

Weight control, diet, access to PMD for medications. — Physician

Affordable Care/Services

Money. Health care is expensive, and medications are expensive. A lot of people I know have diabetes. Many are doing very minimal treatment because they can't afford more. — Community/Business Leader

Lack of access to care for Medicaid and uninsured. — Physician

Medicine and treatment. — Social Services Provider

Diagnosis/Treatment

Identifying their need is the first challenge, accessing care and transportation to outlying communities for treatment. — Community/Business Leader

Consistent care, should be a diabetic clinic. — Physician

Lack of Providers

> *Challenges include care with a lack of endocrinologists (this is an acute issue with type 1 diabetes); it is the most costly chronic disease there is; skyrocketing costs of medicines including insulin; lack of insurance coverage for new technologies that vastly improve care and A1C levels like continuous glucose monitors and artificial pancreas pumps because they are expensive in the short term but reduce complications in the long-term; and a just the burnout factor of a 24/7 disease with no end in sight. — Other Health Provider*

> *No local endocrinologist and long wait period to get into specialists in Reno and Carson. The local physicians and physician's assistants are not comfortable treating diabetes. — Community/Business Leader*

Prevalence/Incidence

> *Many afflicted people. Seems to be a growing problem. — Community/Business Leader*

> *I get a lot of patients with this problem. — Physician*

Obesity

> *Lots of overweight people in our area. — Community/Business Leader*

> *Adult obesity is high compared to state and national stats. — Community/Business Leader*

Kidney Disease

About Kidney Disease

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

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

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

— Healthy People 2020 (www.healthypeople.gov)

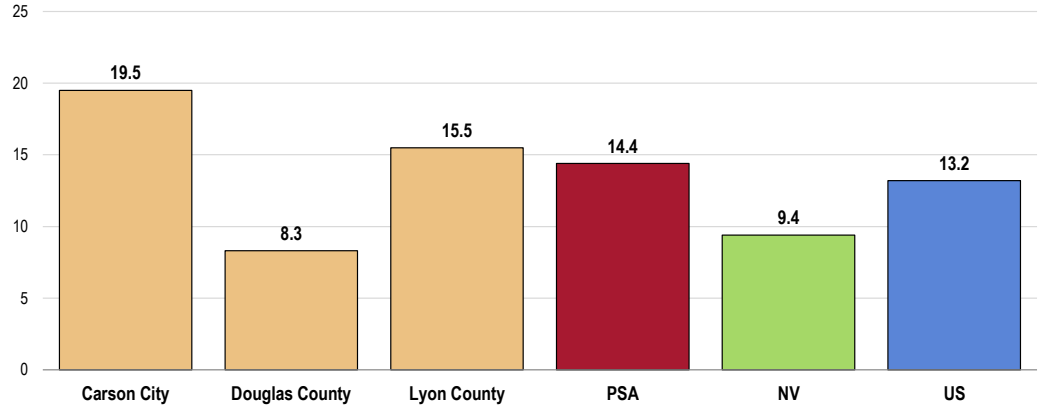
Age-Adjusted Kidney Disease Deaths

Between 2015 and 2017, there was an annual average age-adjusted kidney disease mortality rate of 14.4 deaths per 100,000 population in the Primary Service Area.

- **BENCHMARK:** Above the rate found statewide.
- **DISPARITY:** Highest in Carson City.
- **TREND:** Represents a significant increase over the past decade, particularly since the 2012-2014 reporting period.

Kidney Disease: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

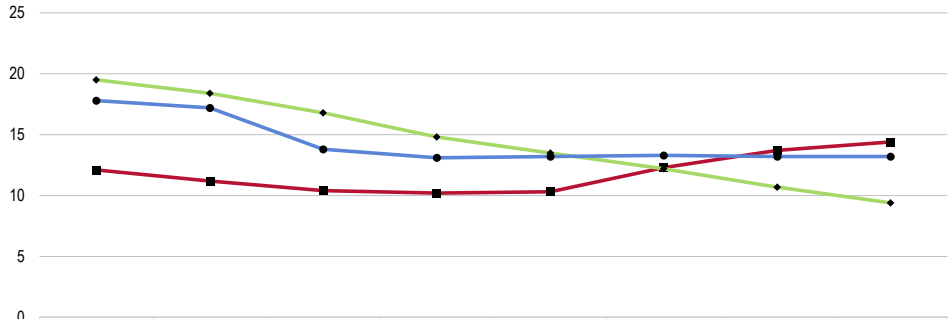


Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.

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.

Kidney Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	12.1	11.2	10.4	10.2	10.3	12.3	13.7	14.4
NV	19.5	18.4	16.8	14.8	13.5	12.2	10.7	9.4
US	17.8	17.2	13.8	13.1	13.2	13.3	13.2	13.2

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.

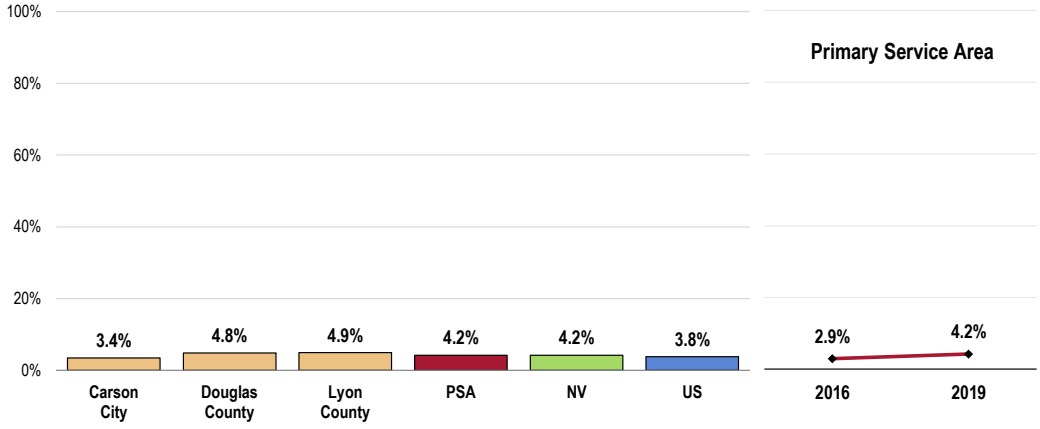
Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Prevalence of Kidney Disease

A total of 4.2% of Primary Service Area adults report having been diagnosed with kidney disease.

- **DISPARITY:** This prevalence increases significantly among those age 65+. Note that none of the Hispanic respondents report a kidney disease diagnosis.

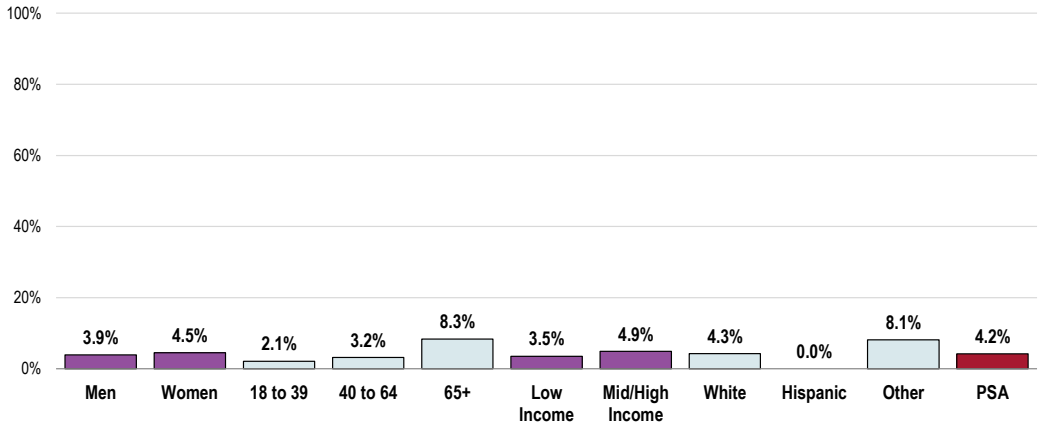
Prevalence of Kidney Disease



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 30]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Prevalence of Kidney Disease
(Primary Service Area, 2019)

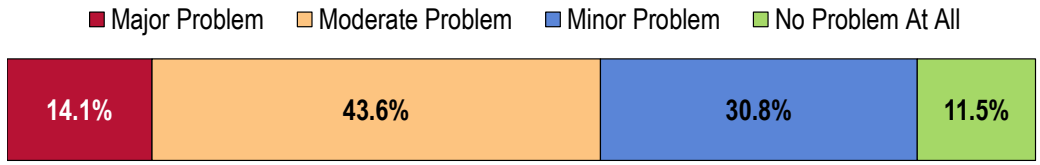


Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 30]
Notes: ● Asked of all respondents.
● Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
● Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Key Informant Input: Kidney Disease

Key informants taking part in an online survey generally characterized *Kidney Disease* as a "moderate problem" in the community.

Perceptions of Kidney Disease as a Problem in the Community
(Key Informants, 2019)



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

Top Concerns

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

Prevalence/Incidence

> *High prevalence, limited number of dialysis chairs, very limited access for underfunded patients, though this is somewhat improved recently. — Physician*
>
> *I get a lot of patients with this problem. — Physician*

Access to Care/Services

> *No hospital. — Community/Business Leader*
>
> *Treatment cost, debilitating on the patients. — Physician*

Comorbidities

> *Lots of diabetes that goes onto dialysis. — Physician*

Diagnosis/Treatment

> *Untreated hypertension. — Physician*

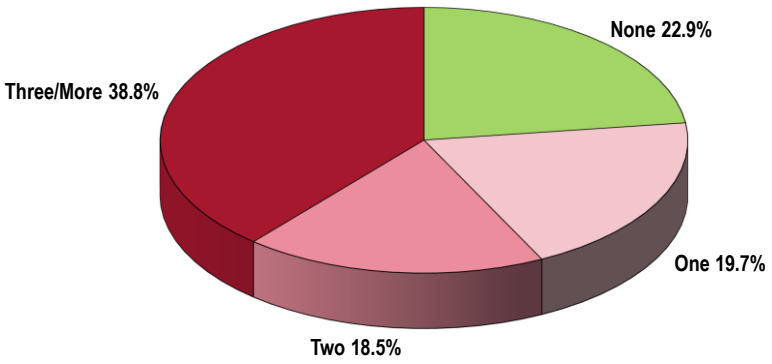
Potentially Disabling Conditions

Multiple Chronic Conditions

For the purposes of this assessment, chronic conditions include lung disease, arthritis, sciatica, cancer, osteoporosis, kidney disease, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression. Multiple chronic conditions are concurrent conditions.

Among Primary Service Area survey respondents, most report currently having at least one chronic health condition.

Number of Current Chronic Conditions
(Primary Service Area, 2019)



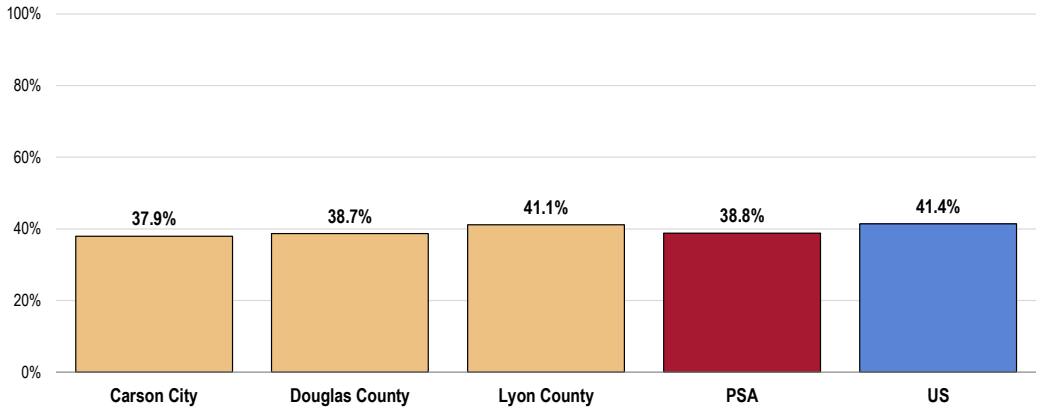
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 143]

Notes:
- Asked of all respondents.
- In this case, chronic conditions include lung disease, arthritis, sciatica, cancer, osteoporosis, kidney disease, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression.

In fact, 38.8% of Primary Service Area adults report having three or more chronic conditions

- **DISPARITY:** Hispanic respondents are significantly less likely to report 3+ chronic conditions than those of other ethnicities. Also note the strong correlation with age.

Currently Have Three or More Chronic Conditions

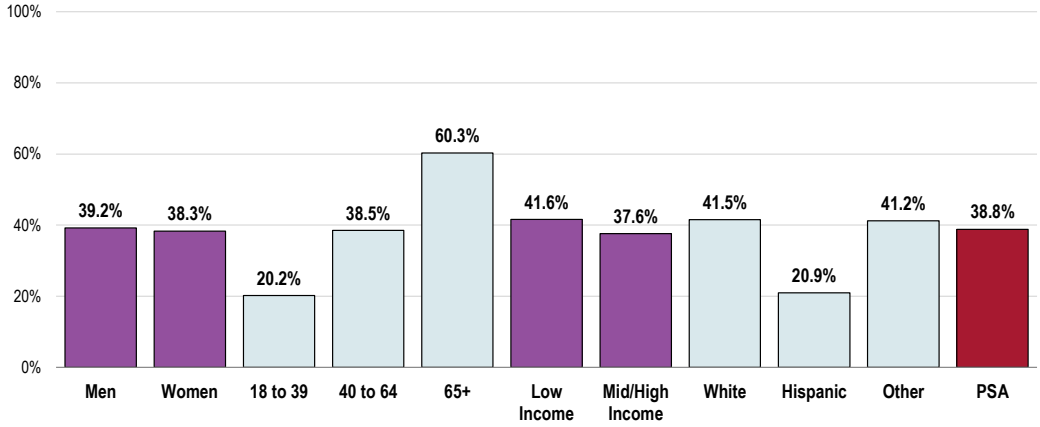


Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 143]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- In this case, chronic conditions include lung disease, arthritis, sciatica, cancer, osteoporosis, kidney disease, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression.

Currently Have Three or More Chronic Conditions

(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 143]

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, chronic conditions include lung disease, arthritis, sciatica, cancer, osteoporosis, kidney disease, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression.

Activity Limitations

About Disability & Health

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

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

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

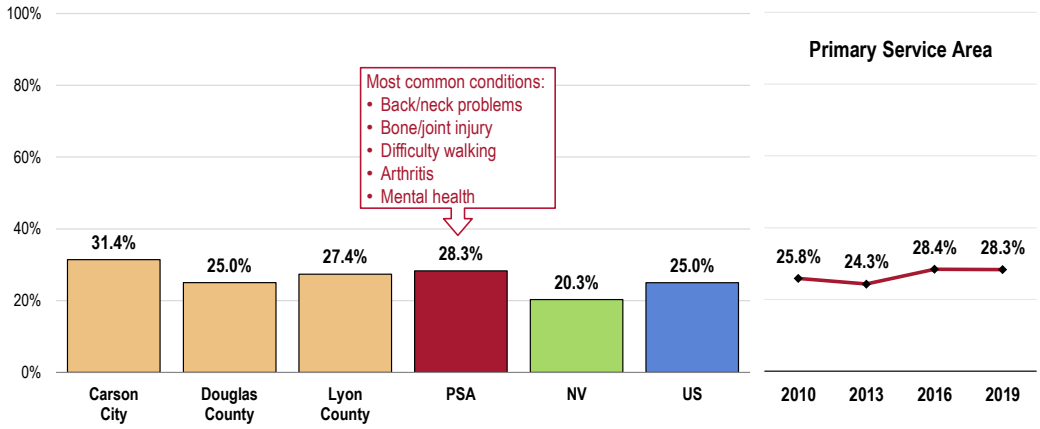
- Improve the conditions of daily life by: encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.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

— Healthy People 2020 (www.healthypeople.gov)

A total of 28.3% of Primary Service Area adults are limited in some way in some activities due to a physical, mental, or emotional problem.

- **BENCHMARK:** Less favorable than the state prevalence.
- **DISPARITY:** White respondents are far more likely to report activity limitations than those of another race/ethnicity. Also note the correlation with age and income.

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

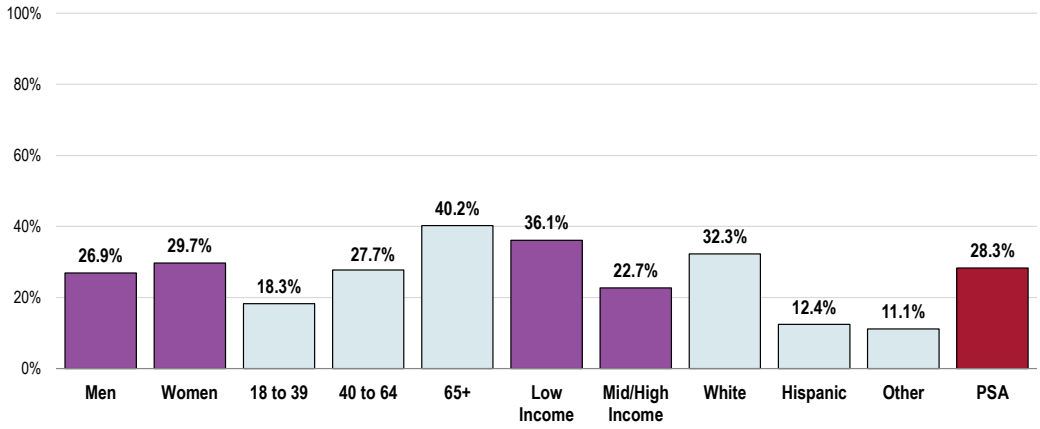


Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 109-110]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

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

(Primary Service Area, 2019)



Sources:
- 2019 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.

Chronic Back Conditions

About Chronic Back Conditions

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

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

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

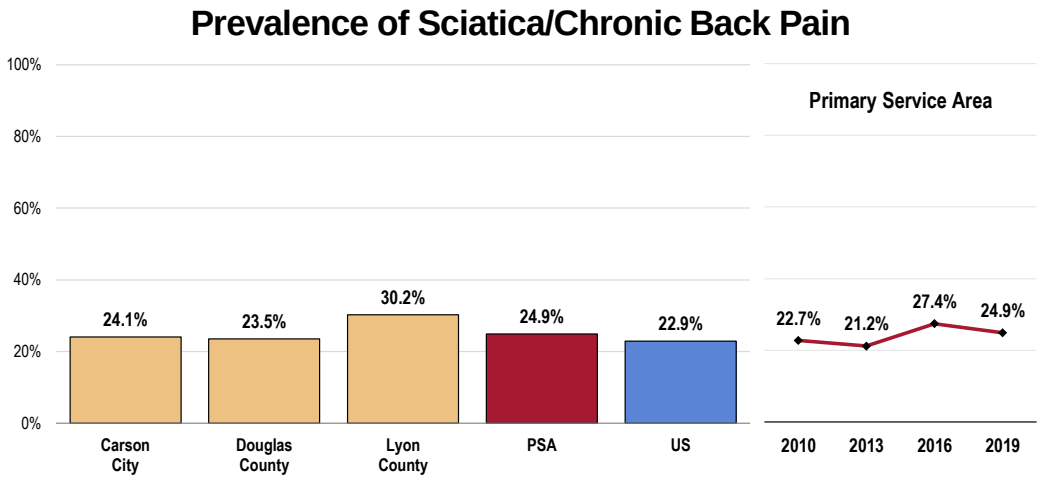
- 2nd leading cause of lost work time (after the common cold).
- 3rd most common reason to undergo a surgical procedure.
- 5th most frequent cause of hospitalization.

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

— Healthy People 2020 (www.healthypeople.gov)

A quarter (24.9%) of Primary Service Area adults (18 and older) suffer from chronic back pain or sciatica.

- No significant differences to report.



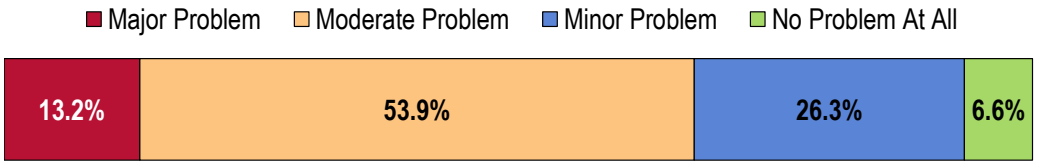
Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 26]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Key Informant Input: Arthritis, Osteoporosis & Chronic Back Conditions

More than half of key informants taking part in an online survey characterized *Arthritis, Osteoporosis & Chronic Back Conditions* as a "moderate problem" in the community.

Perceptions of Arthritis/Osteoporosis/Back Conditions as a Problem in the Community

(Key Informants, 2019)



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

Top Concerns

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

Access to Care/Services

> *I don't see that there are many offices for them in the rural areas. — Other Health Provider*
> *No hospital or clinic. — Community/Business Leader*

Prevalence/Incidence

> *I get a lot of patients with this problem. — Physician*
> *The number of individuals with the medical condition. — Community/Business Leader*

Insurance Issues

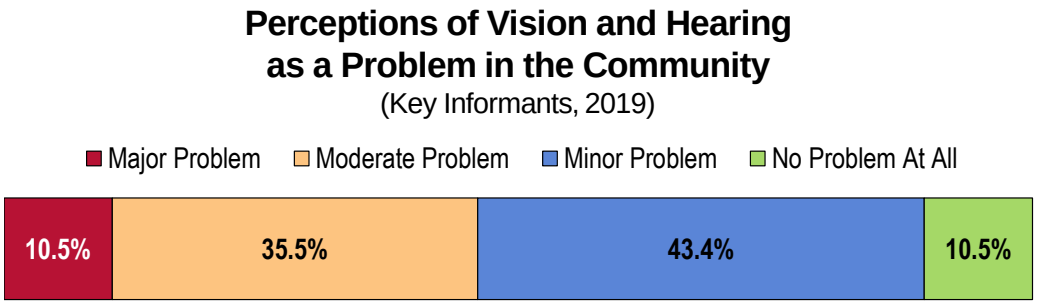
> *Many clients on Medicare or Medicaid have complaints about this issue. — Social Services Provider*

Obesity

> *Obesity. — Physician*

Key Informant Input: Vision & Hearing

Key informants taking part in an online survey most often characterized *Vision & Hearing* as a "minor problem" in the community.



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

Top Concerns

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

Access to Care/Services

> *No coverage by Medicare or Medicaid for adults with hearing and vision loss. We rely on service organizations like the Sertoma and Lions to meet these needs, but that is limited in scope. Not sure what Carson, Lyon, or Storey [counties] do. — Social Services Provider*
>
> *Generally, individuals rely on services outside of the immediate market. — Community/Business Leader*

Aging Population

> *Aging population and across all age groups. Ear buds for listening to music. Cost of hearing aids is substantial. — Community/Business Leader*
>
> *Aging population and growing number of hearing aid centers. — Community/Business Leader*

Insurance Issues

> *Lack of insurance coverage for vision issues, lack of Medicare coverage for hearing aids. — Other Health Provider*

Alzheimer's Disease

About Dementia

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

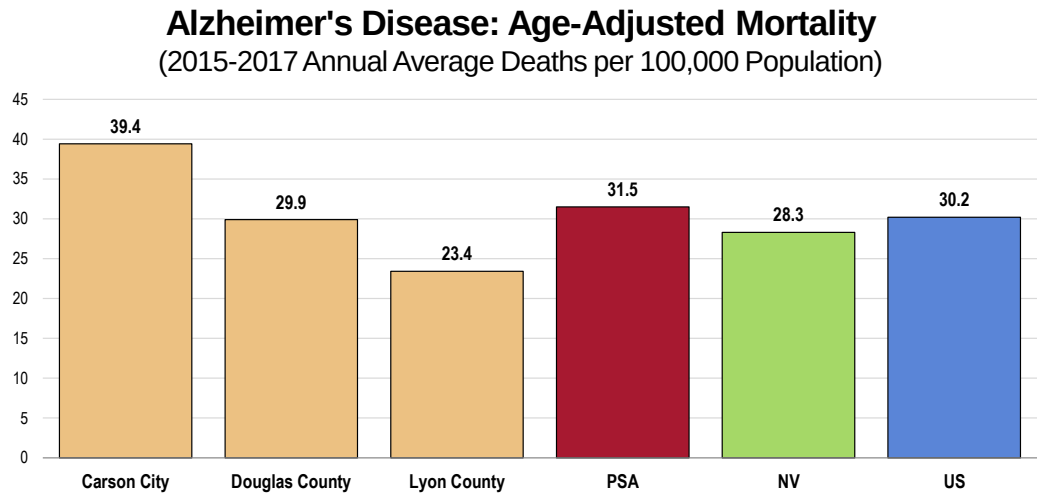
Alzheimer's disease is the 6th leading cause of death among adults age 18 years and older. Estimates vary, but experts suggest that up to 5.1 million Americans age 65 years and older have Alzheimer's disease. These numbers are predicted to more than double by 2050 unless more effective ways to treat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

— Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Alzheimer's Disease Deaths

Between 2015 and 2017, there was an annual average age-adjusted Alzheimer's disease mortality rate of 31.5 deaths per 100,000 population in the Primary Service Area.

- **DISPARITY:** Highest in Carson City.
- **TREND:** A significant increase over time.

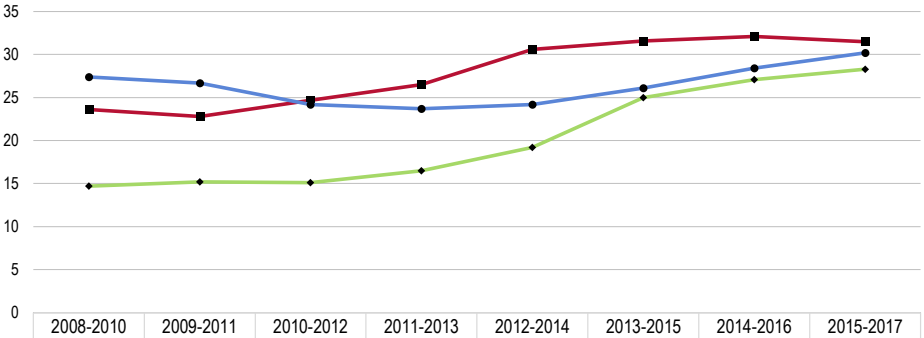


Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.

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.

Alzheimer's Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	23.6	22.8	24.7	26.5	30.6	31.6	32.1	31.5
NV	14.7	15.2	15.1	16.5	19.2	25.0	27.1	28.3
US	27.4	26.7	24.2	23.7	24.2	26.1	28.4	30.2

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.

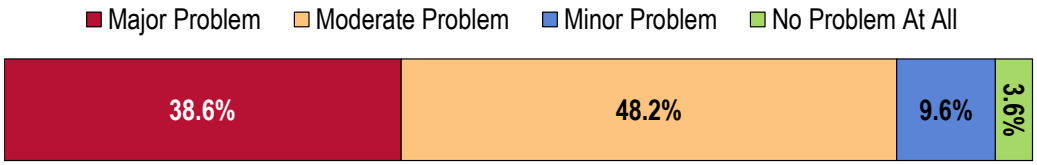
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
• Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Key Informant Input: Dementias, Including Alzheimer's Disease

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

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

(Key Informants, 2019)



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

Notes: • Asked of all respondents.

Top Concerns

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

Aging Population

> *As the local population ages and our area is seeing more patients retiring in Nevada, there is a increasing need to care for the elderly who suffer from dementia or age-related self-care issues. Families have also moved their parents or grandparents to Nevada to be closer but find the responsibilities of care to be overwhelming and see assistance. The shortage of services and access to care can be frustrating — Physician*

The population is growing and aging, and the condition is becoming more common. If the patient is lucky enough to have family to care for them, the logistics of managing care with other family life and a job is overwhelming to the average person; they don't know where to turn for their loved one. — Other Health Provider

We have an older population, and in my opinion there's probably a lot of undiagnosed dementia and Alzheimer's, due to a lack of transportation or concerns about telling someone and losing their freedom. — Community/Business Leader

A lot of retirees live here and suffer from it. Homeless folks with it can't be treated without consent. Not enough facilities to house those with the disease. — Community/Business Leader

With an aging community and a rise in dementia and Alzheimer's, this is a problem that our community must address. — Community/Business Leader

The aging population in the area with a limited number of proper care providers. — Community/Business Leader

Our population is getting older and care for these problems is always an issue for any community. — Community/Business Leader

We live in a community with a significant number of elderly folks. — Community/Business Leader

Elderly community. — Physician

Access to Care/Services

Decreased access to support groups, lack of resources for respite care, and a large population of elderly people who moved here from California and do not have family support. — Community/Business Leader

Lack of neurology services and lack of facilities. — Physician

Limited providers for neurology. — Physician

It is present, and there is no geriatric specialist. — Physician

No services locally. — Community/Business Leader

Inadequate services in neurology. — Physician

No hospital. — Community/Business Leader

Prevalence/Incidence

There is a growing number of citizens being diagnosed with Alzheimer's disease. — Community/Business Leader

This is evident by the number of memory care facilities we now have and the aging population in the surrounding counties. — Community/Business Leader

Affordable Care/Services

Many caregivers have complaints about addressing this issue with low- to moderate-income individuals. — Social Services Provider

Impact on Quality of Life

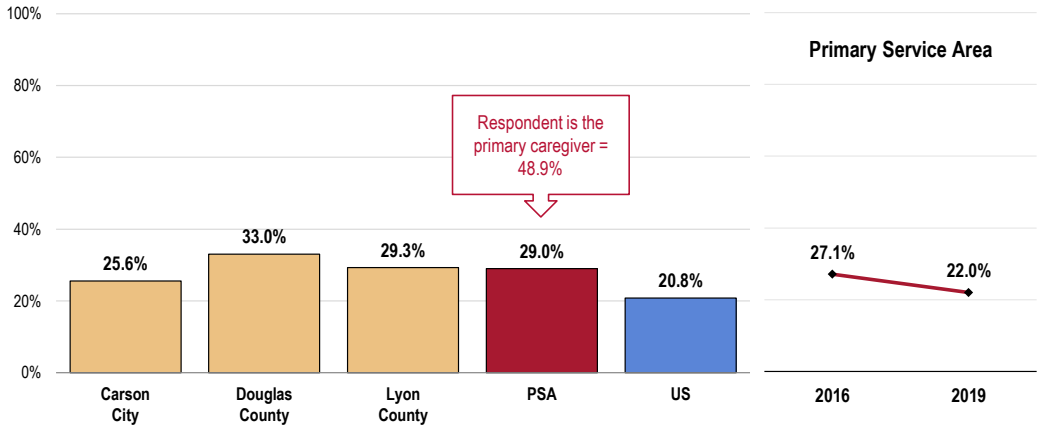
The effect on one's life and that person's family may be devastating. There are programs for these patients, some of which are in Carson City and Douglas County. However, we have no reversing therapy at this time. — Physician

Caregiving

A total of 29.0% of Primary Service Area adults currently provide care or assistance to a friend or family member who has a health problem, long-term illness, or disability.

- **BENCHMARK:** Higher than the US proportion.

Act as Caregiver to a Friend or Relative with a Health Problem, Long-Term Illness, or Disability



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 111, 113]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

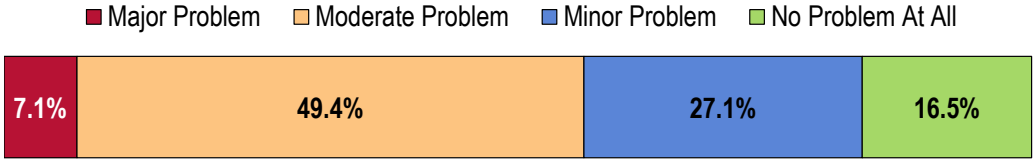
Immunization & Infectious Diseases

Key Informant Input: Immunization & Infectious Diseases

Almost half of key informants taking part in an online survey most often characterized *Immunization & Infectious Diseases* as a "moderate problem" in the community.

Perceptions of Immunization and Infectious Diseases as a Problem in the Community

(Key Informants, 2019)



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

Top Concerns

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

Access to Care/Services

> *There has been no readily-available infectious disease consultant in Carson. We have had to exist with arrangements made through consultants in Reno- and usually with limited access to obtaining the consult. — Physician*
>
> *Decreased access for family care physicians and lack of education to parents and families regarding the importance of immunizations and handwashing. — Community/Business Leader*

Awareness/Education

> *Anti-vax groups have a loud voice. Social media exposes many parents to the wrong information. Misconceptions with vaccines and what they are believed to cause. Lack of provider recommendations. Parents not prioritizing well-check visits. — Community/Business Leader*
>
> *I am concerned that the rise of anti-vax voices may create problems in the future. — Community/Business Leader*

Early Diagnosis/Prevention

> *Immunization rates are lower in counties outside of Washoe and Clark. Historically, Carson has had some of the lowest rates in the state, but they are starting to increase. — Public Health Representative*

Births

Professional Research Consultants, Inc.

Birth Outcomes & Risks

Low-Weight Births

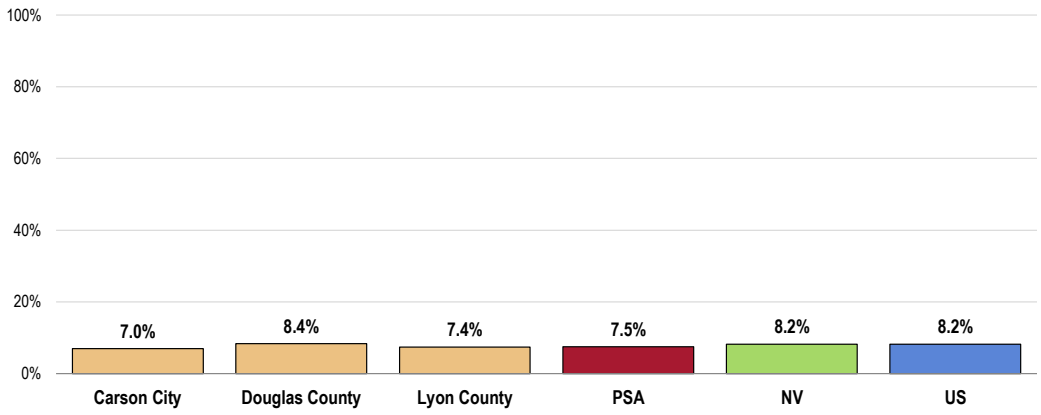
Low birthweight babies, those who weigh less than 2,500 grams (5 pounds, 8 ounces) at birth, are much more prone to illness and neonatal death than are babies of normal birthweight.

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

A total of 7.5% of 2006-2012 Primary Service Area births were low-weight.

- No significant differences to report.

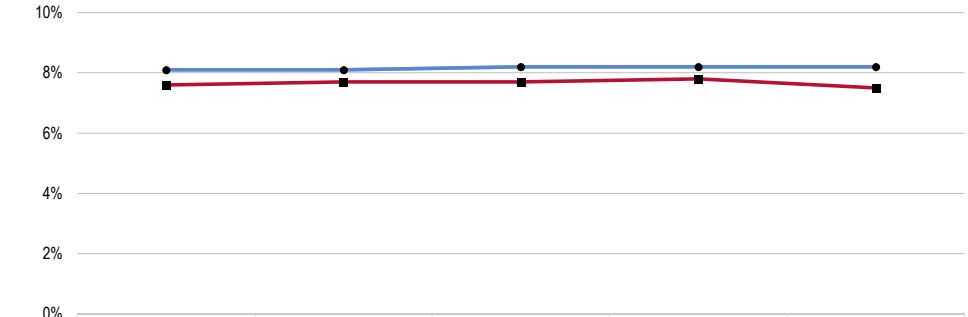
Low-Weight Births
(Percent of Live Births, 2006-2012)
Healthy People 2020 = 7.8% or Lower



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-8.1]

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

Low-Weight Births
(Percent of Live Births)
Healthy People 2020 = 7.8% or Lower



	2002-2008	2003-2009	2004-2010	2005-2011	2006-2012
PSA	7.6%	7.7%	7.7%	7.8%	7.5%
NV	8.1%	8.1%	8.2%	8.2%	8.2%
US	8.1%	8.1%	8.2%	8.2%	8.2%

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-8.1]

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

Infant Mortality

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

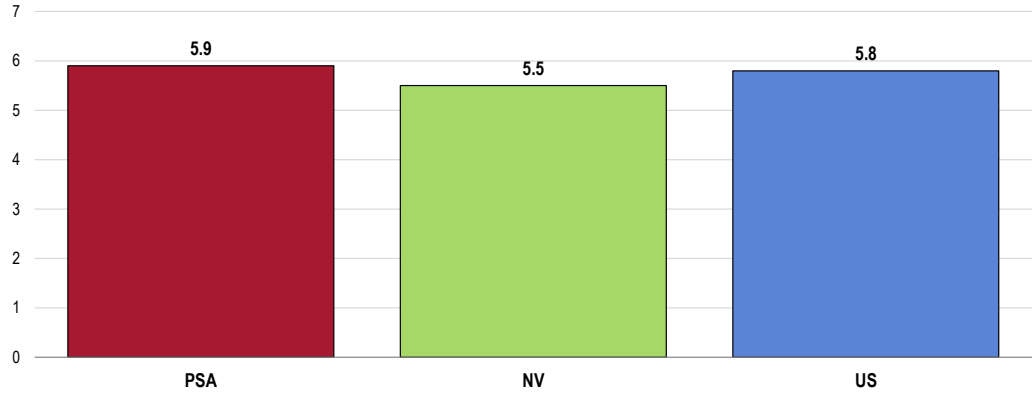
Between 2015 and 2017, there was an annual average of 5.9 infant deaths per 1,000 live births.

- **TREND:** After a period of increase, mortality has decreased since the 2013-2015 reporting period.

Infant Mortality Rate

(Annual Average Infant Deaths per 1,000 Live Births, 2015-2017)

Healthy People 2020 = 6.0 or Lower



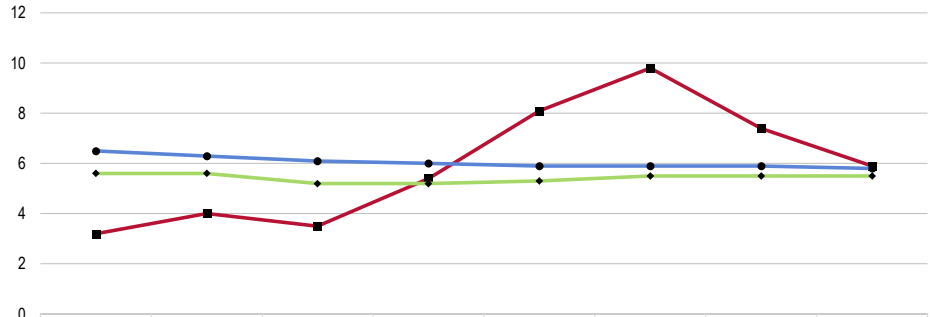
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-1.3]

Notes:
- Infant deaths include deaths of children under 1 year old.
- This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

Infant Mortality Trends

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

Healthy People 2020 = 6.0 or Lower



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	3.2	4.0	3.5	5.4	8.1	9.8	7.4	5.9
NV	5.6	5.6	5.2	5.2	5.3	5.5	5.5	5.5
US	6.5	6.3	6.1	6.0	5.9	5.9	5.9	5.8

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted April 2019.
- Centers for Disease Control and Prevention, National Center for Health Statistics.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-1.3]

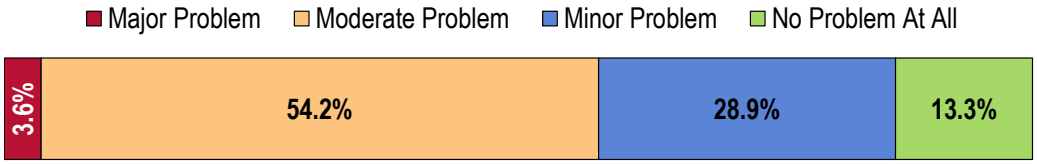
Notes:
- Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.

Key Informant Input: Infant & Child Health

Over half of key informants taking part in an online survey generally characterized *Infant & Child Health* as a "moderate problem" in the community.

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

(Key Informants, 2019)



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

Top Concerns

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

Access to Care/Services

The limited number of providers accepting new patients and/or Medicaid patients. — Community/Business Leader

Lack of local pediatric care, lack of family support to new parents. — Community/Business Leader

There are too few specialty physicians in the area. — Other Health Provider

Access to Food

Childhood hunger. Limited resources for children to access without a parent or guardians assistance. This issue is the main focus of our organization; we see the need and the gaps in service. There are hundreds of children in the community that do not have access to enough food outside of free meal services at school. — Community/Business Leader

Family Planning

Births to Teen Mothers

About Teen Births

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

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

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

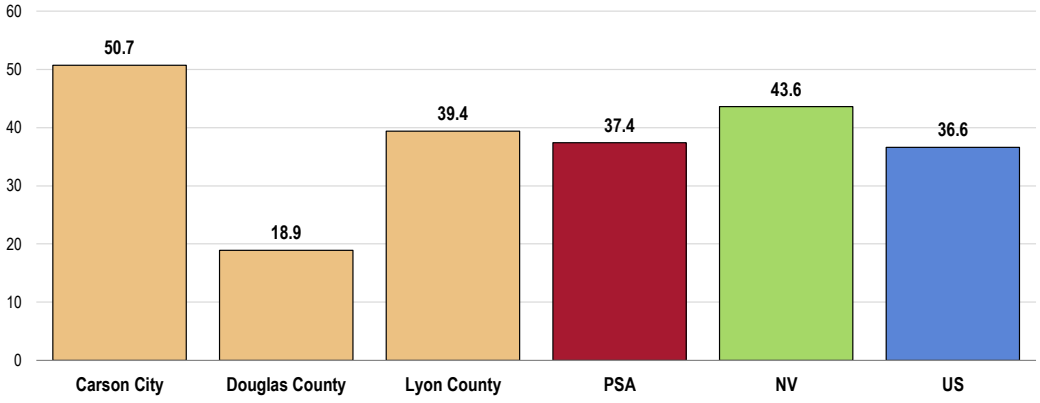
— Healthy People 2020 (www.healthypeople.gov)

Between 2006 and 2012, there were 37.4 births to women age 15 to 19 per 1,000 women age 15 to 19 in the Primary Service Area.

- **BENCHMARK:** Lower than the statewide rate.
- **DISPARITY:** Highest in Carson City and also among Latinas when compared against White teen mothers.
- **TREND:** Represents a decrease in the rate of teen births over time.

Teen Birth Rate

(Births to Adolescents Age 15-19 per 1,000 Female Population Age 15-19, 2006-2012)

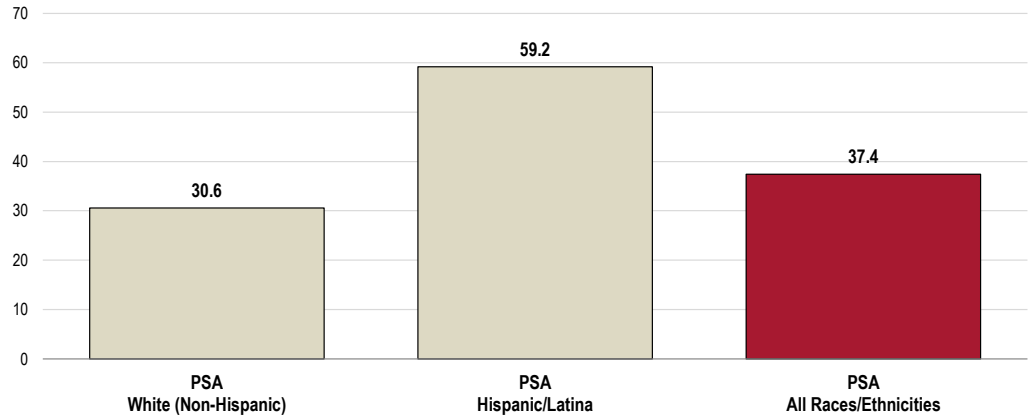


Sources:
- Centers for Disease Control and Prevention, National Vital Statistics System.
- Retrieved from Community Commons at http://www.chna.org.

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

Teen Birth Rate

(Births to Adolescents Age 15-19 per 1,000 Female Population Age 15-19, 2006-2012)

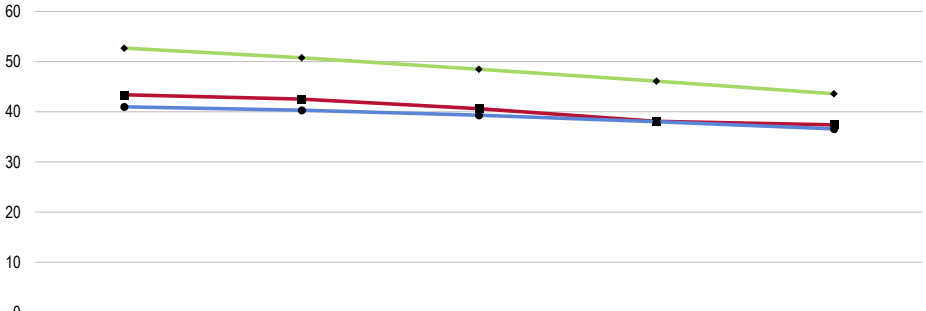


Sources:
- Centers for Disease Control and Prevention, National Vital Statistics System.
- Retrieved from Community Commons at http://www.chna.org.

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

Teen Birth Rate Trends

(Births to Adolescents Age 15-19 per 1,000 Female Population Age 15-19)



	2002-2008	2003-2009	2004-2010	2005-2011	2006-2012
PSA	43.4	42.5	40.6	38.1	37.4
NV	52.7	50.8	48.5	46.1	43.6
US	41.0	40.3	39.3	38.0	36.6

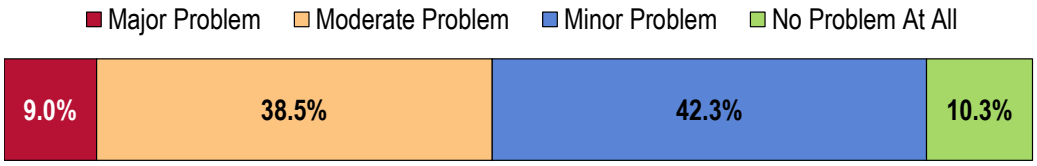
Sources:
- Centers for Disease Control and Prevention, National Vital Statistics System.
- Retrieved from Community Commons at http://www.chna.org.

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

Key Informant Input: Family Planning

Key informants taking part in an online survey slightly more often characterized *Family Planning* as a "minor problem" than a "moderate problem" in the community.

Perceptions of Family Planning as a Problem in the Community
(Key Informants, 2019)



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

Top Concerns

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

Access to Care/Services

> *Only one clinic, I think. — Community/Business Leader*

Early Diagnosis/Prevention

> *Need to prevent unplanned pregnancy. — Physician*

Funding

> *Lack of funding. — Community/Business Leader*

Home Life

> *Single parent families, students living with relatives, grandparents. — Community/Business Leader*

Modifiable Health Risks

Professional Research Consultants, Inc.

Nutrition

About Healthful Diet & Healthy Weight

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

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

Americans with a healthful diet:

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

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

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

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

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

Social factors thought to influence diet include:

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

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

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

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

— Healthy People 2020 (www.healthypeople.gov)

Daily Recommendation of Fruits/Vegetables

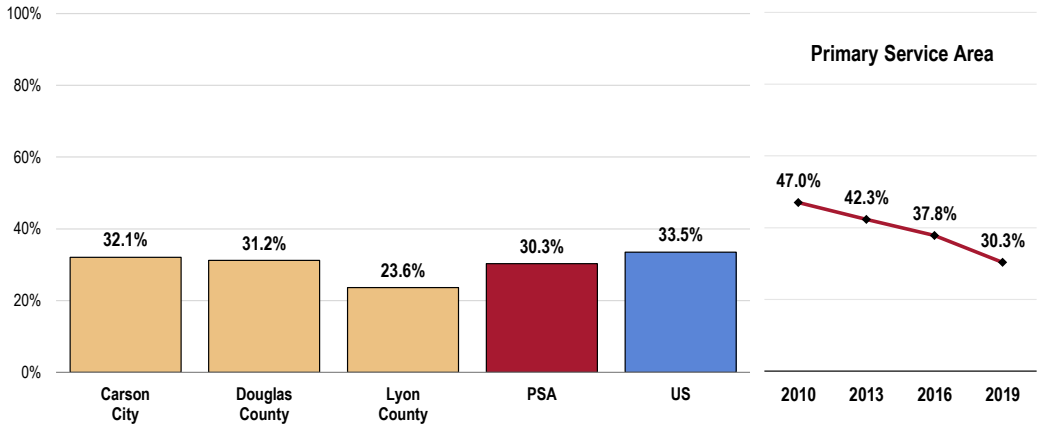
Just three in 10 Primary Service Area adults (30.3%) report eating five or more servings of fruits and/or vegetables per day.

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.

RELATED ISSUE:
See also *Food Insecurity* in the **Social Determinants of Health** section of this report.

- **DISPARITY:** Least common in Lyon County, as well as among service area men.
- **TREND:** Represents a significant decrease in consumption over time.

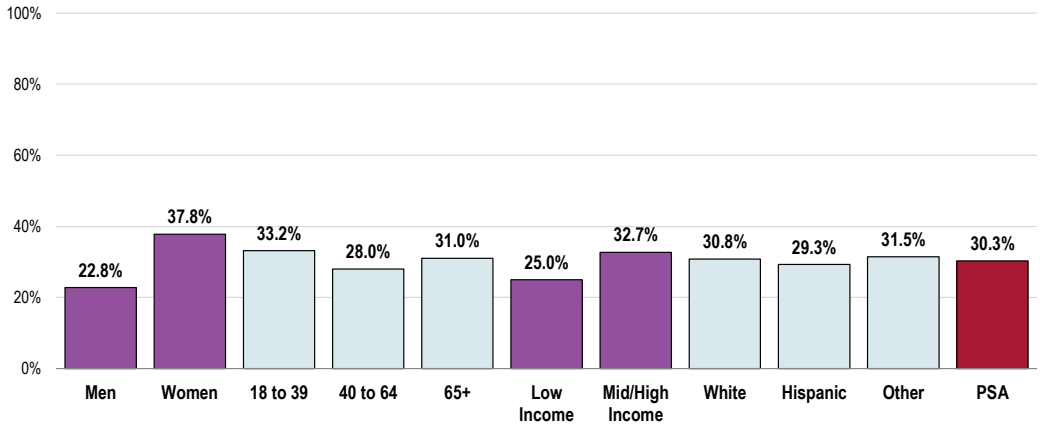
Consume Five or More Servings of Fruits/Vegetables Per Day



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]
- 2017 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.

Consume Five or More Servings of Fruits/Vegetables Per Day
(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]

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

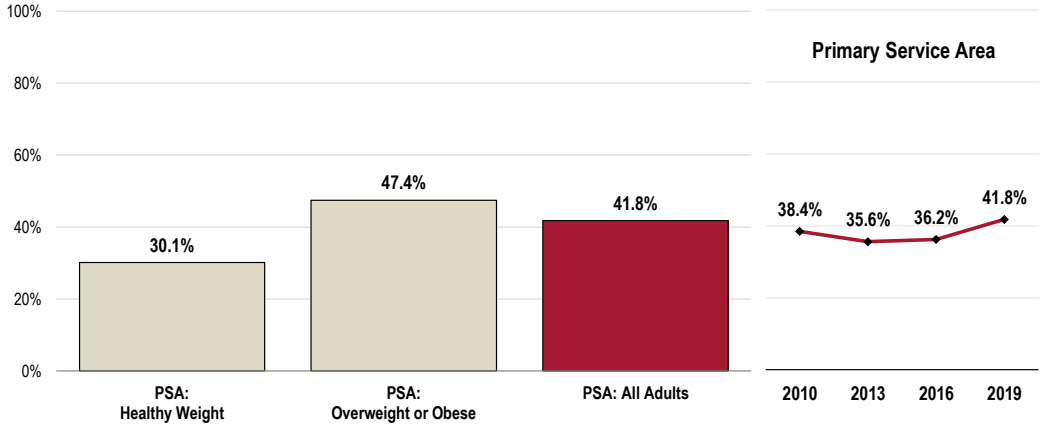
Health Advice about Diet & Nutrition

A total of 41.8% of survey respondents acknowledge that a physician counseled them about diet and nutrition in the past year.

- **DISPARITY:** Note that 47.4% of overweight respondents have received this advice (while over half have not).

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

(By Weight Classification)



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 303]
Notes: ● Asked of all respondents.

Physical Activity

About Physical Activity

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

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

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

Factors **negatively** associated with adult physical activity include: advancing age; low income; lack of time; low motivation; rural residency; perception of great effort needed for exercise; overweight or obesity; perception of poor health; and being disabled. Older adults may have additional factors that keep them from being physically active, including lack of social support, lack of transportation to facilities, fear of injury, and cost of programs.

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

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

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

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

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

— Healthy People 2020 (www.healthypeople.gov)

Leisure-Time Physical Activity

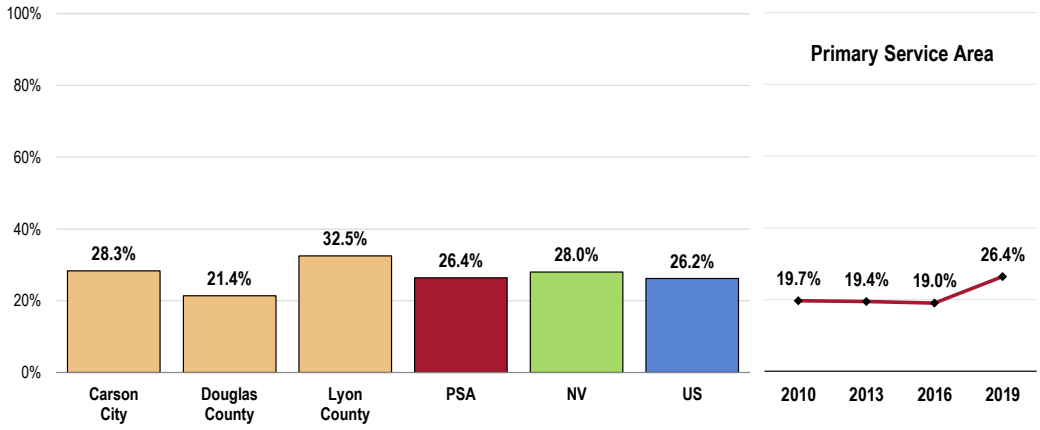
Leisure-time physical activity includes any physical activities or exercises (such as running, calisthenics, golf, gardening, walking, etc.) which take place outside of one's line of work.

A total of 26.4% of Primary Service Area adults report no leisure-time physical activity in the past month.

- **BENCHMARK:** Satisfies the related Healthy People 2020 objective (32.6% or lower).
- **DISPARITY:** Most favorable in Douglas County.
- **TREND:** Represents an unfavorable increase since 2010.

No Leisure-Time Physical Activity in the Past Month

Healthy People 2020 = 32.6% or Lower



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 89]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-1]

Notes:
- Asked of all respondents.

Activity Levels

Adults

Recommended Levels of Physical Activity

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

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

— 2013 Physical Activity Guidelines for Americans, US Department of Health and Human Services. www.cdc.gov/physicalactivity
— Learn more about CDC's efforts to promote walking by visiting http://www.cdc.gov/vitalsigns/walking.

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

Aerobic activity is one of the following: at least 150 minutes per week of light to moderate activity, 75 minutes per week of vigorous activity, or an equivalent combination of both.

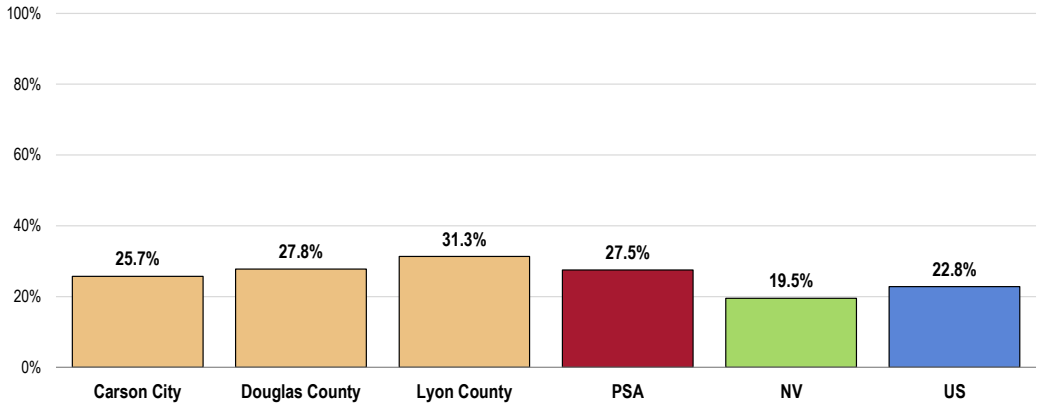
Strengthening activity is at least 2 sessions per week of exercise designed to strengthen muscles.

A total of 27.5% of Primary Service Area adults regularly participate in adequate levels of both aerobic and strengthening activities (meeting physical activity recommendations).

- **BENCHMARK:** Favorably above Nevada and US findings. Satisfies the Healthy People 2020 objective of 20.1% or higher.
- **DISPARITY:** Less common among lower-income residents and older adults (age 65+).

Meets Physical Activity Recommendations

Healthy People 2020 = 20.1% or Higher



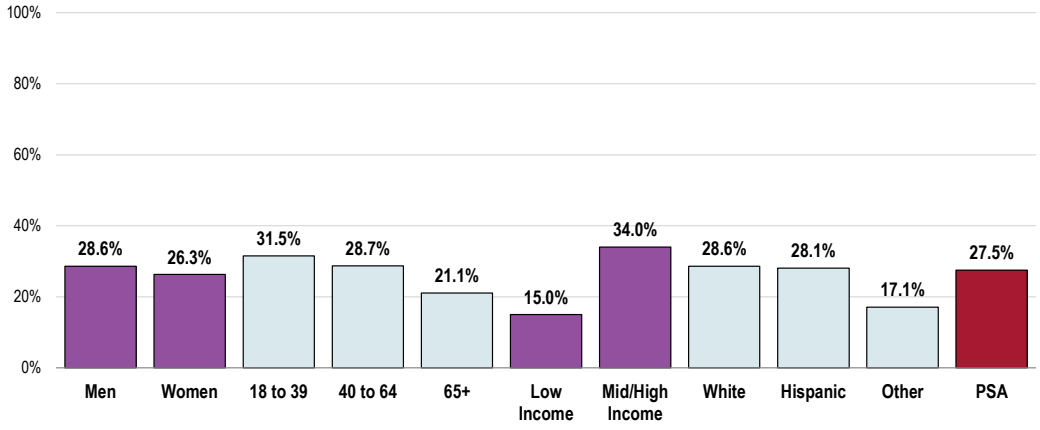
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-2.4]

Notes:
- Asked of all respondents.
- Meeting both guidelines is defined as the number of persons age 18+ who report light or moderate aerobic activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity and report doing physical activities specifically designed to strengthen muscles at least twice per week.

Meets Physical Activity Recommendations

(Primary Service Area, 2019)

Healthy People 2020 = 20.1% or Higher



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-2.4]

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

Children

Recommended Levels of Physical Activity

Children and adolescents should do 60 minutes (1 hour) or more of physical activity each day.

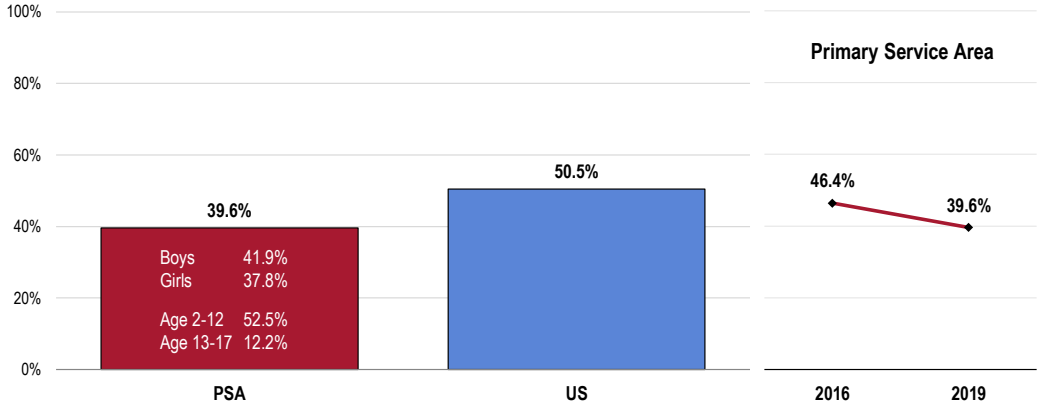
— 2013 Physical Activity Guidelines for Americans, US Department of Health and Human Services. www.cdc.gov/physicalactivity

Among Primary Service Area children age 2 to 17, 39.6% are reported to have had 60 minutes of physical activity on each of the seven days preceding the interview (1+ hours per day).

- **BENCHMARK:** Notably lower than the national prevalence.
- **DISPARITY:** Notably less common among teens.

Child Is Physically Active for One or More Hours per Day

(Parents of Children Age 2-17)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 124]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

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

Access to Physical Activity

In 2016, there were 14.9 recreation/fitness facilities for every 100,000 population in the Primary Service Area.

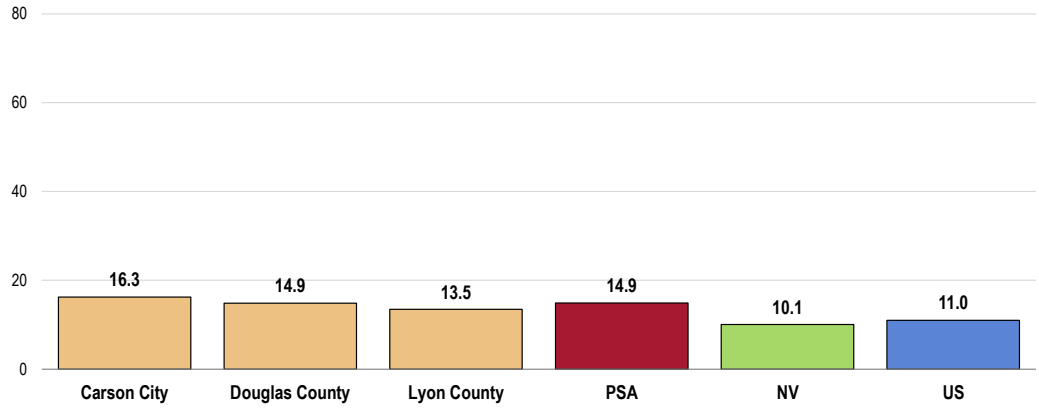
Here, recreation/fitness facilities include establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities."

Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools.

- **BENCHMARK:** Better than seen statewide or nationally.

Population With Recreation & Fitness Facility Access

(Number of Recreation & Fitness Facilities per 100,000 Population, 2016)



Sources:
- US Census Bureau, County Business Patterns. Additional data analysis by CARES.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes:
- Recreation and fitness facilities are defined by North American Industry Classification System (NAICS) Code 713940 , which include *Establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities". Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools.* This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.

Weight Status

About Overweight & Obesity

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

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

— Healthy People 2020 (www.healthypeople.gov)

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

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

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

Adult Weight Status

Classification of Overweight and Obesity by BMI	BMI (kg/m^2)
Underweight	<18.5
Normal	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	≥30.0

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

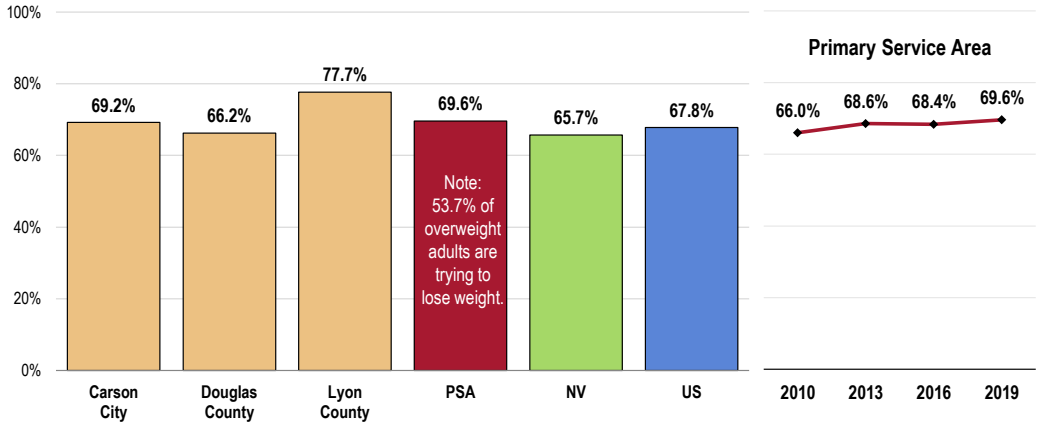
Overweight Status

More than two-thirds (69.6%) of Primary Service Area adults are overweight.

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

- **BENCHMARK:** Significantly higher than the state finding.
- **DISPARITY:** Notably high in Lyon County.

Prevalence of Total Overweight (Overweight and Obese)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 155, 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): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

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.

Note that 31.2% of overweight adults have been given advice about their weight by a health professional in the past year (while over two-thirds have not).

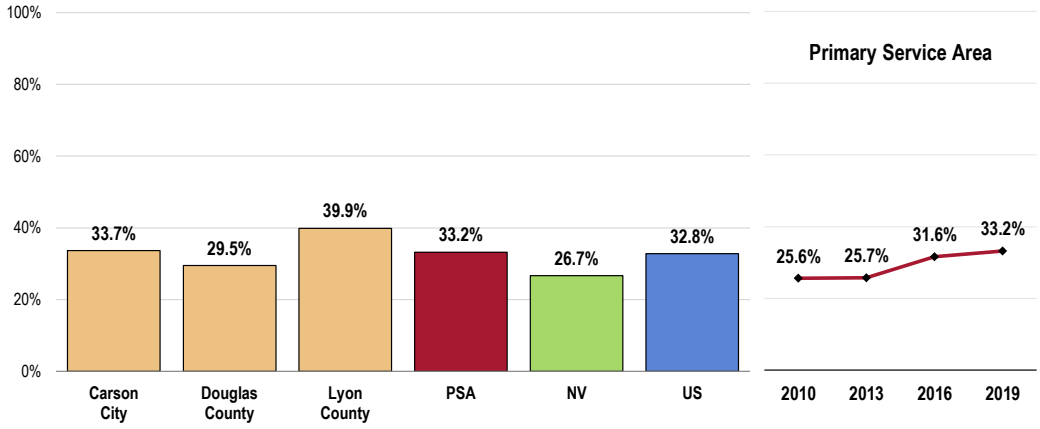
The overweight prevalence above includes 33.2% of Primary Service Area adults who are <u>obese</u>.

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

- **BENCHMARK:** Above the Nevada prevalence.
- **DISPARITY:** More common among non-Hispanic respondents (particular those of "Other" race), low-income individuals, and men.
- **TREND:** A significant increase over time.

Prevalence of Obesity

Healthy People 2020 = 30.5% or Lower



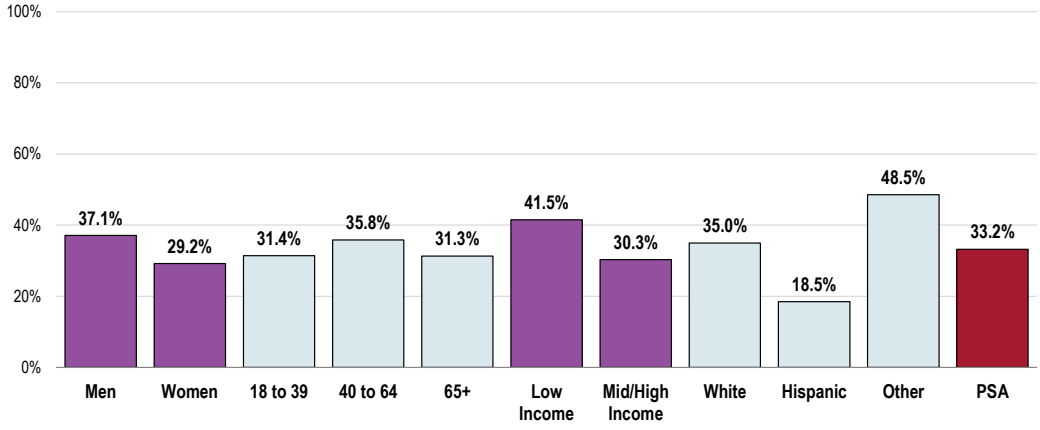
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]

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

Prevalence of Obesity

(Primary Service Area, 2019)

Healthy People 2020 = 30.5% or Lower



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]

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

Children's Weight Status

About Weight Status in Children & Teens

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

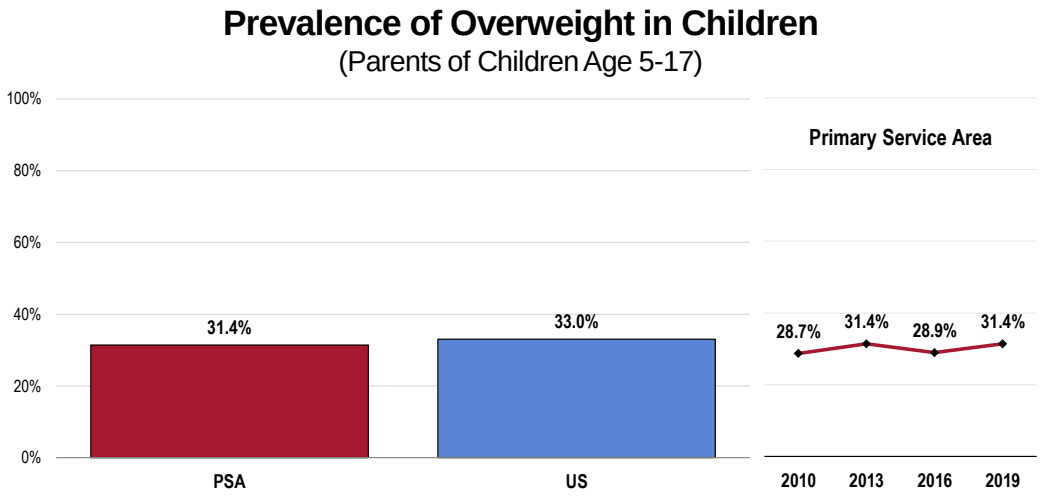
BMI-for-age weight status categories and the corresponding percentiles are shown below:

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

— Centers for Disease Control and Prevention

Based on the heights/weights reported by surveyed parents, 31.4% of Primary Service Area children age 5 to 17 are overweight or obese (≥85th percentile).

- No significant differences to report.



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 192]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

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

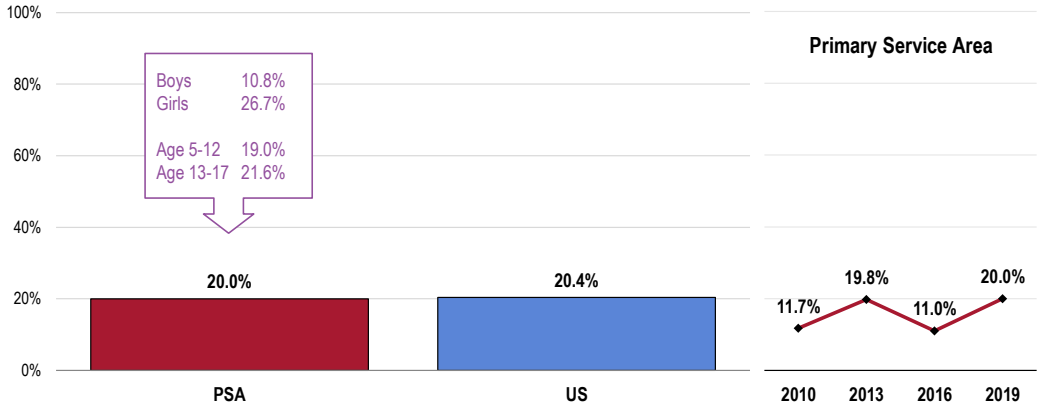
Further, one in five area children age 5 to 17 (20.0%) are obese (≥95th percentile).

- **DISPARITY:** The prevalence is more than twice as high among girls than among boys.

Prevalence of Obesity in Children

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

Healthy People 2020 = 14.5% or Lower



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 158]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-10.4]

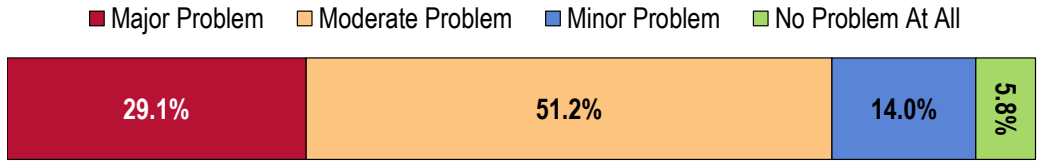
Notes:
- Asked of all respondents with children age 5-17 at home.
- Obesity among children is determined by children's Body Mass Index status equal to or above the 95th percentile of US growth charts by gender and age.

Key Informant Input: Nutrition, Physical Activity & Weight

More than half of key informants taking part in an online survey most often characterized *Nutrition, Physical Activity & Weight* as a "moderate problem" in the community.

Perceptions of Nutrition, Physical Activity, and Weight as a Problem in the Community

(Key Informants, 2019)



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

Notes:
- Asked of all respondents.

Top Concerns

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

Lifestyle

Prepared foods are the norm of the day, fast food does nothing to improve their products, TV and video causes reduced physical activity as well as our overscheduled lives. It is a modern-day crisis. — Other Health Provider

The largest number of people in our community commute to work, many work 12-hours shifts, have little time to exercise and are too tired to cook nutritious meals. Large reliance on fast food and prepared/prepackaged foods leading to weight gain when coupled with the lack of physical activity. Large number of children go home to empty house and watch TV, play video games, and snack on empty calories while waiting for parents. — Community/Business Leader

Poor lifestyle choices. Casino culture encourages poor choices, large portions of unhealthy food. Many do not take advantage of the amazing local environment. Quality food is more expensive. — Physician

Inactive lifestyles, plethora of fast food establishments, low income families and lack of nutritional education. — Community/Business Leader

Clients are primarily routine. Low activity, too much TV and social media, and less physical activity. Diets are compromised by fast foods and processed foods. Unwilling to make positive changes. — Social Services Provider

Unhealthy diets, overweight population, lack of regular exercise. — Community/Business Leader

Weight Status

Lots of overweight people with poor nutrition and lack physical activity. — Community/Business Leader

I see an increase in overweight people in the community but have not heard of an increase in resources. — Community/Business Leader

It does not take a deep survey to simply observe the number of our residents, across all age groups, who are carrying too much weight. Education, motivation and access to programs to encourage more activity are all needed. — Community/Business Leader

Insufficient Physical Activity

Workplaces should be encouraged to incorporate physical activity breaks into their daily schedule. Happy workers equal good production. — Public Health Representative

Motivation. Most patients don't have an interest or the motivation in exercising, even at a moderate fashion. There is a lack of good, safe, public walking areas. — Physician

Awareness/Education

Lack of education. Minimal PE requirements for elementary children. Food disparity. — Physician

Need more education regarding nutrition services. — Physician

Access to Healthy Food

Cost of healthy food for low-income, lack of knowledge on importance of healthy choices. Youth exposed to unhealthy fare in school lunch. — Community/Business Leader

Workplace Environments

Workplace environments are often unhealthy. Not enough emphases placed on workplace wellness programs. School district wellness policies are struggling. Cultural barriers and misconceptions (eating healthy is too expensive). Lack of education. Costs. Reactive care versus preventative care (we should be providing better services and monitoring these behavioral issues, as they are directly related to patient/population health factors and determinants of health). — Community/Business Leader

Substance Abuse

About Substance Abuse

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These problems include:

- Teenage pregnancy
- Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)
- Other sexually transmitted diseases (STDs)
- Domestic violence
- Child abuse
- Motor vehicle crashes
- Physical fights
- Crime
- Homicide
- Suicide

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Social attitudes and political and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. In addition to the considerable health implications, substance abuse has been a flash-point in the criminal justice system and a major focal point in discussions about social values: people argue over whether substance abuse is a disease with genetic and biological foundations or a matter of personal choice.

Advances in research have led to the development of evidence-based strategies to effectively address substance abuse. Improvements in brain-imaging technologies and the development of medications that assist in treatment have gradually shifted the research community's perspective on substance abuse. There is now a deeper understanding of substance abuse as a disorder that develops in adolescence and, for some individuals, will develop into a chronic illness that will require lifelong monitoring and care.

Improved evaluation of community-level prevention has enhanced researchers' understanding of environmental and social factors that contribute to the initiation and abuse of alcohol and illicit drugs, leading to a more sophisticated understanding of how to implement evidence-based strategies in specific social and cultural settings.

A stronger emphasis on evaluation has expanded evidence-based practices for drug and alcohol treatment. Improvements have focused on the development of better clinical interventions through research and increasing the skills and qualifications of treatment providers.

— Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Cirrhosis/Liver Disease Deaths

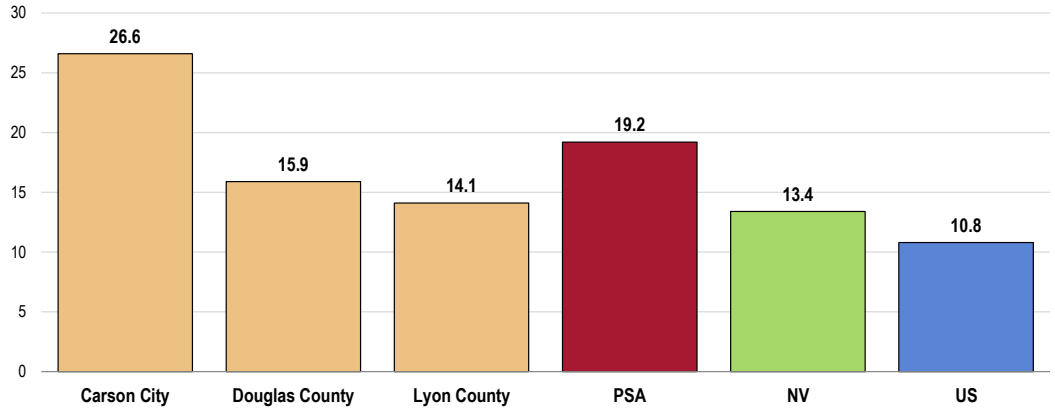
Between 2015 and 2017, the Primary Service Area reported an annual average age-adjusted cirrhosis/liver disease mortality rate of 19.2 deaths per 100,000 population.

- **BENCHMARK:** Significantly above state and national rates; more than double the related Healthy People 2020 objective (8.2 or lower).
- **DISPARITY:** Notably high in Carson City.

Cirrhosis/Liver Disease: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 8.2 or Lower



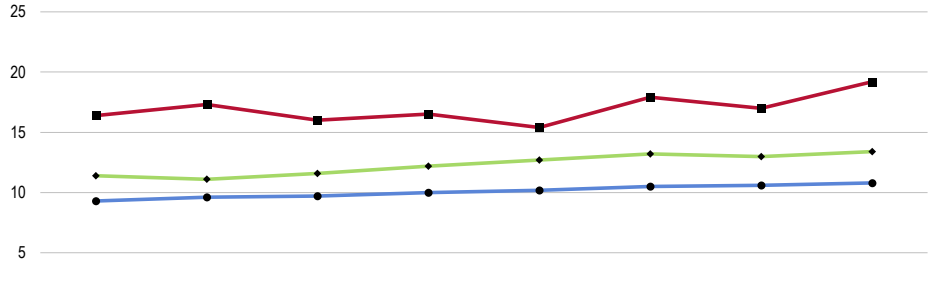
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-11]

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

Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 8.2 or Lower



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	16.4	17.3	16.0	16.5	15.4	17.9	17.0	19.2
NV	11.4	11.1	11.6	12.2	12.7	13.2	13.0	13.4
US	9.3	9.6	9.7	10.0	10.2	10.5	10.6	10.8

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-11]

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

Alcohol Use

Excessive Drinking

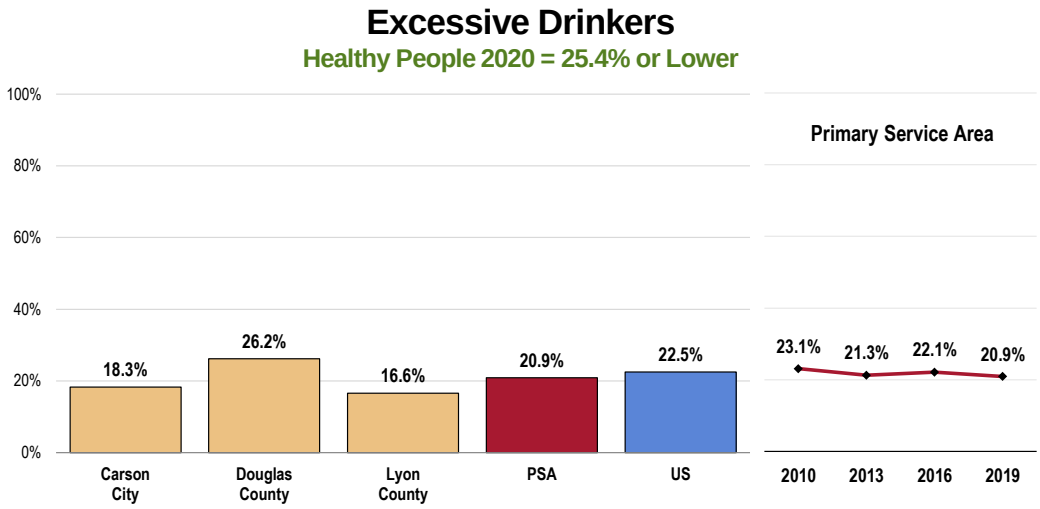
"**Excessive drinking**" includes heavy **and/or** binge drinkers:

- **Heavy drinkers** include men reporting 2+ alcoholic drinks per day or women reporting 1+ alcoholic drink per day in the month preceding the interview.
- **Binge drinkers** include men reporting 5+ alcoholic drinks or women reporting 4+ alcoholic drinks on any single occasion during the past month.

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

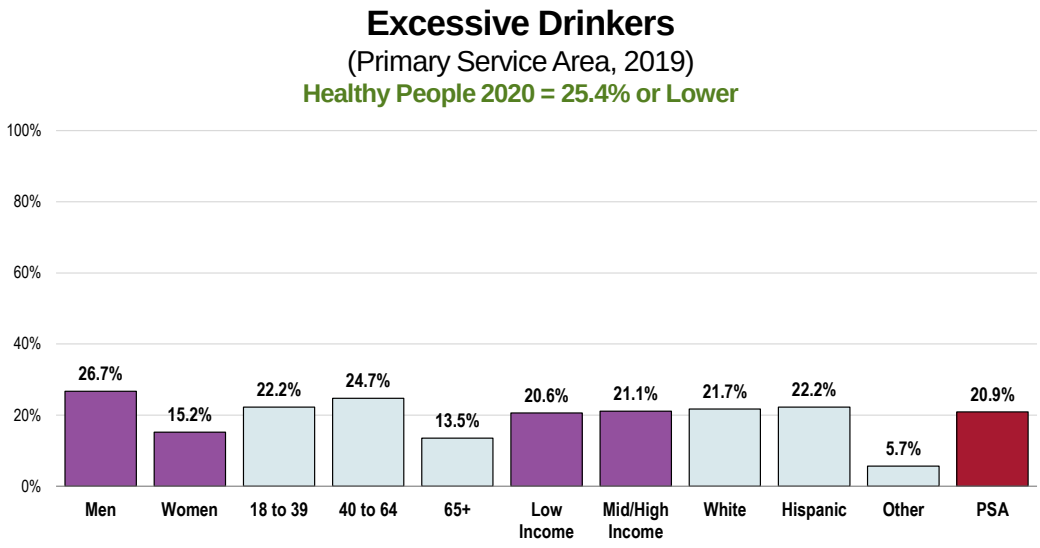
One in five area adults (20.9%) are excessive drinkers (heavy and/or binge drinkers).

- **BENCHMARK:** Satisfies the related Healthy People 2020 objective (25.4% or lower).
- **DISPARITY:** Unfavorably high in Douglas County, as well as among men, adults age 40-64, White residents, and Hispanic residents.



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-15]

Notes:
- Asked of all respondents.
- Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-15]

Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

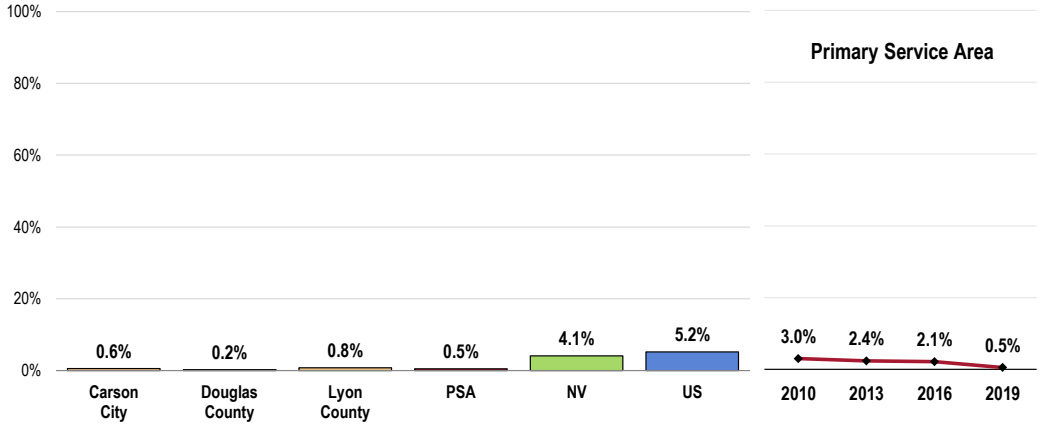
Drinking & Driving

A total of 0.5% of Primary Service Area adults acknowledge having driven a vehicle in the past month after they had perhaps too much to drink.

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.

- **BENCHMARK:** Notably below the rates found statewide and nationally.
- **TREND:** Marks a significant decrease over time.

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



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 58]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Age-Adjusted Unintentional Drug-Related Deaths

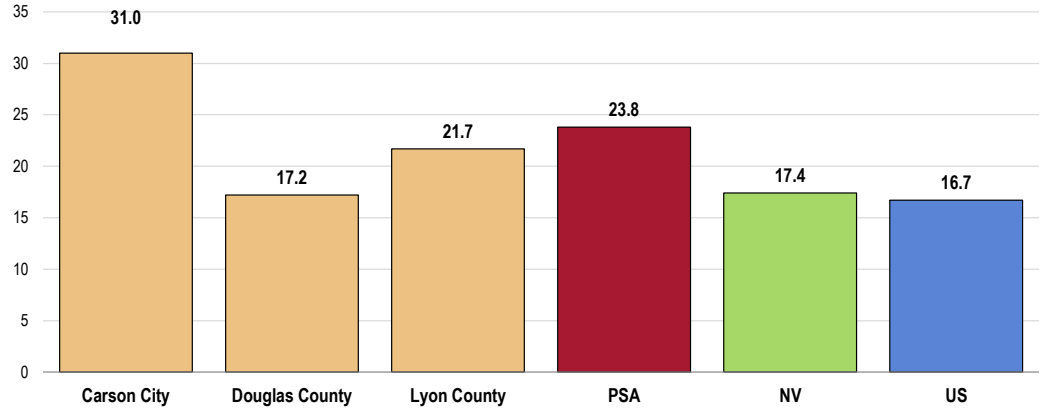
Between 2015 and 2017, there was an annual average age-adjusted unintentional drug-related mortality rate of 23.8 deaths per 100,000 population in the Primary Service Area.

- **BENCHMARK:** Higher than state and national rates. More than double the related Healthy People 2020 objective of 11.3 or lower.
- **DISPARITY:** Notably high in Carson City.
- **TREND:** The area mortality rate has increased over the past decade, most notably since the 2012-2014 reporting period.

Unintentional Drug-Related Deaths: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 11.3 or Lower



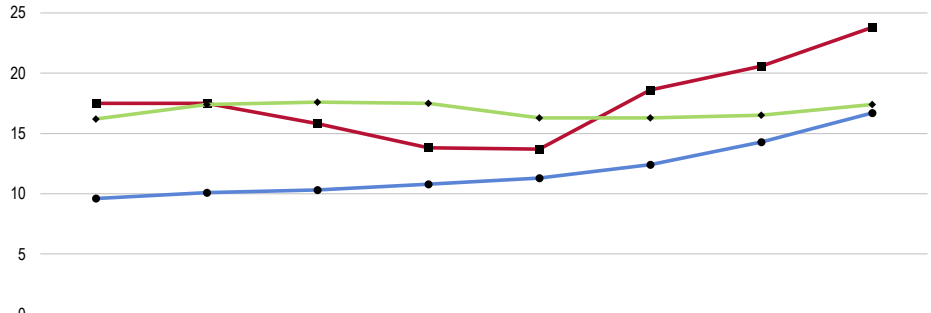
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [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.

Unintentional Drug-Related Deaths: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 11.3 or Lower



	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
PSA	17.5	17.5	15.8	13.8	13.7	18.6	20.6	23.8
NV	16.2	17.4	17.6	17.5	16.3	16.3	16.5	17.4
US	9.6	10.1	10.3	10.8	11.3	12.4	14.3	16.7

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted April 2019.
- UD Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-12].

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

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.

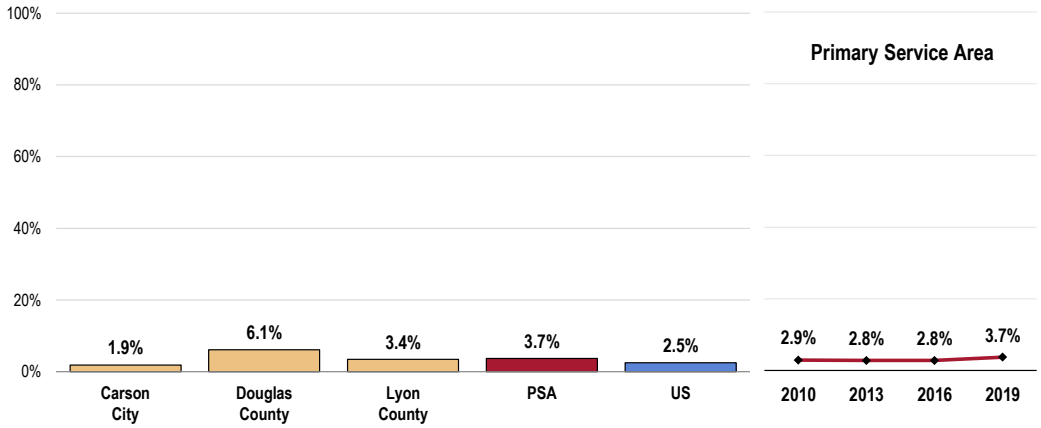
Note: As a self-reported measure – and because this indicator reflects potentially illegal behavior – it is reasonable to expect that it might be underreported, and that actual illicit drug use in the community is likely higher.

A total of 3.7% of Primary Service Area adults acknowledge using an illicit drug in the past month.

- **BENCHMARK:** Satisfies the related Healthy People 2020 objective (7.1% or lower).
- **DISPARITY:** Unfavorably high in Douglas County, as well as among younger adults.

Illicit Drug Use in the Past Month

Healthy People 2020 = 7.1% or Lower



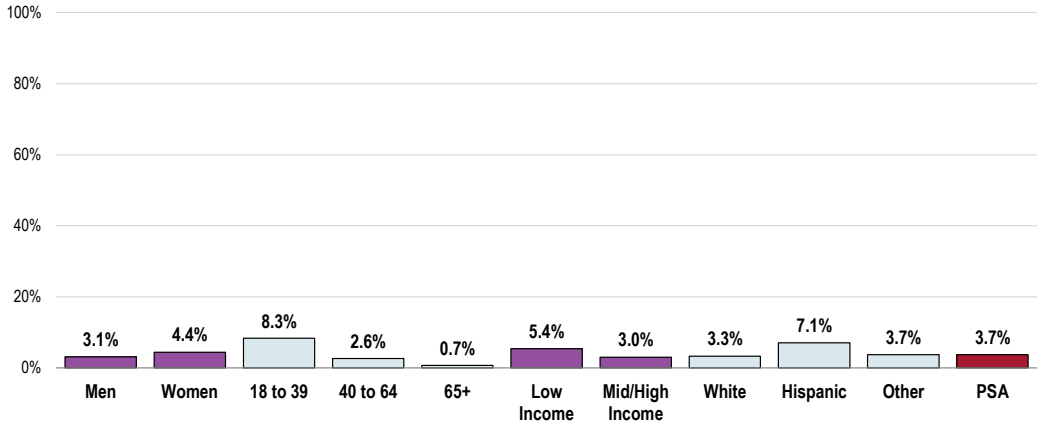
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 59]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-13.3]

Notes:
- Asked of all respondents.

Illicit Drug Use in the Past Month

(Primary Service Area, 2019)

Healthy People 2020 = 7.1% or Lower



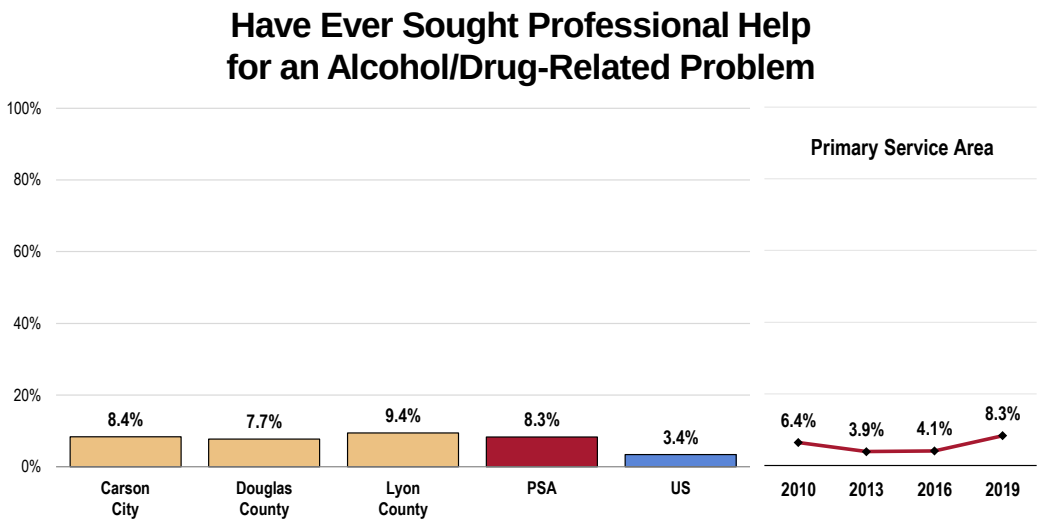
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 59]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-13.3]

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

Alcohol & Drug Treatment

A total of 8.3% of Primary Service Area adults report that they have sought professional help for an alcohol or drug problem at some point in their lives.

- **BENCHMARK:** Above the national proportion.
- **TREND:** A significant increase over 2013 and 2016 findings (similar to 2010).



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 60]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

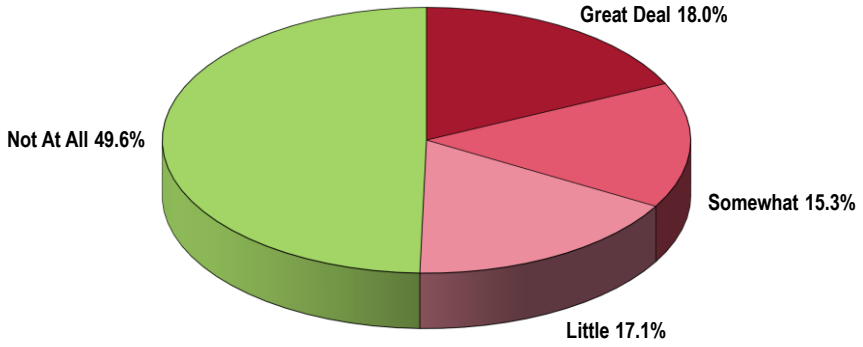
Personal Impact From Substance Abuse

Area adults were also asked to what degree their lives have been impacted by substance abuse (whether their own abuse or that of another).

Almost half of Primary Service Area residents' lives have <u>not</u> been negatively affected by substance abuse (either their own or someone else's).

Degree to Which Life Has Been Negatively Affected by Substance Abuse (Self or Other's)

(Primary Service Area, 2019)

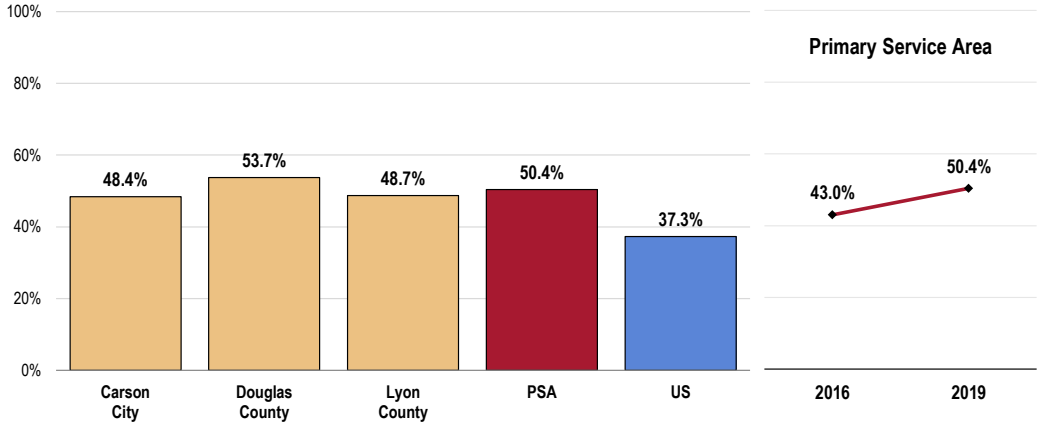


Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 61]
Notes: ● Asked of all respondents.

However, 50.4% have felt a personal impact to some degree ("a little," "somewhat," or "a great deal").

- **BENCHMARK:** Above the proportion found nationally.
- **DISPARITY:** More prevalent among adults age 40-64.
- **TREND:** Marks a significant increase since first measured in 2016.

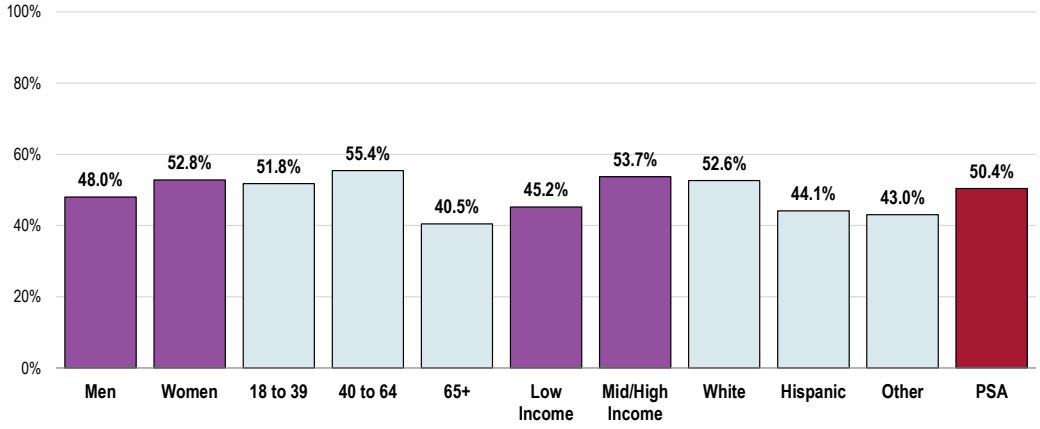
Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else)



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 195]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.
● Includes response of "a great deal," "somewhat," and "a little."

Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else)

(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 195]

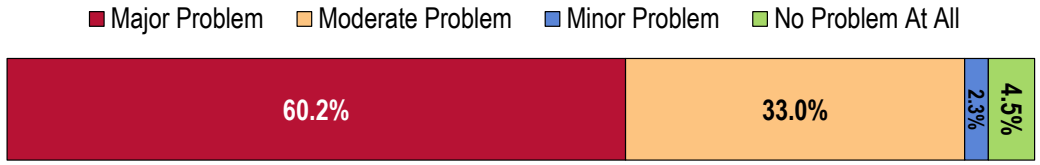
Notes:
- Asked of all respondents.
- Includes response of "a great deal," "somewhat," and "a little."
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income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

Key Informant Input: Substance Abuse

Six in ten key informants taking part in an online survey characterized *Substance Abuse* as a "major problem" in the community.

Perceptions of Substance Abuse as a Problem in the Community

(Key Informants, 2019)



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

Notes:
- Asked of all respondents.

Top Concerns

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

Affordable Care/Services

> *There's no free agencies or outpatient facilities available for people to detox or seek help with addiction and treatment for chronic pain management. Not a lot of people who can prescribe or treat psychiatric conditions. With the rise of marijuana, it has become a go to drug for the society. Substance abuse also goes with a dysfunctional family system; once the parents start, the kids follow. There is no role model around or counselors to help. There is not enough education about the effects of substance abuse in this community. — Physician*

Financial barriers: Will insurance pay? What about uninsured/underinsured individuals? Lack of awareness of facilities: I think that Carson Tahoe's Behavior Health is the only facility offering substance abuse treatment. I have never seen public awareness messaging regarding these services in the community, nor have I had direct to provider marketing from the facility in terms of the referral process or brochures to provide patients/families who are affected. Do we have sufficient outpatient treatment options for when a person is discharged from inpatient care? And again, will these services, if available, be affordable? — Physician

Affordable care and long-term care for individuals. Lack of knowledge of resources available. — Public Health Representative

Money and quality of treatment. In some of the groups, if clientele are court-ordered, it is not unusual to hear of reports that some people are showing up to groups high or under-the-influence. — Community/Business Leader

There is no rehab for those without insurance; getting help is almost impossible. — Other Health Provider

Insurance or a lack thereof. — Physician

Cost and knowing where they are and what they can do. — Community/Business Leader

Fees, housing and transportation. — Social Services Provider

Lack of treatment centers for low-income. — Physician

The cost of service. — Community/Business Leader

Access to Care/Services

Lack of facilities and lack of money. If someone gets into rehab, they can't sustain their home or job, which tends to mean they don't get help. The large availability of substances also creates a problem. Easy to get at any age. — Community/Business Leader

No treatment centers in our area- only short-term detox, and that is very limited. No transitional housing for addicts or alcoholics upon release of 30-day treatment centers. — Social Services Provider

Lack of facilities and programs. Proliferation of opioids, meth and heroin. Alternatives to incarceration. — Community/Business Leader

Locating treatment centers or counselors who can see patients within a short amount of time is difficult. — Other Health Provider

No facilities to care for patients. — Physician

Transportation. — Community/Business Leader

Lack of options. — Physician

Lack of access to care. — Physician

Prevalence/Incidence

90%-95% of adults and youth in need are using or victims of family members that abuse drugs and alcohol. — Social Services Provider

Just read the crime report in Carson City for one week and almost every single arrest has a drug and/or alcohol factor to it. — Community/Business Leader

I am not sure for the other areas, but they do have significant places in Carson City and in Douglas County. — Other Health Provider

A gal was just arrested this week again for drug use and trafficking. She has been caught several times and continues to be a repeat offender... It is at every corner you turn. Not one person can say they don't know someone that is affected in some form or fashion of substance abuse. — Community/Business Leader

We have the purest meth in the country, did you know? — Physician

High prevalence, limited treatment resources. — Physician

I get a lot of patients with this problem. — Physician

Denial/Stigma

Greatest barrier is the patient and willingness. Possibly providers unwilling to address the issue. Seems to be good support groups in the area: AA/NA. — Physician

Acceptance that the community has a problem. — Community/Business Leader

Non-compliant patients. Limited services available. — Community/Business Leader

The abuser not wanting or thinking they need treatment. — Community/Business Leader

Co-Occurrences

> *Outpatient treatment for underlying psychiatric illnesses that leads to substance abuse. — Physician*

> *Substance abuse and mental health issues go hand-in-hand. How do we build good coping skills so that we don't have to rely on drugs or alcohol to escape? — Public Health Representative*

Access to Medications/Supplies

> *No Buprenorphine prescribers. — Physician*

Awareness/Education

> *Lack of guidance, knowledge of what programs exist, and how to go about seeking treatment, along with recognizing the need. — Community/Business Leader*

Contributing Factors

> *Mental health, homeless population is on the rise. Fear and denial to access services. Spending too little time on patients with addiction. We could use a stronger system. Integrated health care services. — Community/Business Leader*

Socially Acceptable

> *Substance abuse is actually very accepted in the community and not seen as a problem. This acceptance leads to not feeling that there is a need for care. — Community/Business Leader*

Most Problematic Substances

Key informants (who rated this as a "major problem") clearly identified **alcohol** and **methamphetamine/other amphetamines** as the most problematic substances abused in the community, followed by **heroin/other opioids** and **prescription medications**.

Problematic Substances as Identified by Key Informants

	Most Problematic	Second-Most Problematic	Third-Most Problematic	**Total Mentions**
Alcohol	40.5%	22.0%	17.5%	**33**
Methamphetamines or Other Amphetamines	33.3%	29.3%	17.5%	**33**
Heroin or Other Opioids	9.5%	26.8%	27.5%	**26**
Prescription Medications	9.5%	12.2%	17.5%	**16**
Marijuana	2.4%	7.3%	12.5%	**9**
Cocaine or Crack	4.8%	0.0%	5.0%	**4**
Club Drugs (e.g. MDMA, GHB, Ecstasy, Molly)	0.0%	0.0%	2.5%	**1**
Over-The-Counter Medications	0.0%	2.4%	0.0%	**1**

Tobacco Use

About Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. Scientific knowledge about the health effects of tobacco use has increased greatly since the first Surgeon General's report on tobacco was released in 1964.

Tobacco use causes:

- Cancer
- Heart disease
- Lung diseases (including emphysema, bronchitis, and chronic airway obstruction)
- Premature birth, low birth weight, stillbirth, and infant death

There is no risk-free level of exposure to secondhand smoke. Secondhand smoke causes heart disease and lung cancer in adults and a number of health problems in infants and children, including: severe asthma attacks; respiratory infections; ear infections; and sudden infant death syndrome (SIDS).

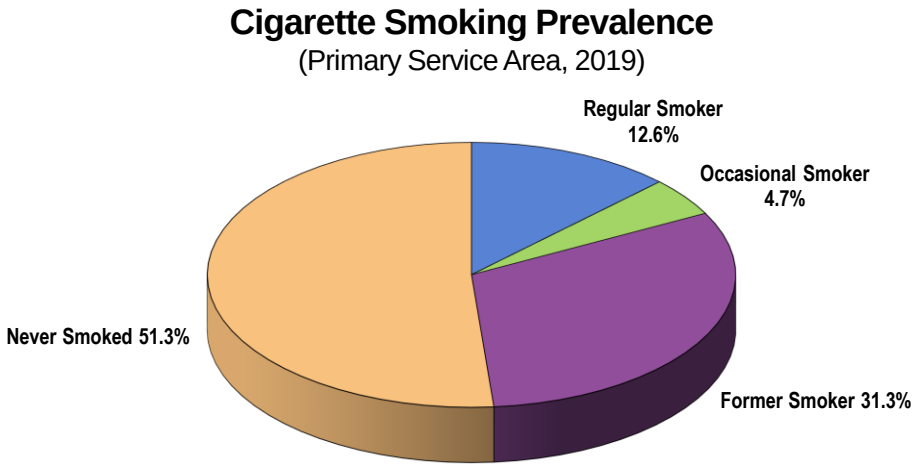
Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontitis, and tooth loss. Cigar use causes cancer of the larynx, mouth, esophagus, and lung.

— Healthy People 2020 (www.healthypeople.gov)

Cigarette Smoking

Cigarette Smoking Prevalence

A total of 17.3% of Primary Service Area adults currently smoke cigarettes, either regularly (every day) or occasionally (on some days).



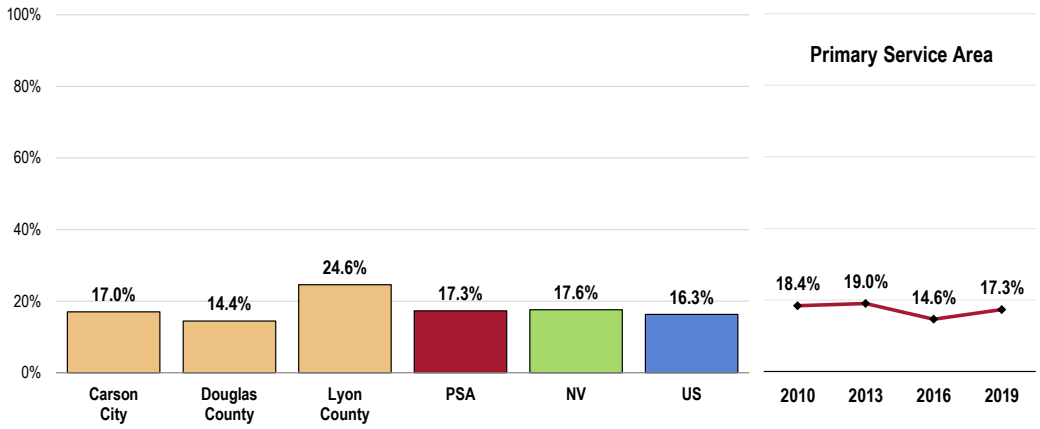
Sources: • 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 159]
Notes: • Asked of all respondents.

Note the following findings related to cigarette smoking prevalence in the Primary Service Area.

- **BENCHMARK:** Fails to satisfy the related Healthy People objective of 12.0% or lower.
- **DISPARITY:** Unfavorably high in Lyon County, as well as among low-income residents and those under age 65.

Current Smokers

Healthy People 2020 = 12.0% or Lower



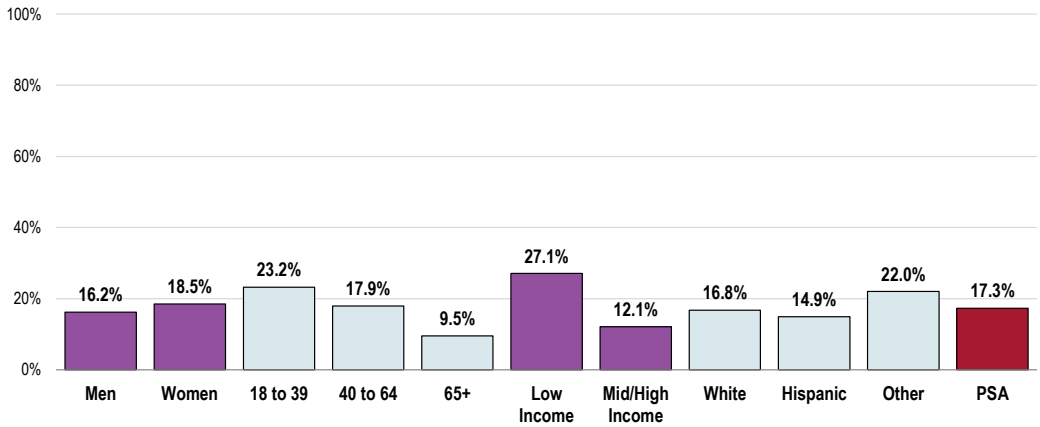
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 193]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1]

Notes:
- Asked of all respondents.
- Includes regular and occasional smokers (those who smoke cigarettes every day or on some days).

Current Smokers

(Primary Service Area, 2019)

Healthy People 2020 = 12.0% or Lower



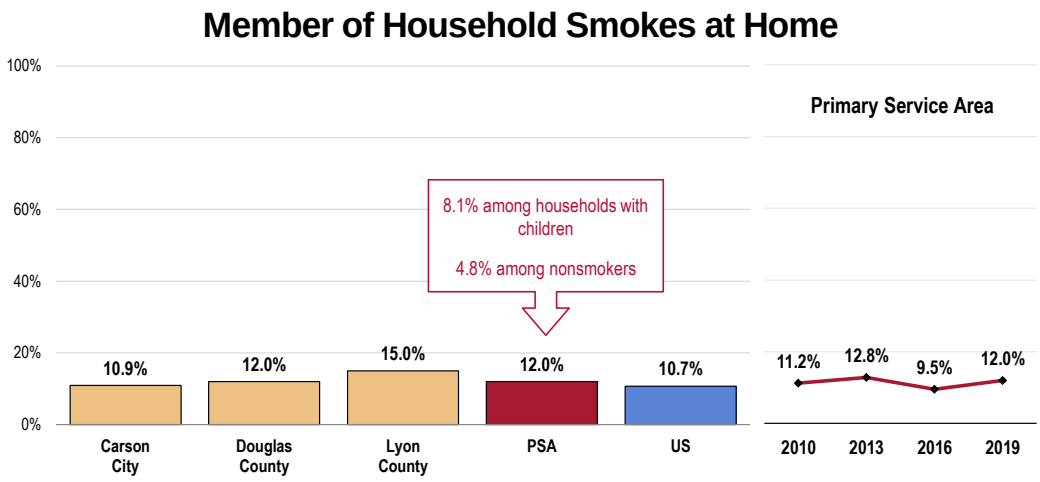
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 193]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1]

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

Environmental Tobacco Smoke

Among all surveyed households in the Primary Service Area, 12.0% report that someone has smoked cigarettes in their home on an average of four or more times per week over the past month.

- No significant differences to report.



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 52, 161-162]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.

Smoking Cessation

About Reducing Tobacco Use

Preventing tobacco use and helping tobacco users quit can improve the health and quality of life for Americans of all ages. People who stop smoking greatly reduce their risk of disease and premature death. Benefits are greater for people who stop at earlier ages, but quitting tobacco use is beneficial at any age.

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

— Healthy People 2020 (www.healthypeople.gov)

Smoking Cessation Attempts

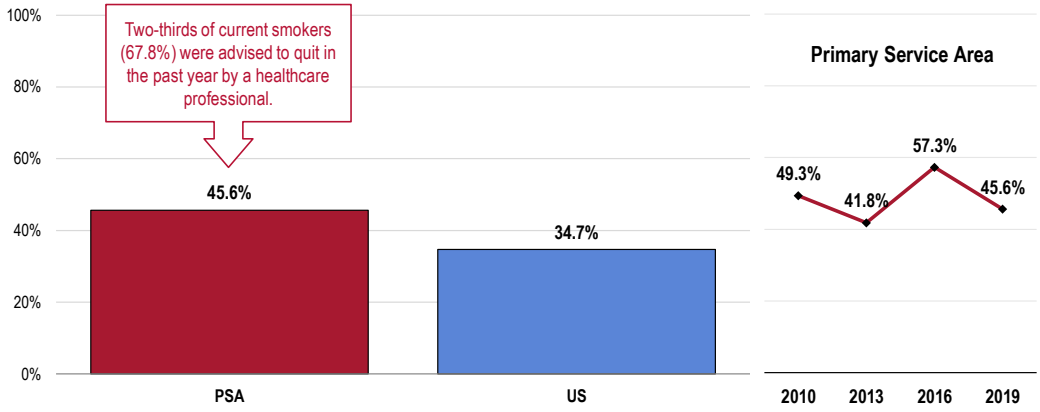
More than four in 10 regular smokers (45.6%) went without smoking for one day or longer in the past year because they were trying to quit smoking.

- **BENCHMARK:** Far from satisfying the related Healthy People 2020 objective (80.0% or higher).
- **TREND:** A significant decrease over 2016 findings, though there is no clear trend over time.

Have Stopped Smoking for One Day or Longer in the Past Year in an Attempt to Quit Smoking

(Everyday Smokers)

Healthy People 2020 = 80.0% or Higher



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 50-51]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-4.1]

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

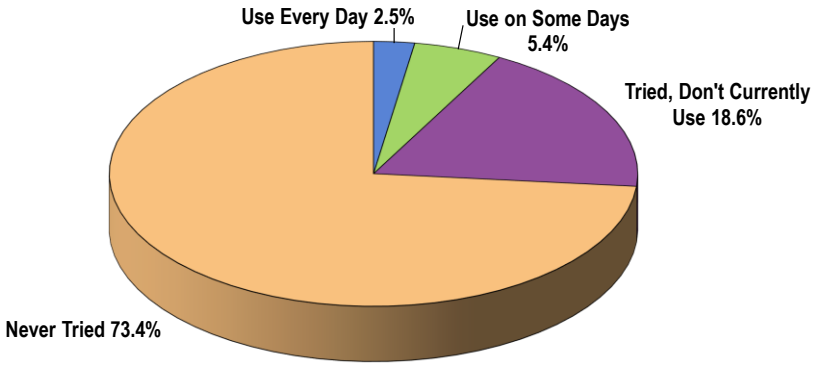
Other Tobacco Use

Use of Vaping Products

Most Primary Service Area adults have never tried electronic cigarettes (e-cigarettes) or other electronic vaping products.

Use of Vaping Products

(Primary Service Area, 2019)



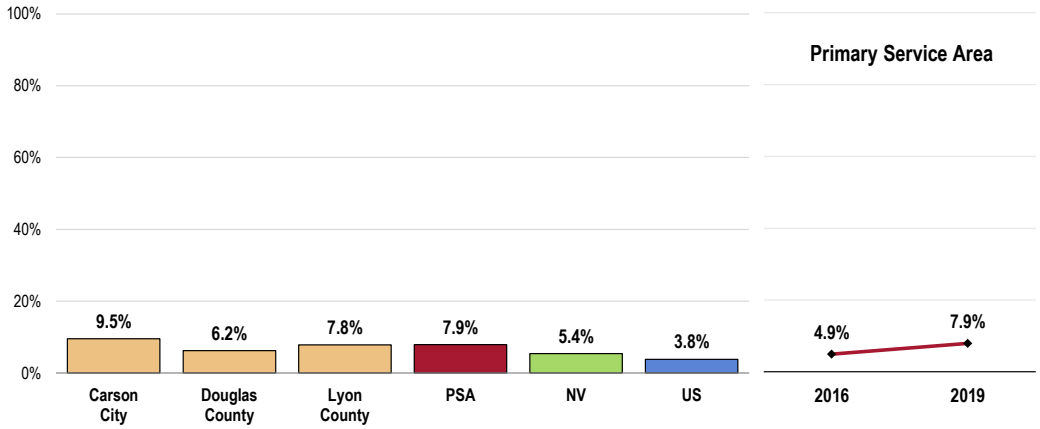
Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 163]
Notes: ● Asked of all respondents.

However, 7.9% currently use vaping products either regularly (every day) or occasionally (on some days).

- **BENCHMARK:** Significantly higher than the prevalence found statewide or nationally.
- **DISPARITY:** Prevalence is higher among low-income residents and adults under age 65 (particularly younger adults). It is also notably higher in the "Other" race category.
- **TREND:** A notable increase since first measured in 2016 (note that respondents were asked specifically about "e-cigarettes" in 2016, versus "vaping products" in 2019).

Currently Use Vaping Products

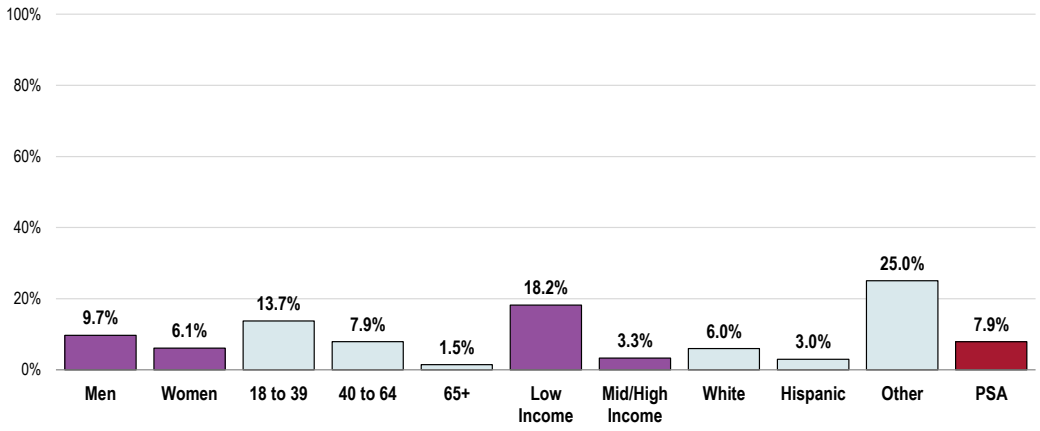
(Every Day or on Some Days)



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 194]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
Notes: ● Asked of all respondents.
● Includes regular and occasional users (those who smoke e-cigarettes every day or on some days).

Currently Use Vaping Products

(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 194]

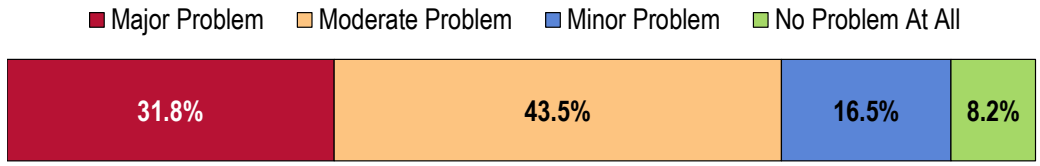
Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household 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 occasional users (those who smoke e-cigarettes every day or on some days).

Key Informant Input: Tobacco Use

The greatest share of key informants taking part in an online survey characterized *Tobacco Use* as a "moderate problem" in the community.

Perceptions of Tobacco Use as a Problem in the Community

(Key Informants, 2019)



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

Notes:
- Asked of all respondents.

Top Concerns

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

Prevalence/Incidence

> *It has gotten better, but the casinos rule the state on smoking laws, even though smokers are in the minority. A new concern is marijuana smoking and also e-cigs and vaping, which is an epidemic among middle and high schoolers. — Other Health Provider*

High prevalence of tobacco abuse and a big issue with the disease processes associated with smoking. — Physician

Visible in casinos and outside areas. Young people smoking across the street from CHS. Vaping outlets. Availability of marijuana- though not a tobacco, it's smoking. — Community/Business Leader

The percentage of tobacco users per capita is higher in our community than other communities. — Community/Business Leader

Prevalent in the adults and youth served. — Social Services Provider

Vaping. There has been a 78% increase in vaping in teens between 2017 and 2018. — Community/Business Leader

Lots of smokers, kids that vape. — Physician

Still too many people smoke. — Physician

I get a lot of patients with this problem. — Physician

High prevalence. — Physician

Vaping. — Community/Business Leader

Awareness/Education

Smokers confirming the desire to receive assistance in quitting don't find reasonable or reliable resources. — Community/Business Leader

Lack of education, low socioeconomic status, casinos. — Physician

Co-occurrences

Boredom, family habit that is passed on, apathy, generally accepted, poorly-educated population. — Community/Business Leader

Low income clients, nicotine vape use being targeted to minors. — Social Services Provider

Leading Cause of Death

COPD is the number four cause of death in America, and it's preventable. So many patients with COPD are older adults and also teenagers smoking, most likely to see them vape or use cigars, which we see daily in urgent care and primary care offices. — Physician

Easily Accessible

24/7 casino access. — Physician

Policy Issues

Tobacco use should be banned in all buildings, including gaming establishments. — Public Health Representative

Sexual Health

HIV

About Human Immunodeficiency Virus (HIV)

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

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

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

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

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

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

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

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

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

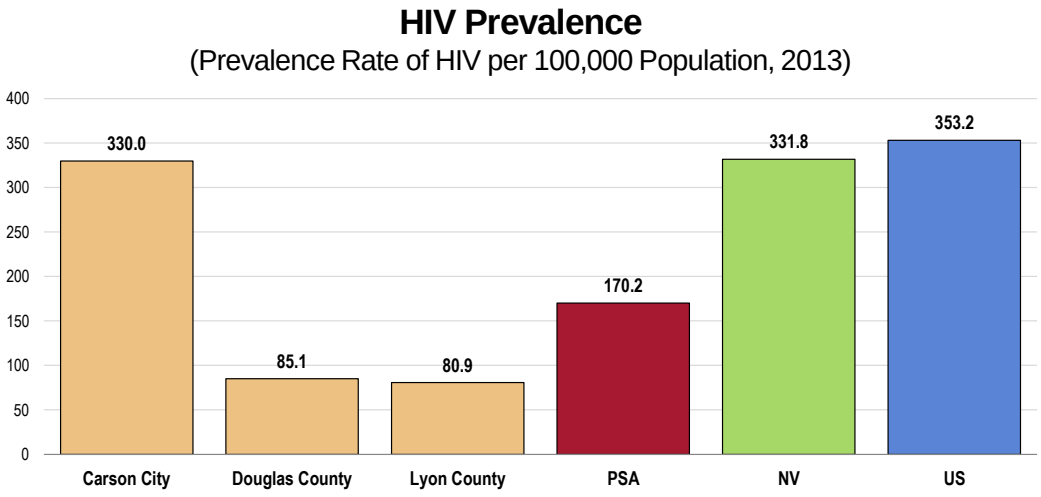
Public perception in the US about the seriousness of the HIV epidemic has declined in recent years. There is evidence that risky behaviors may be increasing among uninfected people, especially gay and bisexual men. Ongoing media and social campaigns for the general public and HIV prevention interventions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

— Healthy People 2020 (www.healthypeople.gov)

HIV Prevalence

In 2013, there was a prevalence of 170.2 HIV cases per 100,000 population in the Primary Service Area.

- **BENCHMARK:** Notably lower than state or US findings.
- **DISPARITY:** Highest in Carson City (which is on par with state and national findings).

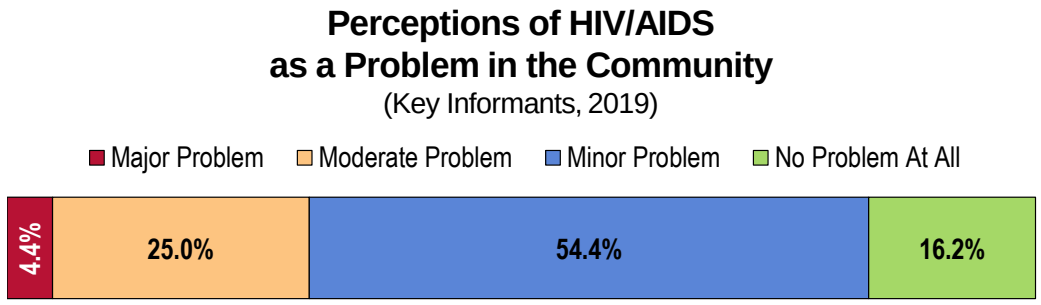


Sources:
- Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes:
- This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

Key Informant Input: HIV/AIDS

The majority of key informants taking part in an online survey most often characterized *HIV/AIDS* as a "minor problem" in the community.



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

Notes:
- Asked of all respondents.

Top Concerns

Among those rating this issue as a "major problem," the following reason was given:

Awareness/Education

> *Poor community education. — Physician*

Sexually Transmitted Diseases

About Sexually Transmitted Diseases

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

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

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

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

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

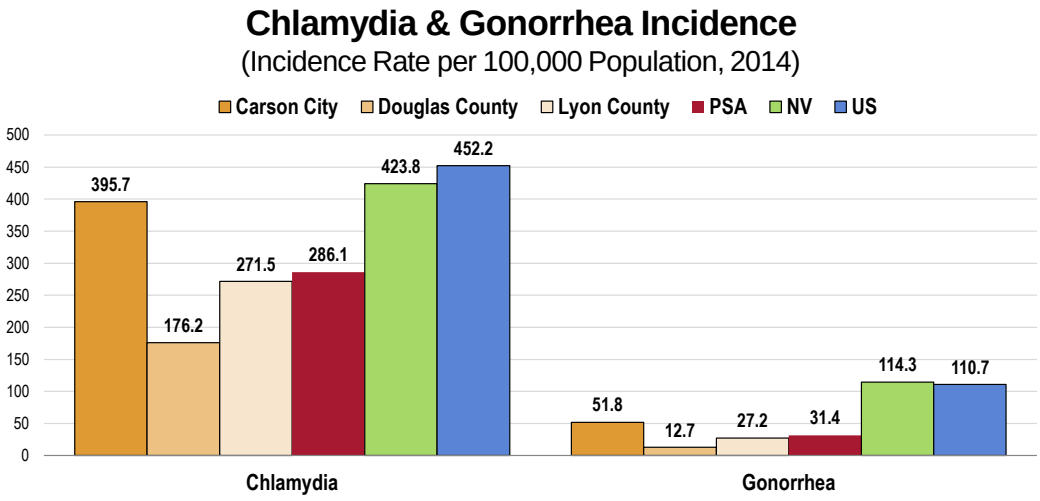
— Healthy People 2020 (www.healthypeople.gov)

Chlamydia & Gonorrhea

In 2014, the chlamydia incidence rate in the Primary Service Area was 286.1 cases per 100,000 population.

The Primary Service Area gonorrhea incidence rate in 2014 was 31.4 cases per 100,000 population.

- **BENCHMARK:** Each Primary Service Area rate is notably lower than the respective state and national rates.
- **DISPARITY:** The Carson City rate for each indicator is significantly higher than either Douglas or Lyon counties (and more similar to the state and nation).

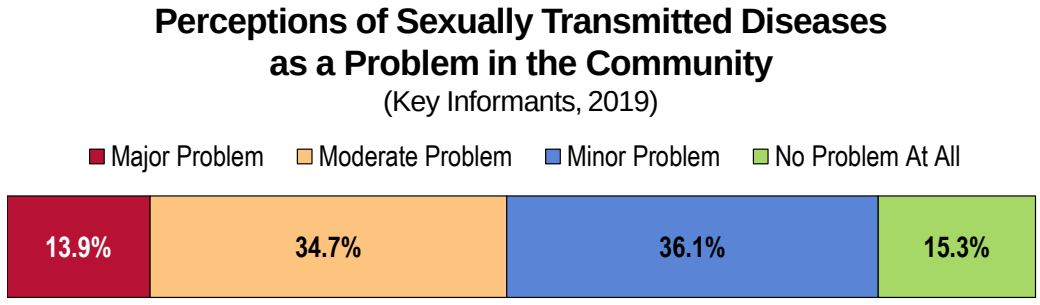


Sources:
- Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

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

Key Informant Input: Sexually Transmitted Diseases

Key informants taking part in an online survey slightly more often characterized *Sexually Transmitted Diseases* as a "minor problem" than a "moderate problem" in the community.



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

Notes:
- Asked of all respondents.

Top Concerns

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

Awareness/Education

> *With a nationwide increase in all STDs, programs need to be developed for the adult populations about how to reduce their risk of contracting an STD. Anonymous sex via dating apps should provide health education pop-ups. — Public Health Representative*

> *Because people are not educated about STD's in school or in the community, most Americans practice unsafe sex, especially teenagers and older adults who are post-menopausal; they don't think they can get pregnant or are on birth control, hence, they can sleep with whoever they want. There's a major need for education, about prevention being better than the cure. Working in urgent care and primary care, I have seen an increase in STD's- not only in teenagers, about also adults and older adults. — Physician*
>
> *Lack of education. — Physician*

Prevalence/Incidence

> *Oversight of our Community Health Clinic has revealed significant levels of STIs in our community across all age groups. In our very conservative community, this is not a topic of open conversation, which leads to the problem growing bigger. — Social Services Provider*

Contributing Factors

> *Unprotected sex, lots of meth users using needles and unprotected sex. — Physician*

Access to Health Services

Professional Research Consultants, Inc.

Health Insurance Coverage

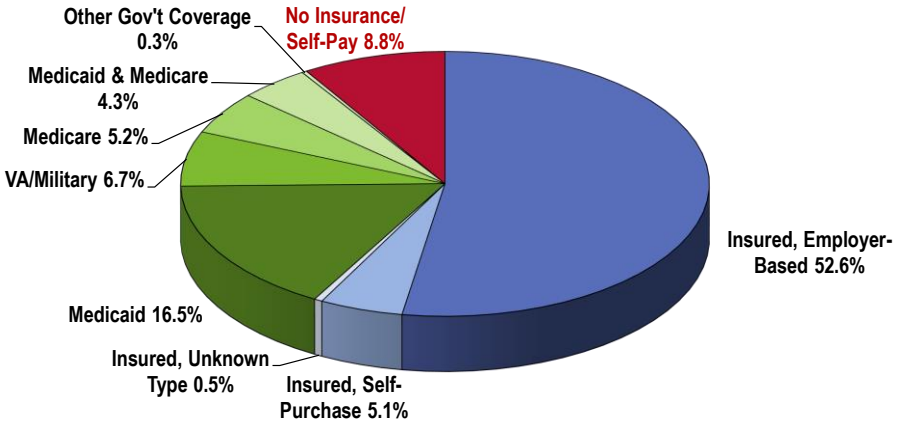
Type of Healthcare Coverage

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

A total of 58.2% of Primary Service Area adults age 18 to 64 report having healthcare coverage through private insurance. Another 33.0% report coverage through a government-sponsored program (e.g., Medicaid, Medicare, military benefits).

Healthcare Insurance Coverage

(Adults Age 18-64; Primary Service Area, 2019)



Sources: • 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]
Notes: • Reflects respondents age 18 to 64.

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).

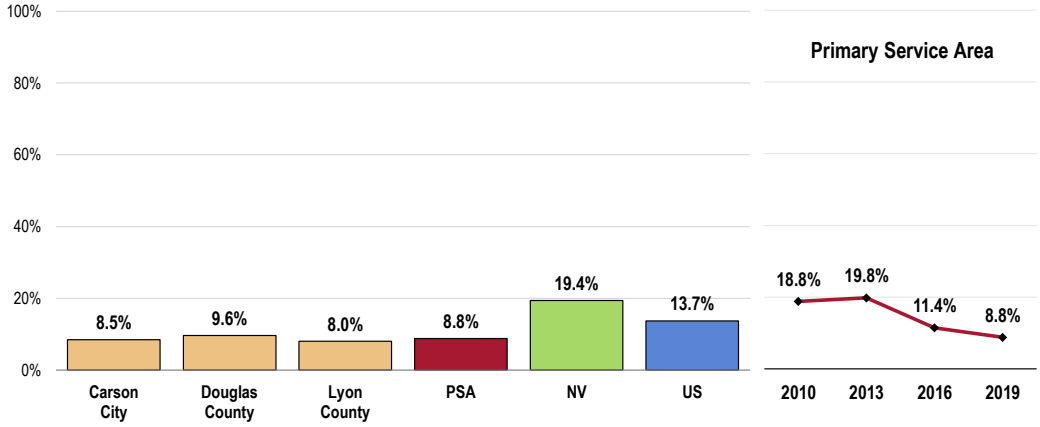
Among adults age 18 to 64, 8.8% report having no insurance coverage for healthcare expenses.

- **BENCHMARK:** More favorable than the state and national prevalence. The related Healthy People 2020 objective is universal coverage (0.0%).
- **DISPARITY:** Lack of coverage is more common among low-income residents (note that differences by race/ethnicity are not significant).
- **TREND:** Marks a favorable decrease over 2010 and 2013 findings.

Lack of Healthcare Insurance Coverage

(Adults Age 18-64)

Healthy People 2020 = 0.0% (Universal Coverage)



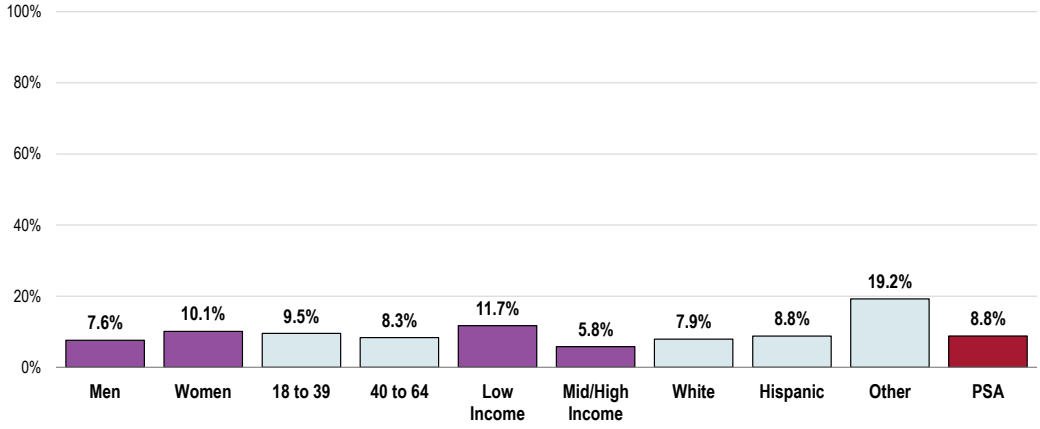
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]

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

Lack of Healthcare Insurance Coverage

(Adults Age 18-64; Primary Service Area, 2019)

Healthy People 2020 = 0.0% (Universal Coverage)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]

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

Difficulties Accessing Healthcare

About Access to Healthcare

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts: overall physical, social, and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps: 1) Gaining entry into the health care system; 2) Accessing a health care location where needed services are provided; and 3) Finding a health care provider with whom the patient can communicate and trust.

— Healthy People 2020 (www.healthypeople.gov)

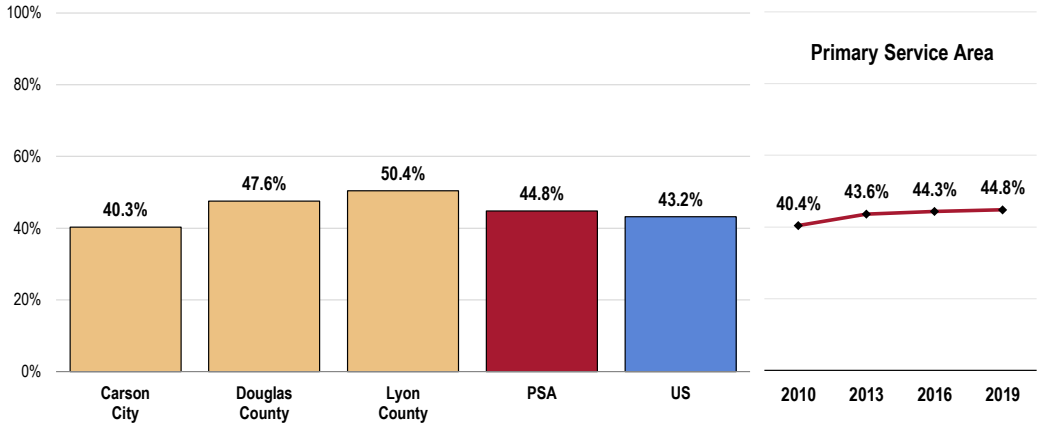
Difficulties Accessing Services

This indicator reflects the percentage of the total population experiencing problems accessing healthcare in the past year, regardless of whether they needed or sought care. It is based on reports of the barriers outlined in the following section.

A total of 44.8% of Primary Service Area adults report some type of difficulty or delay in obtaining healthcare services in the past year.

- **DISPARITY:** Favorably low in Carson City. By demographics, the prevalence is higher among women, adults under age 65 (particularly those under age 40), low-income residents, and White respondents.

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

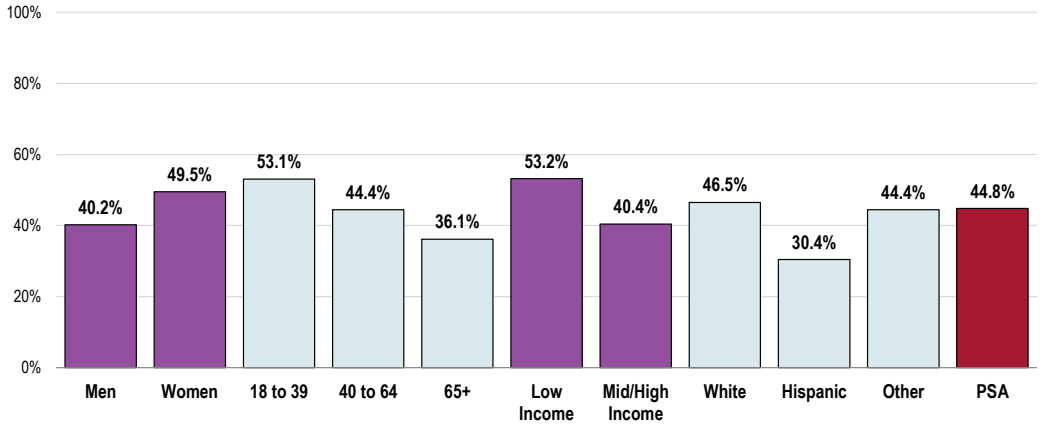


Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 171]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

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

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

(Primary Service Area, 2019)



Sources: • 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 171]

Notes:
- Asked of all respondents.
- Percentage represents the proportion 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

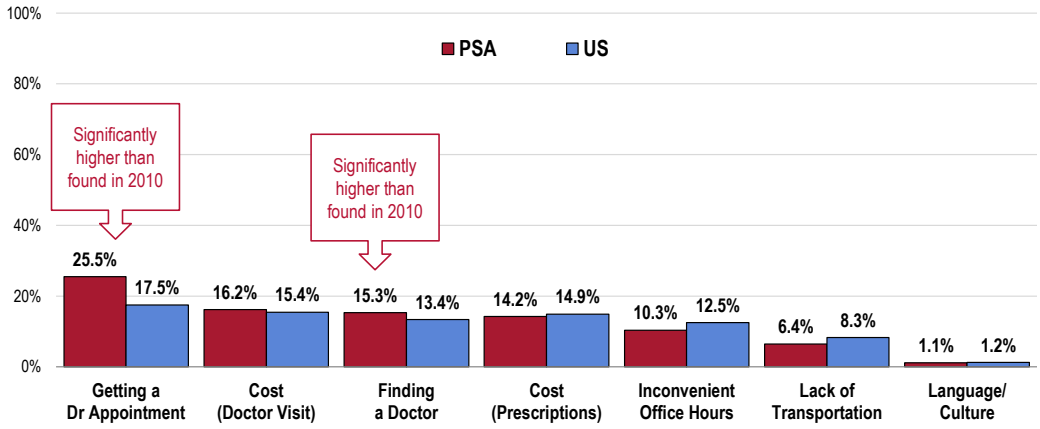
To better understand healthcare access barriers, survey participants were asked whether any of seven types of barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

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

Of the tested barriers, appointment availability and cost of a physician visit impacted the greatest shares of Primary Service Area adults.

- **BENCHMARK:** Local difficulty getting a doctor's appointment is significantly higher than national findings.
- **DISPARITY:** Difficulty finding a doctor and cost of a doctor visit is highest in Lyon County when compared to the rest of the service area. Difficulty getting a doctor's appointment is more common in Douglas County (not shown).
- **TREND:** Difficulty finding a doctor and getting an appointment have each increased from prior years.

Barriers to Access Have Prevented Medical Care in the Past Year



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-13]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Prescriptions

Stretching Prescriptions

A total of 15.1% of respondents acknowledge skipping or stretching a prescription in the past year because of cost (not shown).

- **TREND:** A favorable decrease over prior findings (not shown).

Difficulties Getting Prescriptions

"During the past 12 months, was there any other reason that prevented you from getting a needed prescription?"

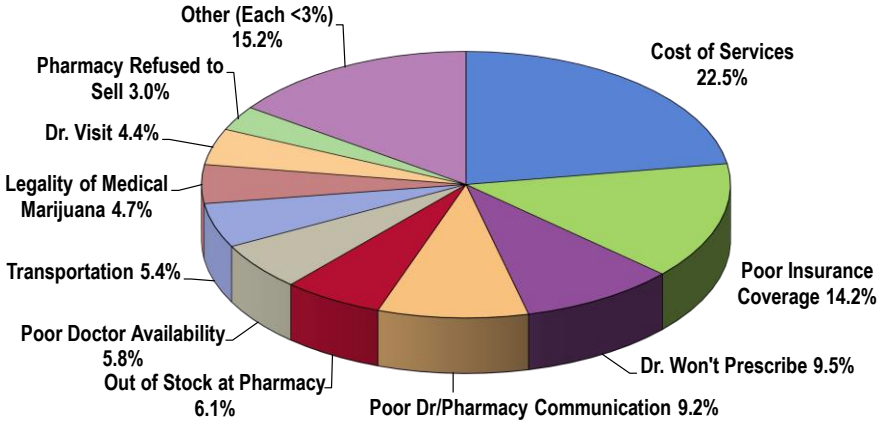
"What was it that prevented you from getting the needed prescription?"

Respondents were asked if they had experienced any difficulty in the past year getting a prescription, due to any reason other than the cost of a prescription.

Cost of services, **poor insurance coverage**, **doctor refusal to prescribe**, and **poor communication between the doctor and pharmacy** were the greatest barriers noted by respondents. Additional reasons are outlined in the following chart.

Reasons for Difficulty Getting a Prescription

(Respondents Reporting Difficulty Getting a Prescription [Unrelated to the Cost of the Prescription], 2019)



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 302]
Notes: ● Asked of respondents who reported difficulty getting a needed prescription, due to reasons other than the cost of the prescription.

Accessing Healthcare for Children

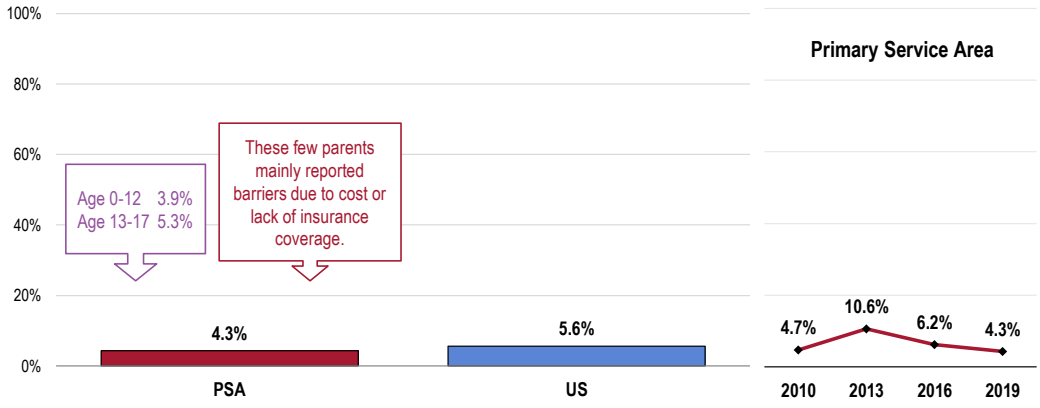
A total of 4.3% of parents say there was a time in the past year when they needed medical care for their child, but were unable to get it.

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.

- **TREND:** A significant decrease from 2013 findings (similar to 2010).

Had Trouble Obtaining Medical Care for Child in the Past Year

(Parents of Children 0-17)



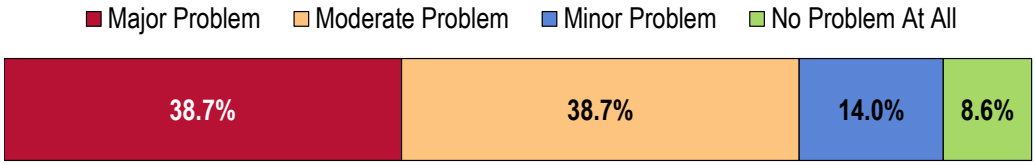
Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 118-119]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents with children 0 to 17 in the household.

Key Informant Input: Access to Healthcare Services

Key informants taking part in an online survey characterized *Access to Healthcare Services* as a "major problem" equally as often as a "moderate problem" in the community.

Perceptions of Access to Healthcare Services as a Problem in the Community

(Key Informants, 2019)



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

Top Concerns

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

Lack of Providers

Lack of available providers in the local communities. Complete lack of accessibility to specialists in local communities, combines with a lack of public transportation to major cities, such as Reno and Carson City. This lack of family care affects all citizens, and the inability to access specialists is an even greater burden on the elderly who often cannot drive. — Community/Business Leader

There is an inadequate number of primary care providers in the area. The doctors in the area are resistant to the use of nurse practitioners. We are past the antiquated thought that the doctor be the gateway to care. RENOWN is now becoming a force in the healthcare of our community to help with this, but still not enough! — Physician

While there may be several doctors and medical staff in Northern Nevada, they are limited in rural areas, which forces you to go to Carson or Reno to see a doctor for just about anything. In addition to that, not many take all insurance plans or charge significantly more now. — Community/Business Leader

Not enough providers to see new visits or follow-ups (even remotely) promptly. Hospital follow-up, generally, is so far-out that patients are often re-admitted before they have a chance to follow-up. — Physician

Lack of timely access to primary care services. There are too few primary care providers in the area, especially outside of Carson City. It often takes months to get a new patient appointment, and follow-up appointments for urgent concerns are impossible. Providers are just too busy to block time in their schedules for same day appointments. Furthermore, there are too few primary care facilities that will see uninsured, underinsured, and Medicaid patients. — Physician

We need 1:1 nursing for patients in critical care, such as stroke, cardioversion, unstable GI bleed, etc. — Physician

Need more primary care physicians. Keep people out of the emergency room or urgent care for minor problems. — Physician

Lack of providers from mental health, primary care and oral health, as well as a lack of transportation. — Community/Business Leader

Limited number of providers along with those who are accepting new patients. — Community/Business Leader

Availability of primary care physicians, psychiatrists, neurologists and rheumatologists. — Physician

Provider shortage, not enough services for low income underserved. — Physician

Insufficient providers in the service area that CTH defines as theirs. — Community/Business Leader

A lack of providers, especially in primary care. — Physician

Lack of providers. — Community/Business Leader

Access to Care/Services

The wait time to see a physician is very long. Even for established patients, the wait can be 2-4 weeks. Efforts exist to use nurse practitioners, but these do not seem to be well-integrated with regular doctor visit records. — Community/Business Leader

Timely access to primary care, psychiatric care and skilled nursing care. Need for more primary care doctors and not to totally rely on APRNs and PAs. For example, a patient may have achieved access for care into the system through an advanced practitioner, but then has trouble closing the loop of care without physician guidance. This is especially true for psychiatric care. — Physician

Primary care services. In our community, primary care is typically booked out about two to three months. This makes it very difficult for patients to establish a provider. Chronic health conditions go unmanaged and this results in increased hospital admissions. — Physician

There is only one hospital in Lyon County. Living in Fernley and working in Silver Springs makes it frustrating to travel to a hospital for any serious matter. Mental health services in Lyon County are also lacking. Lyon County does NOT have the mental health means to adequately address this crisis. — Community/Business Leader

In this community, there is a tragic lack of primary care services. When I work in Carson or Dayton, I am shocked that people do not even know about the community health clinics that are in rural Nevada and they also do not know about the public health clinics. I am not sure whether the FQHC in Carson does outreach, but the poorly-insured should certainly seek that organization for their PCP needs. Why do people think they need to wait 6 months to get into Carson Medical Group? They can only help so many people. Another major problem is the pharmacies in this Carson Valley. There is not a single pharmacy that is open after 8; this is even worse on the weekends. We see people until 8pm and then give them medications that they can't get filled that day. The pharmacies here are not community-oriented. We have a clinic in a Walmart, and that pharmacy closes before we do. – Physician

Access to daily health care and transportation for appointments. — Community/Business Leader

Minimal amount of resources. — Other Health Provider

Affordable Care/Services

For the poor, more economically-challenged areas of our community trying to get adequate medical care can be very hard. In addition, just accessing services like rides, potential lodging, language barriers, all put up a wall that can be difficult to climb. There are not enough doctors to go around, and if you do not have insurance, there is a problem in understanding and accessing public health options, yet alone dealing with major issues. Illiteracy and diversity issues can also play a major role in seeking out treatment. More needs to be done to let potential patients know, in a simple way, about the options that are out there if you are under or uninsured. — Other Health Provider

Affordable health care, services for uninsured and underinsured. Insurance issues such as denials and high deductible with high premiums for families. — Public Health Representative

People having access to affordable health care. — Community/Business Leader

Patients unable to afford insurance and medications. — Physician

Services available for low-income. Doctors not taking new patients. — Other Health Provider

Insurance Issues

It is very hard for the people in the area who don't have insurance or have no employment, also families that are here without documentation. — Other Health Provider

Medicare population and access to accepting primary care doctors and providers. Lack of preventative care and maintenance such that the emergency room becomes the clinic for these patients, often with neglected health. Mental health services are lacking. — Physician

Primary medical providers are full with patients, limiting the ability to take patients with Medicare or Medicaid. Douglas County only has 2 Medicare programs to choose from, and I'm sure Lyon County is in the same situation. In the case of serious trauma, it can be an hour ambulance ride to the closest trauma center. For regular inpatient hospital care, there are only 8-12 beds available, or you have to go another 40 miles for the next facility. VA services available in the area but primary hospital is in Reno for all 3 jurisdictions. — Social Services Provider

Preventive care for the working class that can't afford health insurance. — Social Services Provider

> *Locating a primary physician that takes Medicaid in Carson City. — Other Health Provider*
>
> *Not enough providers that take Medicaid and cash pay. — Physician*

Culturally Competent Resources

> *Lack of culturally-competent health resources, language barriers. Reimbursement issues, equitable health care services. Lack of workplace diversity, health care professionals representing the communities they serve. Institutionalized racism. — Community/Business Leader*

Immunizations

> *Access to preventive health services, such as vaccinations. Counties outside of Washoe and Clark have lower immunization rates. Identifying the barriers would help providers then be able to address the challenges those barriers are causing. — Public Health Representative*

Lack of Specialists

> *Auto immune disease care (i.e Lupus). These specialists are even harder to get into, as they schedule appointments from physician referrals up to 6 months out. Then testing and follow-ups on the testing can take another 6 months or more. The shortage here- including in the Reno area- is very significant. — Community/Business Leader*

Mental Health Services

> *I see that mental health impacts daily living and disease states. Poor services in this area. Not enough providers to get patients in quickly. — Physician*

Quality of Care

> *The ability to get the correct diagnosis and treatment on a variety of conditions, for people of all ages. — Community/Business Leader*

Type of Care Most Difficult to Access

Key informants (who rated this as a "major problem") most often identified primary care and mental health care as the most difficult to access in the community.

Medical Care Difficult to Access as Identified by Key Informants				
	Most Difficult	Second-Most Difficult	Third-Most Difficult	**Total Mentions**
Primary Care	38.2%	16.1%	16.7%	**23**
Mental Health Care	32.4%	32.3%	6.7%	**23**
Substance Abuse Treatment	2.9%	12.9%	20.0%	**11**
Chronic Disease Care	0.0%	16.1%	16.7%	**10**
Dental Care	14.7%	6.5%	6.7%	**9**
Specialty Care	5.9%	6.5%	3.3%	**5**
Pain Management	0.0%	3.2%	13.3%	**5**
Elder Care	2.9%	0.0%	6.7%	**3**
Prenatal Care	0.0%	3.2%	3.3%	**2**
Hospice Care	0.0%	0.0%	6.7%	**2**
Palliative Care	2.9%	0.0%	0.0%	**1**
Emergency Services	0.0%	3.2%	0.0%	**1**

Primary Care Services

About Primary Care

Improving health care services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs. Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. Having a usual PCP is associated with:

- Greater patient trust in the provider
- Good patient-provider communication
- Increased likelihood that patients will receive appropriate care

Improving health care services includes increasing access to and use of evidence-based preventive services. Clinical preventive services are services that: **prevent** illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention); or **detect** a disease at an earlier, and often more treatable, stage (secondary prevention).

— Healthy People 2020 (www.healthypeople.gov)

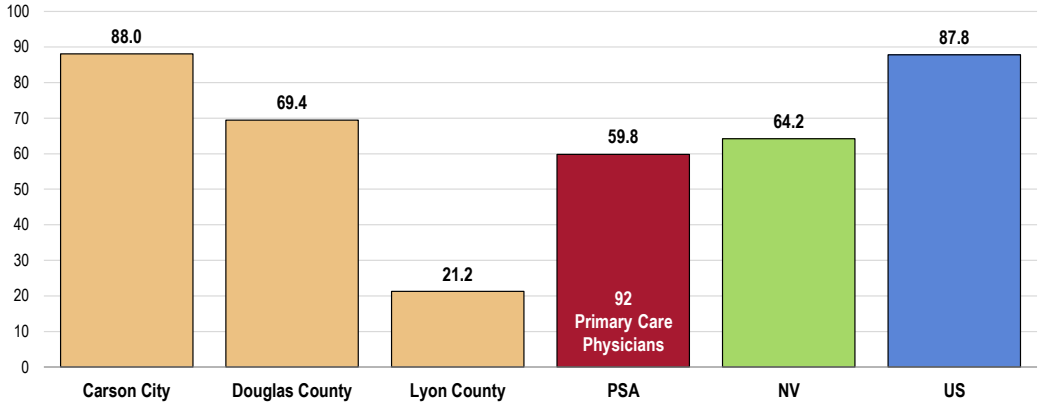
Access to Primary Care

In 2014, there were 92 primary care physicians in the Primary Service Area, translating to a rate of 59.8 primary care physicians per 100,000 population.

- **BENCHMARK:** Lower than the US rate.
- **DISPARITY:** Access to primary care physicians is lowest in Lyon County.

Access to Primary Care

(Number of Primary Care Physicians per 100,000 Population, 2014)



Sources:
- US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.
- Retrieved April 2019 from CARES Engagement Network at https://engagementnetwork.org.

Notes:
- Doctors classified as "primary care physicians" by the AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs, and General Pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Outmigration for Healthcare Services

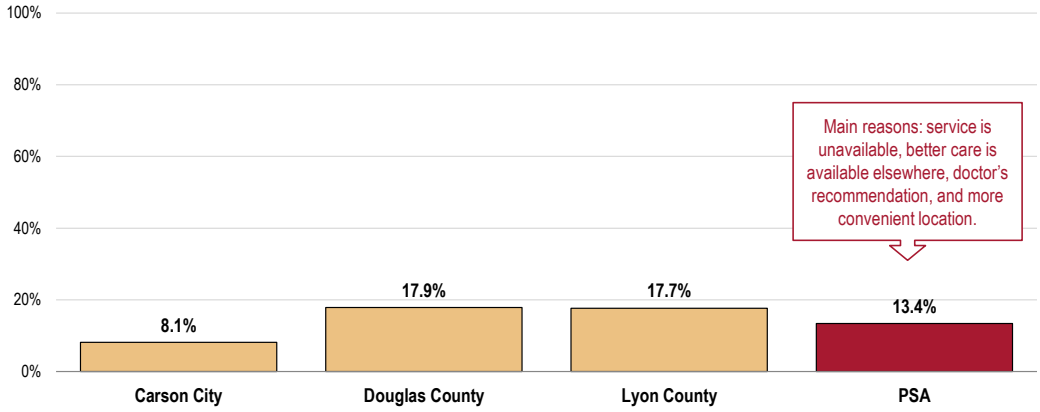
A total of 13.4% of surveyed adults report having left the local area for care in the past year.

- **DISPARITY:** Least common among respondents in Carson City.

Among those who left the local area for care, **general medical** was the most common types of care sought, followed by **psychiatry**, **dental care**, and **emergency medicine**.

These respondents most often sought care in the communities of **Reno** (29.2%) or **Carson City** (17.2%).

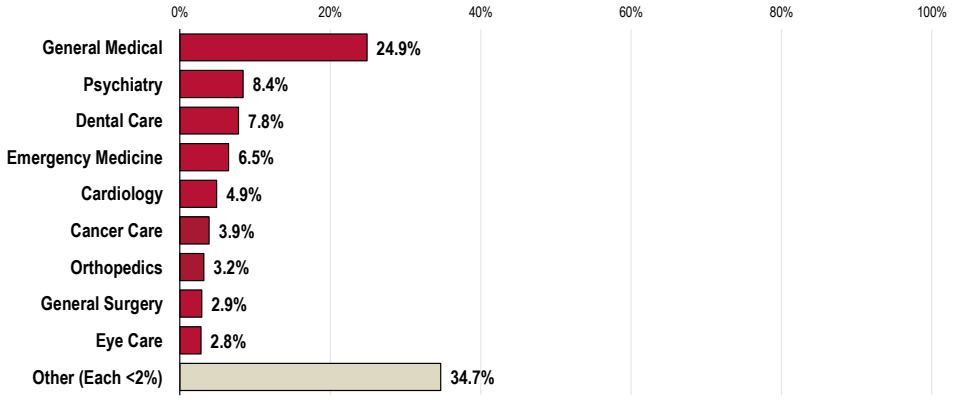
Left Local Area for Healthcare Services in Past Year



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 304, 306]
Notes: ● Asked of all respondents.

Type of Care Accessed Outside Local Area

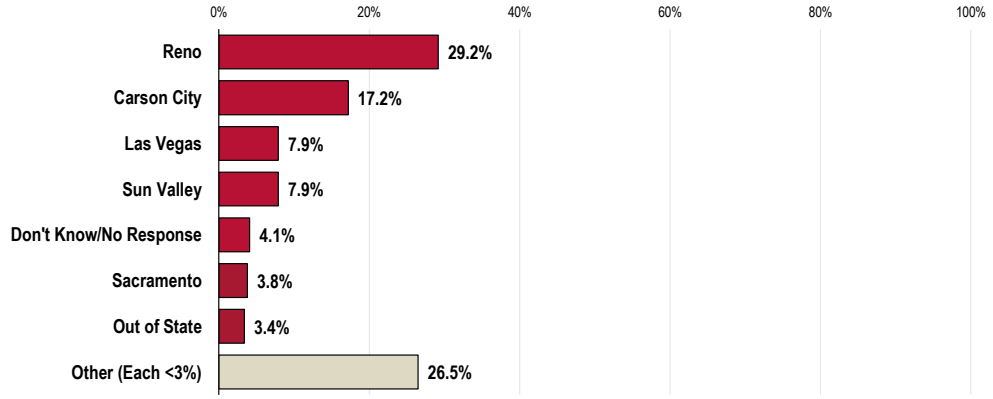
(Among Those Reporting Leaving Local Area in Past Year; Primary Service Area, 2019)



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 305]
Notes: ● Asked of those respondents reporting leaving the local area for healthcare services in the past year.

Community Where Accessed Care Outside Local Area

(Among Those Reporting Leaving Local Area in Past Year;
Primary Service Area, 2019)



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 307]
Notes: ● Asked of those respondents reporting leaving the local area for healthcare services in the past year.

Specific Source of Ongoing Care

Having a specific source of ongoing care includes having a doctor's office, clinic, urgent care center, walk-in clinic, health center facility, hospital outpatient clinic, HMO or prepaid group, military/VA clinic, or some other kind of place to go if one is sick or needs advice about his or her health. This resource is crucial to the concept of "patient-centered medical homes" (PCMH).

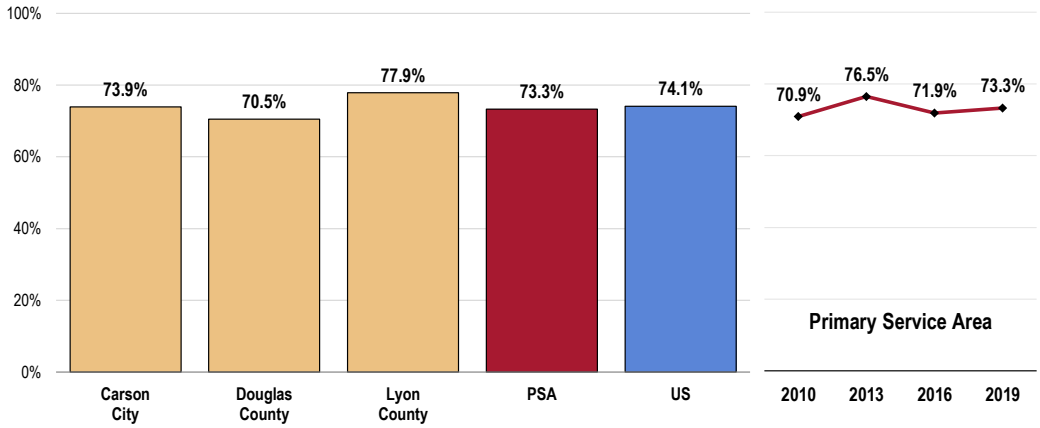
A hospital emergency room is not considered a specific source of ongoing care in this instance.

A total of 73.3% of Primary Service Area adults were determined to have a specific source of ongoing medical care.

- **BENCHMARK:** Fails to meet the Healthy People 2020 objective (95.0 or higher).

Have a Specific Source of Ongoing Medical Care

Healthy People 2020 = 95.0% or Higher



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 170]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
● US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-5.1]
Notes: ● Asked of all respondents.

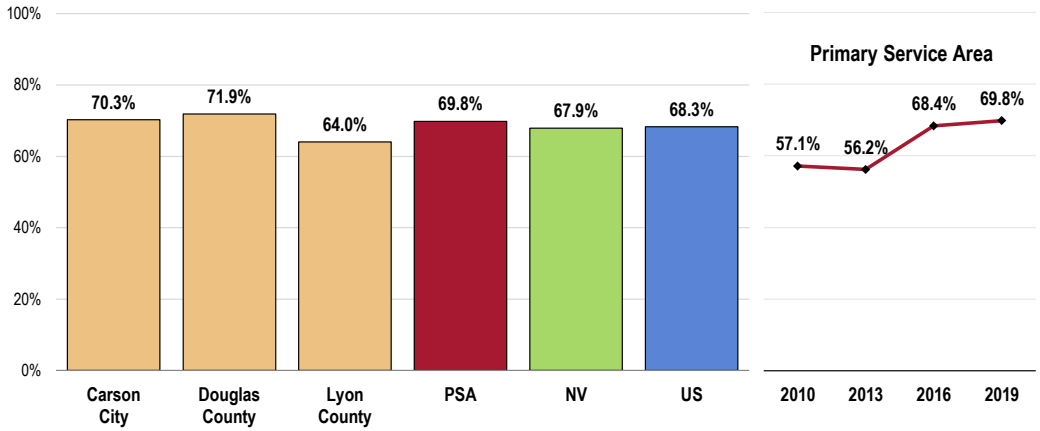
Utilization of Primary Care Services

Adults

More than two-thirds of adults (69.8%) visited a physician for a routine checkup in the past year.

- **DISPARITY:** Low-income residents are less likely to have had a recent routine checkup. Also note the strong correlation with age.
- **TREND:** A favorable increase since 2010.

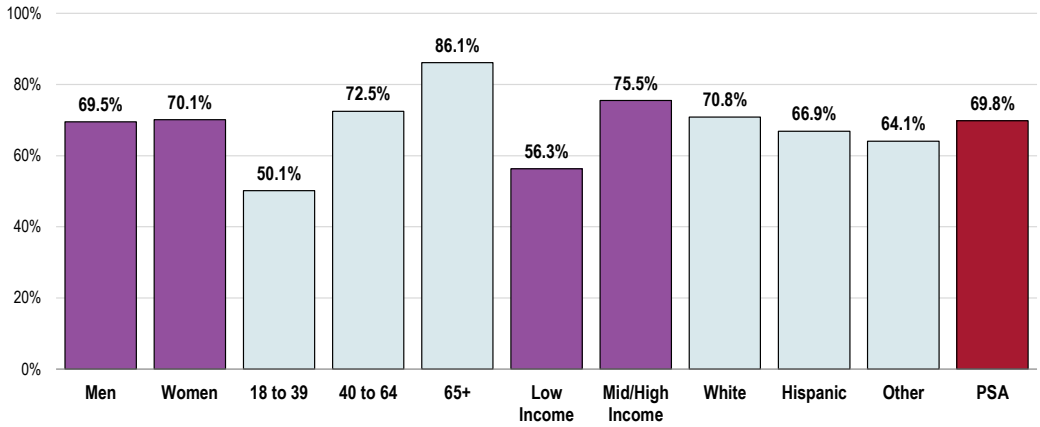
Have Visited a Physician for a Checkup in the Past Year



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Have Visited a Physician for a Checkup in the Past Year
(Primary Service Area, 2019)



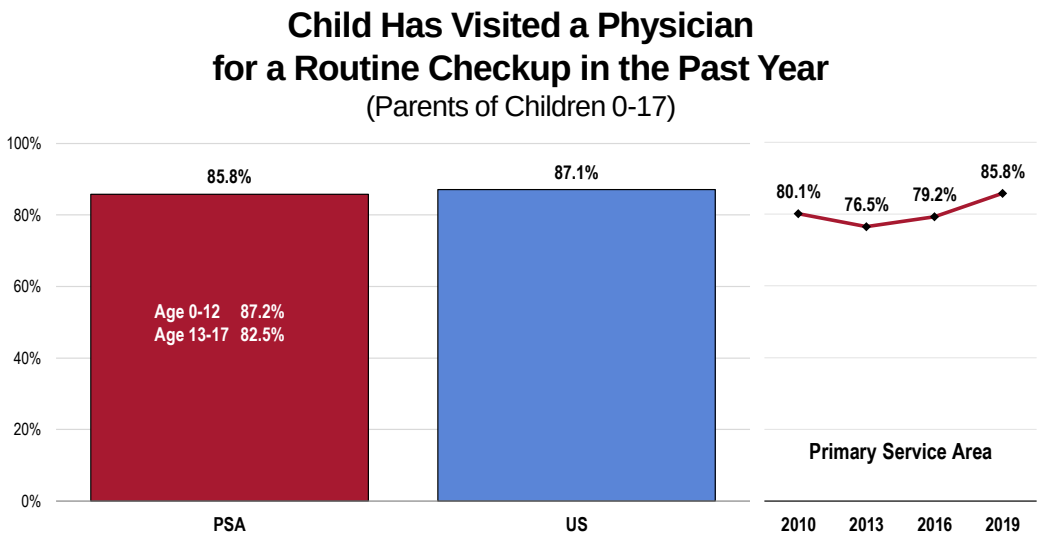
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]

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, 85.8% report that their child has had a routine checkup in the past year.

- **TREND:** This prevalence has increased since 2013 (similar to 2010).



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 120]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

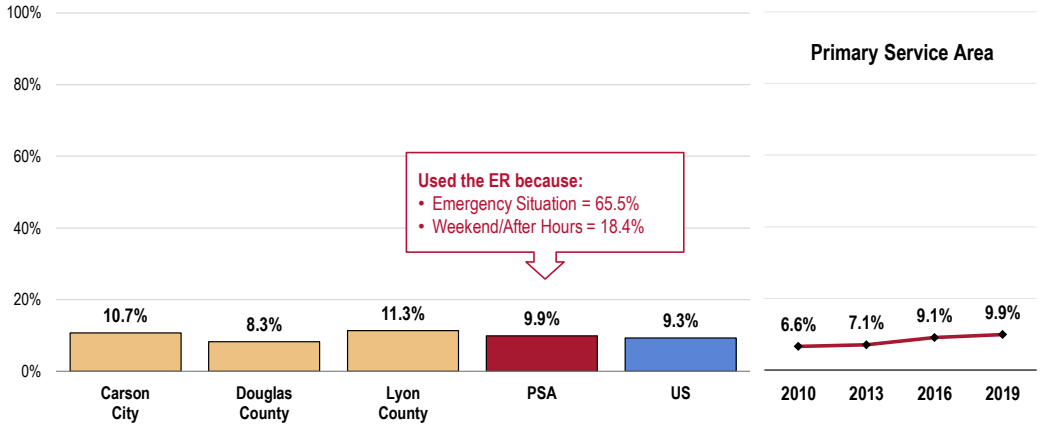
Notes:
- Asked of all respondents with children 0 to 17 in the household.

Emergency Room Utilization

A total of 9.9% of Primary Service Area adults have gone to a hospital emergency room more than once in the past year about their own health.

- **TREND:** Represents a steady increase in emergency room utilization over time.

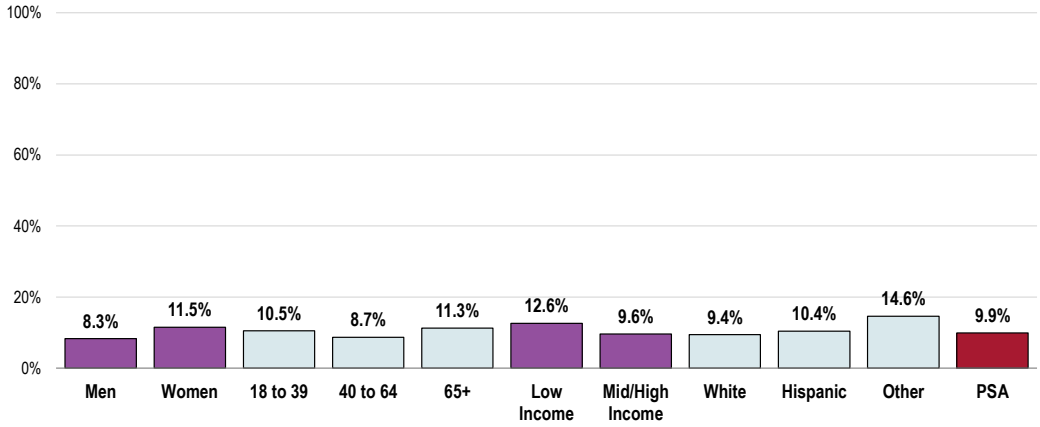
Have Used a Hospital Emergency Room More Than Once in the Past Year



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 22-23]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Have Used a Hospital Emergency Room More Than Once in the Past Year

(Primary Service Area, 2019)



Sources: ● 2019 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.

Long-Term Acute Care

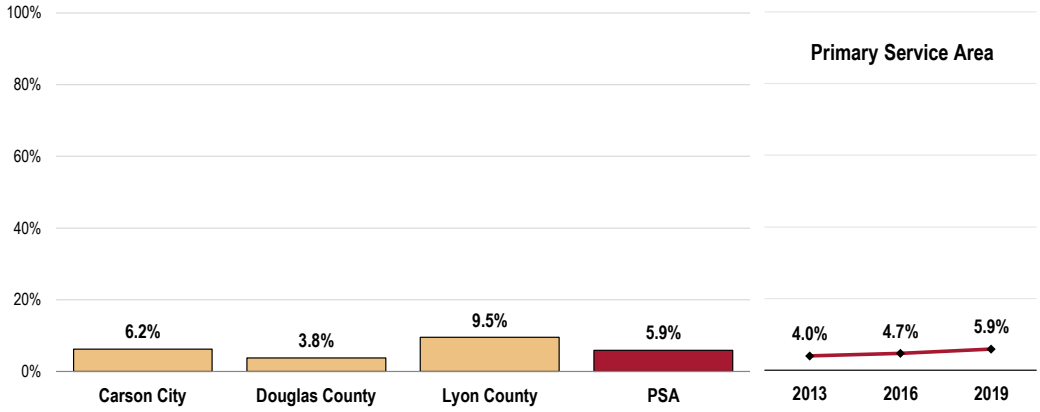
"Long-term acute care hospitals provide care for patients who do not need the level of care provided in a traditional hospital, but whose medical conditions are too complex for a skilled nursing facility or nursing home. The average length of stay for a patient in a long-term acute care hospital is a few weeks.

In the past three years, have you or has anyone in this household been cared for in a long-term acute care hospital?"

A total of 5.9% of survey respondents report that they or a member of their household received long-term acute care in the past three years.

- **DISPARITY:** Lowest in Douglas County.

Member of Household Received Long-Term Acute Care in the Past Three Years



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 314]
Notes: ● Asked of all respondents.

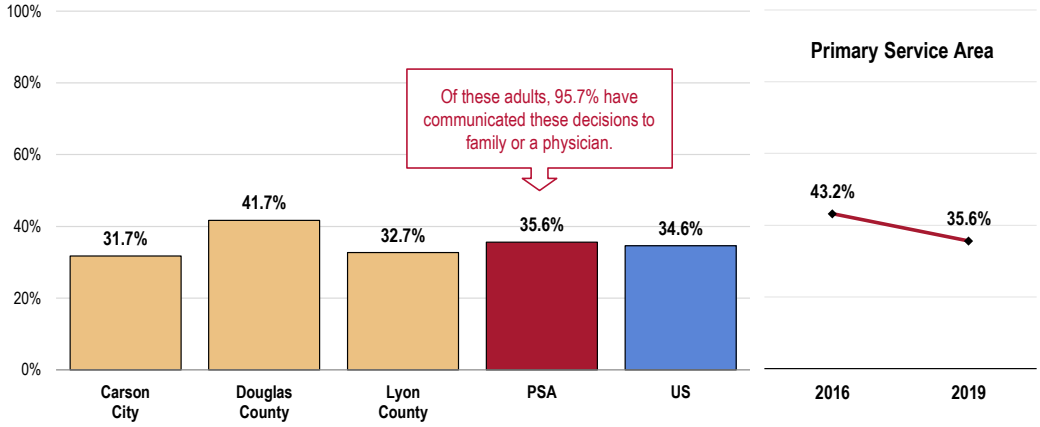
Advance Directives

An advance directive document is a set of directions given about the medical health-care a person wants if he/she ever loses the ability to make those decisions. Formal advance directives include living wills and healthcare powers of attorney.

A total of 35.6% of Primary Service Area adults have completed advance directive documents.

- **DISPARITY:** Higher in Douglas County, as well as among higher-income or White respondents. Also note the strong correlation with age.
- **TREND:** A significant decrease since first measured in 2016.

Have Completed Advance Directive Documents

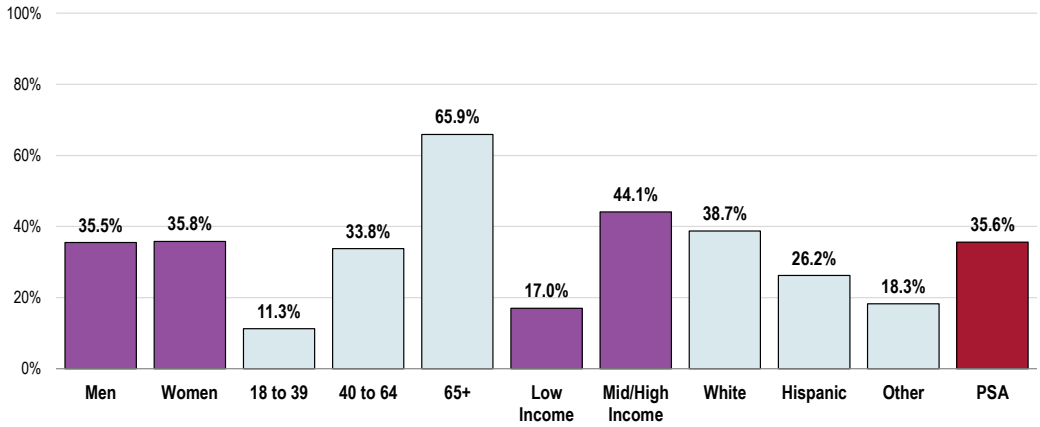


Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 309-310]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.
- An advance directive is a set of directions given about the medical healthcare a person wants if he/she ever loses the ability to make those decisions. Formal advance directives include living wills and health care powers of attorney.

Have Completed Advance Directive Documents

(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 309]

Notes:
- Asked of all respondents.
- An Advance Directive is a set of directions given about the medical healthcare a person wants if he/she ever loses the ability to make those decisions. Formal Advance Directives include Living Wills and Health Care Powers of Attorney.
- 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.

Oral Health

About Oral Health

Oral health is essential to overall health. Good oral health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions. However, oral diseases, from cavities to oral cancer, cause pain and disability for many Americans. Good self-care, such as brushing with fluoride toothpaste, daily flossing, and professional treatment, is key to good oral health. Health behaviors that can lead to poor oral health include: **tobacco use; excessive alcohol use;** and **poor dietary choices**.

The significant improvement in the oral health of Americans over the past 50 years is a public health success story. Most of the gains are a result of effective prevention and treatment efforts. One major success is community water fluoridation, which now benefits about 7 out of 10 Americans who get water through public water systems. However, some Americans do not have access to preventive programs. People who have the least access to preventive services and dental treatment have greater rates of oral diseases. A person's ability to access oral healthcare is associated with factors such as education level, income, race, and ethnicity.

Barriers that can limit a person's use of preventive interventions and treatments include: limited access to and availability of dental services; lack of awareness of the need for care; cost; and fear of dental procedures.

There are also social determinants that affect oral health. In general, people with lower levels of education and income, and people from specific racial/ethnic groups, have higher rates of disease. People with disabilities and other health conditions, like diabetes, are more likely to have poor oral health.

Potential strategies to address these issues include:

- Implementing and evaluating activities that have an impact on health behavior.
- Promoting interventions to reduce tooth decay, such as dental sealants and fluoride use.
- Evaluating and improving methods of monitoring oral diseases and conditions.
- Increasing the capacity of State dental health programs to provide preventive oral health services.
- Increasing the number of community health centers with an oral health component.

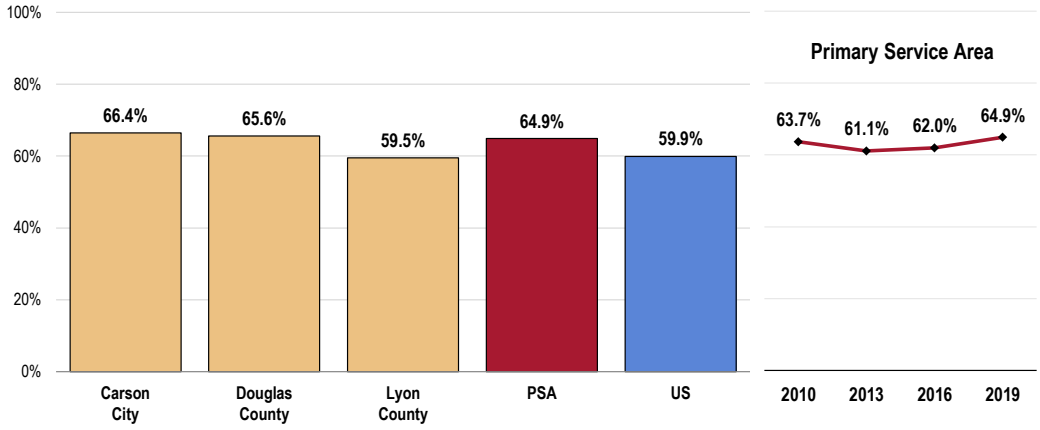
— Healthy People 2020 (www.healthypeople.gov)

Dental Insurance

Almost two-thirds (64.9%) of Primary Service Area adults have dental insurance that covers all or part of their dental care costs.

- **BENCHMARK:** More favorable than the national proportion.

Have Insurance Coverage That Pays All or Part of Dental Care Costs



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 21]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Dental Care

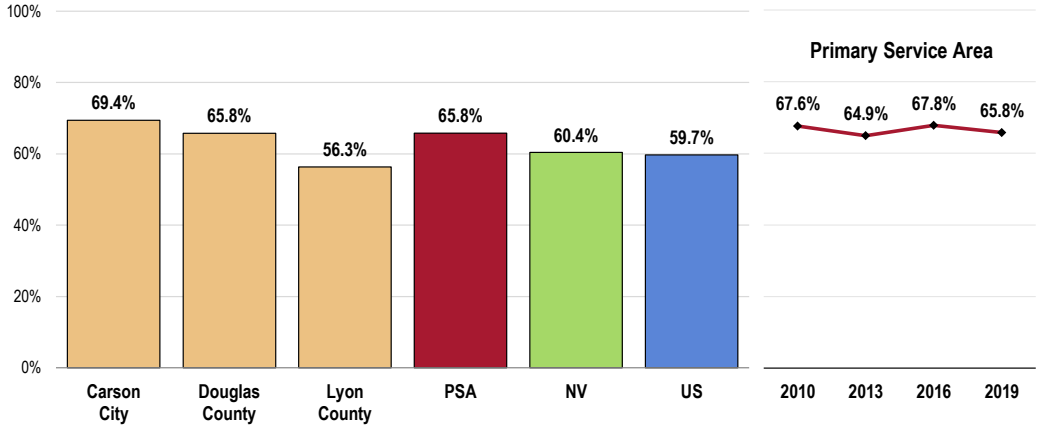
Adults

A total of 65.8% of Primary Service Area adults have visited a dentist or dental clinic (for any reason) in the past year.

- **BENCHMARK:** More favorable than found statewide or nationally. Easily satisfies the related Healthy People 2020 objective of 49.0% or higher.
- **DISPARITY:** Recent dental care is least common in Lyon County, as well as among low-income residents, "Other" race respondents, and those without dental insurance.

Have Visited a Dentist or Dental Clinic Within the Past Year

Healthy People 2020 = 49.0% or Higher



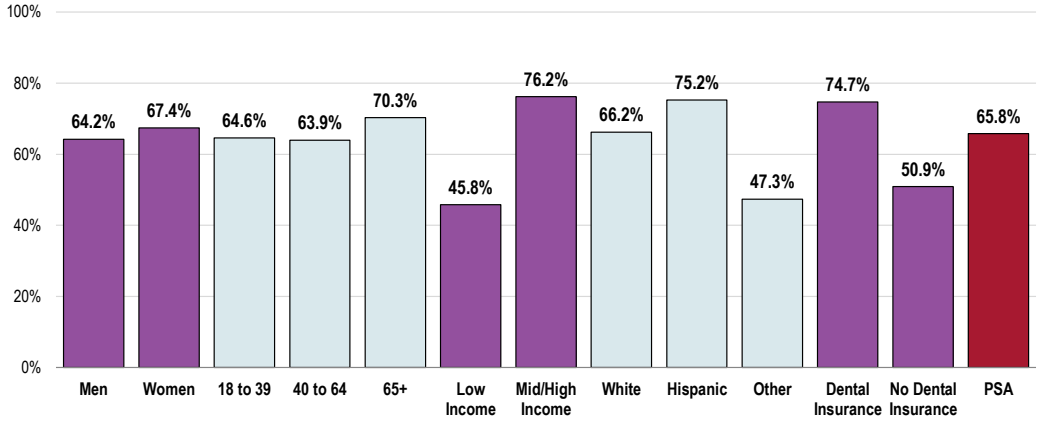
Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Nevada data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

Notes:
- Asked of all respondents.

Have Visited a Dentist or Dental Clinic Within the Past Year

(Primary Service Area, 2019)

Healthy People 2020 = 49.0% or Higher



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

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

Children

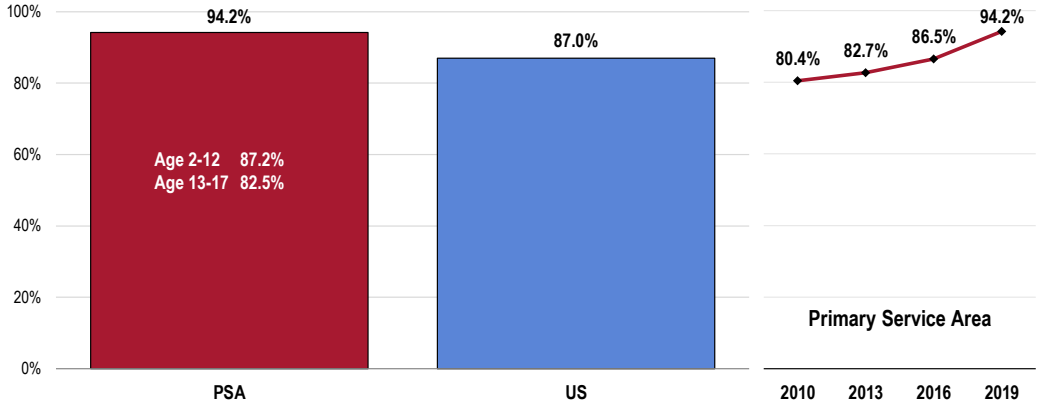
A total of 94.2% of parents report that their child (age 2 to 17) has been to a dentist or dental clinic within the past year.

- **BENCHMARK:** More favorable than the national prevalence; easily satisfies the Healthy People 2020 objective (49.0% or higher).
- **TREND:** Marks a significant increase over time.

Child Has Visited a Dentist or Dental Clinic Within the Past Year

(Parents of Children Age 2-17)

Healthy People 2020 = 49.0% or Higher

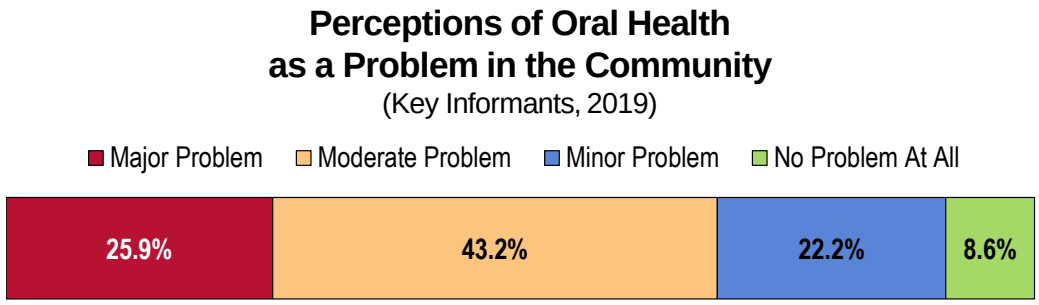


Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 123]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

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

Key Informant Input: Oral Health

Key informants taking part in an online survey most often characterized *Oral Health* as a "moderate problem" in the community.



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

Top Concerns

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

Insurance Issues

Dental care is almost non-existent for Medicaid clients. Only emergency extractions can be performed with Medicaid insurance. — Other Health Provider

Medicare/Medicaid doesn't cover dental for adults. There is only one dental clinic in town. — Social Services Provider

Many clients have no dental insurance or ability to address oral care. — Social Services Provider

Very few dentists that accept Medicaid patients or low-income patients. — Physician

Access to Care/Services

Lack of providers, lack of transportation, lack of oral health education and services. — Community/Business Leader

This is a problem everywhere. Limited access, very expensive, insurance covers little even if the patient has it. — Physician

Cost. — Community/Business Leader

Awareness/Education

Lack of education, smoking, drugs and alcohol. Lack of access to care for Medicaid and uninsured. — Physician

Lots of poor dental health, either not educated to take care of teeth or no money. — Physician

Substance Abuse

Substance abuse is a big cause of the poor oral hygiene in our area. — Community/Business Leader

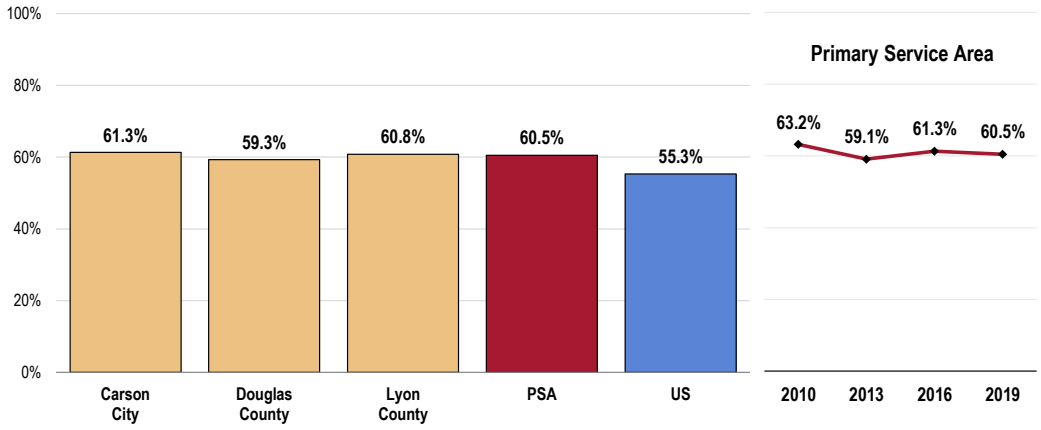
Crack mouth, lack of oral care for school-aged kids, transient and homeless dental care. — Community/Business Leader

Vision Care

Six in 10 Primary Service Area residents (60.5%) had an eye exam in the past two years during which their pupils were dilated.

- **BENCHMARK:** More favorable than the national prevalence.
- **DISPARITY:** Note the strong correlation with age.

Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated

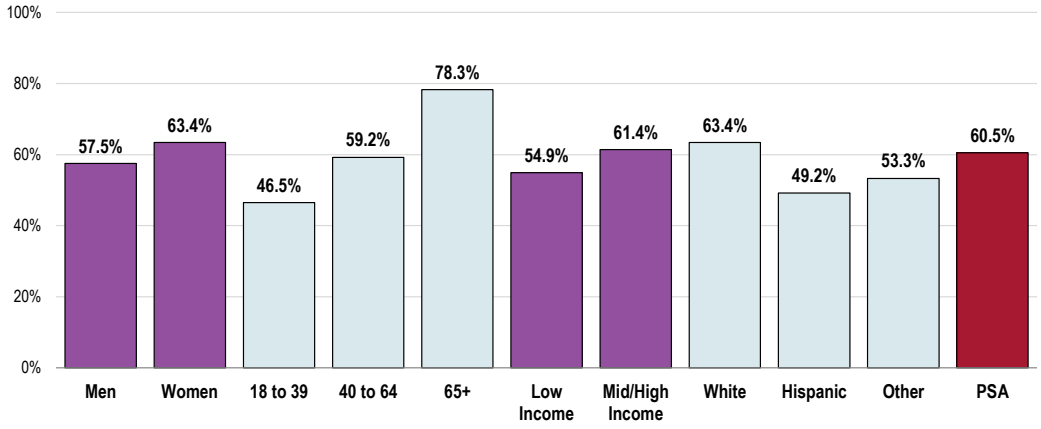


Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 19]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
- Asked of all respondents.

Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated

(Primary Service Area, 2019)



Sources:
- 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 19]

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

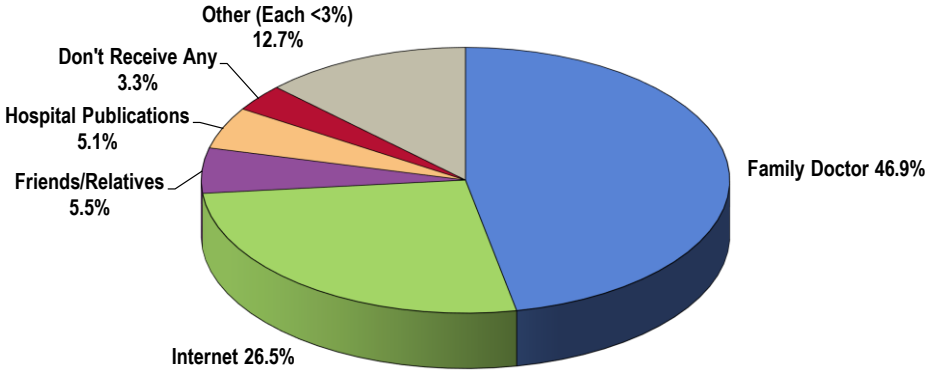
Professional Research Consultants, Inc.

Healthcare Information Sources

Healthcare Information Sources

Family physicians and the internet are residents' primary sources of healthcare information.

Primary Source of Healthcare Information
(Primary Service Area, 2019)



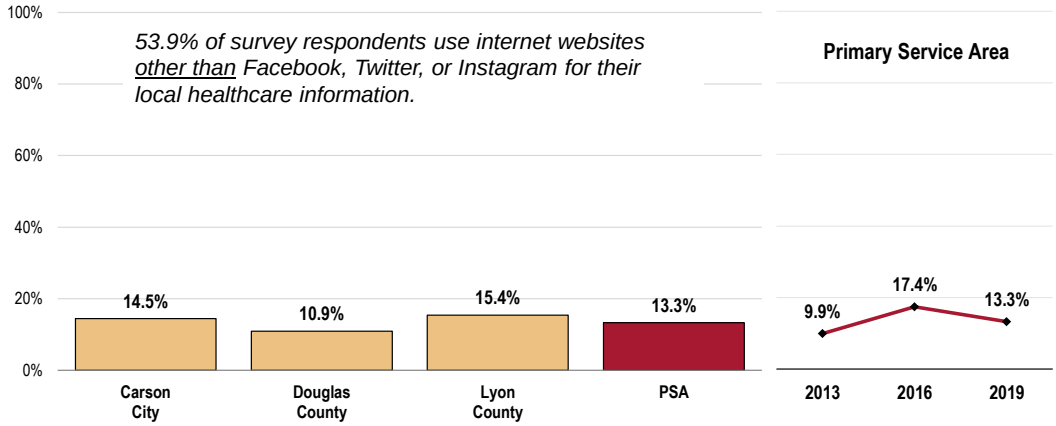
Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 311]
Notes: ● Asked of all respondents.

Use of Social Media

A total of 13.3% of respondents report using social media (such as Facebook, Twitter, and/or Instagram) for their <u>local</u> healthcare information.

- **TREND:** Significantly higher than first measured in 2013, but no clear trend over time.

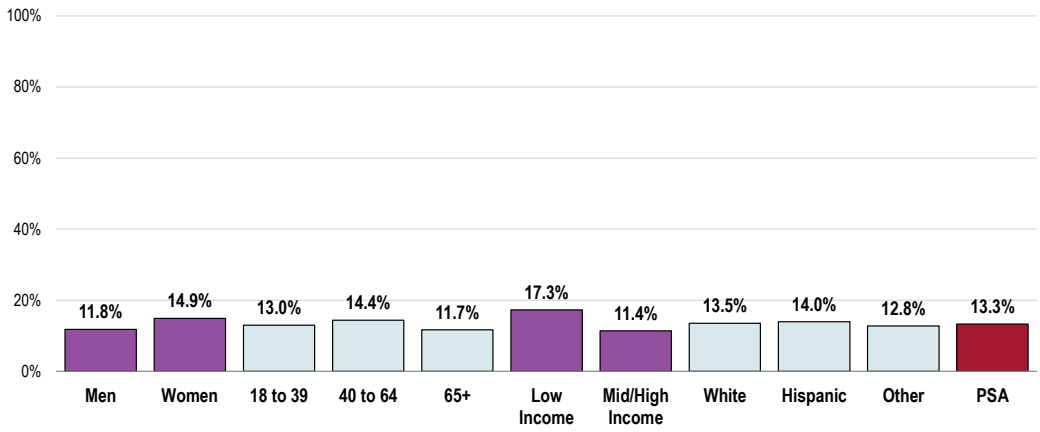
Use Social Media Websites (Facebook, Twitter, Instagram) to Obtain Local Healthcare Information



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 312-313]
Notes: ● Asked of all respondents.

Use Social Media Websites (Facebook, Twitter, Etc.) to Obtain Local Healthcare Information

(Primary Service Area, 2019)



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 312]

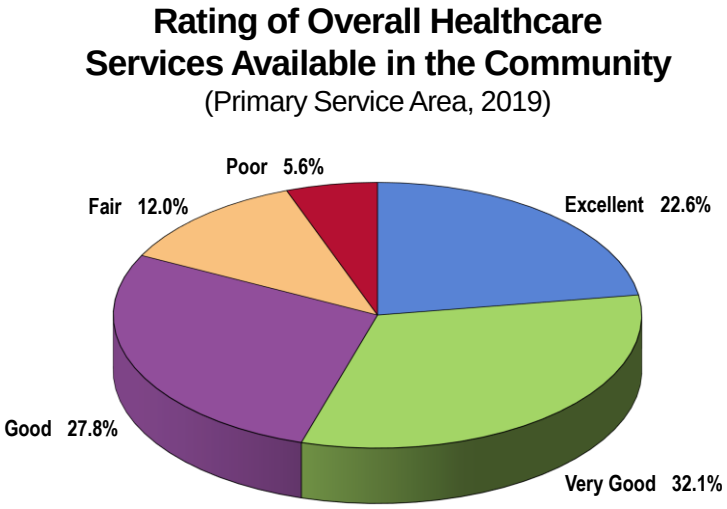
Notes:
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household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

Professional Research Consultants, Inc.

Perceptions of Local Healthcare Services

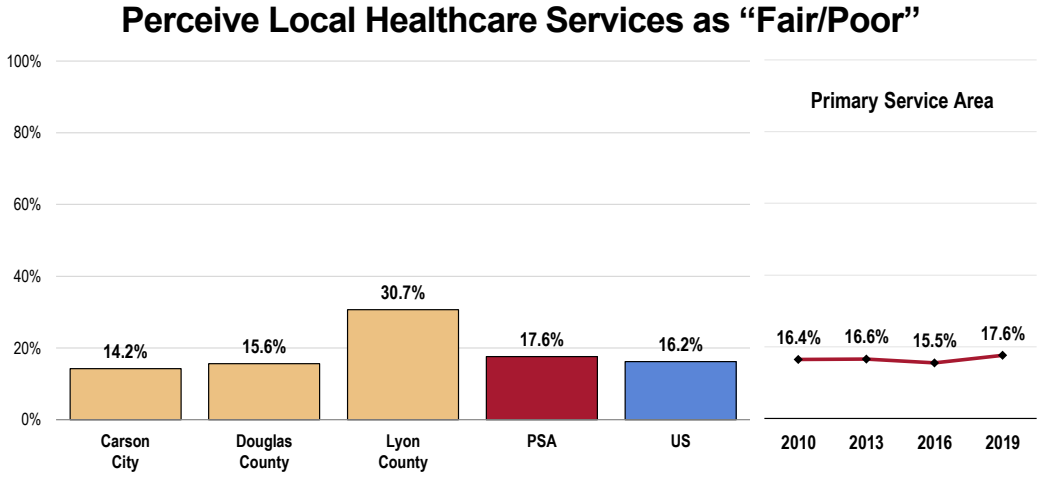
More than half of Primary Service Area adults rate the overall healthcare services available in their community as "excellent" or "very good."



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]
Notes: ● Asked of all respondents.

However, 17.6% of residents characterize local healthcare services as "fair" or "poor."

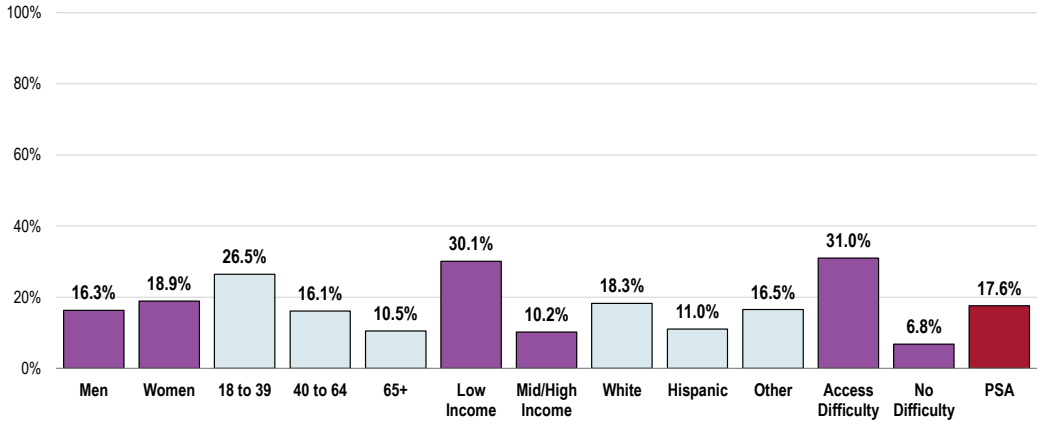
- **DISPARITY:** Unfavorably high in Lyon County, as well as among those reporting access difficulties, low-income residents, and young adults (strong negative correlation with age).



Sources: ● 2019 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]
● 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Perceive Local Healthcare Services as "Fair/Poor"

(Primary Service Area, 2019)



Sources:
- 2019 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).
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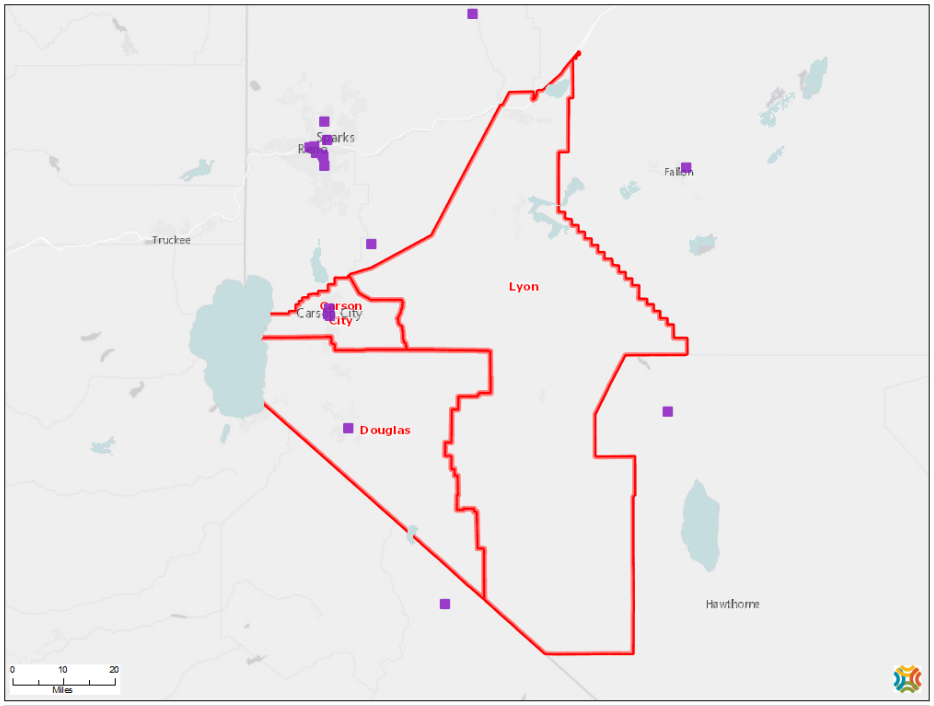
Healthcare Resources & Facilities

Federally Qualified Health Centers (FQHCs)

The following map details Federally Qualified Health Centers (FQHCs) within the Primary Service Area as of March 2018.



Map Legend

Federally Qualified Health Centers, POS
March 2018

Community Commons, 12/14/2018

Resources Available to Address the Significant Health Needs

The following represent potential measures and resources (such as programs, organizations, and facilities in the community) identified by key informants as available to address the significant health needs identified in this report. This list only reflects input from participants in the Online Key Informant Survey and should not be considered to be exhaustive nor an all-inclusive list of available resources.

Access to Healthcare Services

Access to Healthcare Network
Adult Day Club Respite Program
Amber Creek Counseling Services
Banner Churchill
Carson City Health and Human Services
Carson City Pediatric Dentistry
Carson Medical Group
Carson Tahoe Health
Carson Tahoe Hospital
Carson Tahoe Medical Group
Carson Tahoe Physicians Clinic
Carson Tahoe Radiology
Carson Tahoe Regional Medical Center
Carson Valley Medical Center
Community Chest
Community Health Department
Community Health Nurses
Community Nursing Programs
Doctor's Offices
Early Intervention Services for Infants and Toddlers
Fernley Mental Health
FISH Clinic
HAWC Community Health
Health Department
High Sierra Area Health Education Center
Hopes Clinic
Hospitals
Human Services Network
Kindred Home Care
Local Non-Profits and Referrals
Lyon County Human Services
Mallory Behavioral Health Crisis Center
Meals on Wheels
Medicaid Providers
Mobile Outreach Safety Team
Nevada Check-Up WIC Services
Nevada Health Center
Nevada Primary Care Association
Nevada Rural Health Clinics
Nevada Urban Indians
Northern Nevada Hopes
Renown Medical Group
Renown Urgent Care
Rural Nevada Counseling
Saint Mary's Rainbows and Tears Bereavement Group
Salvation Army Clinic
Sierra Family Health Center
Silver Springs Mental Health
State of Nevada
Storey County Senior Center
United Way of Northern Nevada
University of Nevada
University of Utah
UNR Rural Outreach Clinic
Urgent Care
Veterans Administration
Vitality

Arthritis, Osteoporosis & Chronic Back Conditions

Carson City Health and Human Services
Carson Tahoe Hospital
Doctor's Offices
Nevada Health Centers
Physical Therapy
Reno Orthopedic Center
Sierra Family Health Center
Tahoe Fracture and Orthopedic Medical Clinic

Cancer

Alpine Cancer Center
American Cancer Society
Banner Churchill Community Hospital
Cancer Resource Center
Cancer Support Groups
Carson City Health and Human Services

- *Carson Surgical Group*
- *Carson Tahoe Cancer Resource Center*
- *Carson Tahoe Hospital*
- *Doctor's Offices*
- *Hospice*
- *Huntsman Cancer Center*
- *Kindred Home Care*
- *Nevada Health Center*
- *Palliative Care Services*
- *Renown Health*
- *Renown Medical Group*
- *Renown Regional Medical Center*
- *St. Mary's Hospital*

Dementias, Including Alzheimer's Disease

- *Alzheimer's Association*
- *Alzheimer's Home*
- *Assisted Living With Dementia Care*
- *Cancer Therapy*
- *Carson Long-Term Care*
- *Carson Tahoe Behavioral Health*
- *Carson Tahoe Cancer Resource Center*
- *Carson Tahoe Health*
- *Carson Tahoe Health Memory Care Center*
- *Doctor's Offices*
- *FISH Clinic*
- *In-Home Care Helpers*
- *Mallory Behavioral Health Crisis Center*
- *Memory Care Units*
- *Mental Health Services*
- *Nevada Health Center*
- *Nursing Homes*
- *Prestige Carson Tahoe Care Center*
- *Private Care Facilities*
- *Sanford Center for Aging*
- *Senior Citizen's Center*
- *Sierra Place*
- *Skyline Estates Senior Living*
- *The Lodge Assisted Living and Memory Care*

Diabetes

- *Access to Healthcare Network*
- *Banner Churchill*
- *Care Chest*
- *Carson City Health and Human Services*
- *Carson Family Practice*
- *Carson Medical Group*
- *Carson Tahoe Diabetes Education*
- *Carson Tahoe Emergency Services*
- *Carson Tahoe Health*
- *Carson Tahoe Health and Wellness Institute*
- *Carson Tahoe Hospital*
- *Carson Tahoe Physicians Clinic*
- *Community Centers*
- *County Health Nurse*
- *Doctor's Offices*
- *Federally Qualified Health Centers*
- *FISH Clinic*
- *Fitness Centers/Gyms*
- *Health and Human Services*
- *Health Department*
- *Nevada Diabetes Association*
- *Nevada Health Center*
- *Nutrition Services*
- *Online Support Groups*
- *Renown Health*
- *Ross Clinic*
- *Sierra Nevada Health*
- *United Latino Services*
- *University of Nevada*
- *UNR Rural Outreach Clinic*

Family Planning

- *Carson City Health and Human Services*
- *Carson Medical Group*
- *Community Health Nurses*

Heart Disease & Stroke

- *American Heart Association*
- *Carson Tahoe Cardiology*
- *Carson Tahoe Health*
- *Carson Tahoe Health and Wellness Institute*
- *Carson Tahoe Hospital*
- *Carson Tahoe Regional Medical Center*
- *Doctor's Offices*
- *Douglas Community Center*
- *Health and Human Services*
- *Nevada Health Center*
- *Nutrition Services*
- *Occupational Therapy*
- *Public Library*
- *Renown Health*
- *Renown Health Institute for Heart and Vascular Health*
- *Renown Regional Medical Center*

Senior Citizen Groups
St. Mary's Hospital
University of Utah

Immunization & Infectious Diseases

Carson City Health and Human Services
Carson Medical Group
Doctor's Offices
Immunize Nevada
Nevada Health Center
School System

Infant & Child Health

Banner Churchill Community Hospital
Carson Tahoe Medical Group
Life Choices Community Pregnancy Clinic
Planned Parenthood

Injury & Violence

Advocates to End Domestic Violence
Child Protective Services
Community Counseling Center
Elder Protective Services
Law Enforcement
Mallory Behavioral Health Crisis Center
Renown Health
Sheriff's Department

Kidney Disease

DaVita
Dialysis Center
Doctor's Offices
Liberty Dialysis

Mental Health

24-Hour Carson Tahoe Nurse Health Line
AA/NA
Amber Creek Counseling Services
Behavioral Health Services
Carson City Mental Health Program
Carson City Police
Carson Counseling Supportive Services
Carson Medical Group
Carson School District
Carson Tahoe Behavioral Health
Carson Tahoe Health
Carson Valley Adult Day Club
Carson Valley Medical Center
CC Community Counseling
Churches
City Public Health Services
Community Chest
Community Counseling Center
Doctor's Offices
DPBH Rural Clinics
Federally Qualified Health Centers
Fitness Centers/Gyms
Lyon County Human Services
Mallory Behavioral Health Crisis Center
Mental Health Services
Mobile Outreach Safety Team
Mountain View Health and Rehabilitation
NAMI
Nevada Mental Health
Non-Profit Suicide Prevention Network of Douglas County
Pacific Behavioral Health
Ron Wood Family Resource Center
Rural Community Health Services
Rural Nevada Counseling
School System
Serenity Mental Health
Silver Springs Mental Health
State Funded Programs
State Mental Health Department
State of Nevada Rural Clinics
Suicide Hotlines
Tahoe Youth and Family Services
University of Nevada
Veterans Administration
Vitality

Nutrition, Physical Activity & Weight

Aquatic Center
Carson Tahoe Health
Carson Tahoe Health and Wellness Institute
Carson Tahoe Hospital
Community and Senior Center
Community Food Closet
Doctor's Offices
Douglas Community Center
Educational Programs
Farmer's Markets
Fitness Centers/Gyms
Healthy Communities Coalition
Nevada Appeal
Nevada Health Center
Nutrition Services
Parks and Recreation

School System
Senior Center

Oral Health

Absolute Dental
Community Health Nurses
Dentist's Offices
Doctor's Offices
Fallon Family Dental
Federally Qualified Health Centers
FISH Clinic
Healthy Smiles Yerington
Medicaid Providers
Nevada Health Center
Northern Nevada Dental Program

Respiratory Diseases

American Cancer Society
American Lung Association
Carson Tahoe Health
Carson Tahoe Physicians Clinic
Carson Valley Medical Center
Doctor's Offices
Health Department
Mountain Medical
Mountain Medical Pulmonary and Sleep
Nevada Health Center
Northern Nevada Hopes

Sexually Transmitted Diseases

Carson Community Health Clinic
China Spring Youth Camp
Community Health Center
Doctor's Offices
Douglas County Community Health
Health Department

Substance Abuse

AA/NA
Behavioral Health Services
Capital City Counseling
Carson Community Counseling Center
Carson Counseling Supportive Services
Carson School District
Carson Tahoe Behavioral Health
Carson Tahoe Freedom From Smoking
Carson Tahoe Health
Carson Tahoe Hospital
City/County Health and Human Services Departments
Community Chest
Community Counseling Center
Community Rehab Facilities
Counseling Substance Abuse Prevention
Doctor's Offices
Drug Court
FISH Clinic
Hospitals
Jail/Prison
John Glenn and Associates
JOINN Nevada
Lyon County Human Services
Mallory Behavioral Health Crisis Center
Mental Health Services
Partnership Carson City
Rehabilitation Services
Reno Behavioral Health
Ron Wood Family Resource Center
Rural Nevada Counseling
Sheriff's Department
State Funded Programs
Substance Abuse Services
Support Groups
Vitality
Westhill High School

Tobacco Use

1-800-Quit-Now
AA/NA
American Cancer Society
American Heart Association
Carson City Health and Human Services
Carson Medical Group
Carson Tahoe Behavioral Health
Carson Tahoe Freedom From Smoking
Carson Tahoe Health
Community Health Center
Community Health Nurses
Doctor's Offices
Health and Human Services
Health Department
Nevada Health Center
Nevada Urban Indians
Quitline
School System
Support Groups

Vision & Hearing

Access to Healthcare Network
Costco Hearing Aid Center

Doctor's Offices
Lions Club
My Hearing Centers
Sanford Center for Aging
School System
Sertoma Club

Appendix

Professional Research Consultants, Inc.

Evaluation of Past Activities

Strategic Initiatives & Plan for Carson Tahoe Health's
2016 Community Health Needs Assessment (2016 thru 2018)

Areas of Focus – Evaluation of Past Work

Access to Healthcare Services			
Strategy	**Action**	**Measurement/Additional Information**	**Partner**
Continue Primary Care Physician Recruitment	• Acquire physician practice in Incline Village • Add providers in Incline Village • Expand physician office space in Carson City • Add primary care providers to the community • Explore opportunities to bring access to kids in the community	# of providers added – 34 APNs & 8 MD/DOs Wait time for first appointments – improved from 18/20 weeks to 14 weeks # of clinic visits – increased from just under 36,000 to over 69,000 (90% increase) Physician practice purchased in Incline Village and Carson City. Expanded clinic to S. Reno. Access for kids increased through offering pediatrician recruitment incentives.	Carson Medical Group Nevada Health Center
Expand Telehealth Options	• Establish specialty telehealth network • Maintain telestroke program	# of telehealth visits/consults – increased from 61 to 155 (154% increase) Agreement renewed with the University of Utah for telestroke program with discussions taking place to expand to tele-ICU and tele-burn.	Specialty Providers University of Utah

Continue Post-CTRH appointments at NV Health Center & CTMG	• Maintain community partnerships for post-CTRH primary care appointments	# of appointments utilized – we no longer track post discharge appointments at NV Health Center as the tracking was not valid and they no longer hold discharge appointments for CTH since many appointment hours are lost due to no shows and there are limited quick follow-up appointments. They do their best to help accommodate CTH requests. We are also sending patients (all payers) to Primary Care Nevada for post discharge appointments that are needed faster.	NV Health Center
Continue REMSA Triage Call Service Center	• Maintain nurse hotline service	# of calls – average around 5,000 a year (2016-2018) $ spent - $144,000 annually Patient satisfaction rate – 4.3/5.0	REMSA
Continue contracts for placement and services for under or non-insured patients	• Maintain contracts with local providers	# of patients – the actual number was unable to be tracked with current systems $ spent – arrangements have changed over the last few years so that we average now just under $200,000 a year for placement services. A new skilled nursing facility through Prestige has opened in the community. We are also working with the others SNF providers in the community regarding sharing education and resources so they are able to offer a higher clinical level of care.	• NV Health Center • Walgreens • Mountain View • Eden Home Health • Lincare • Prestige

Continue Services at Wal-Mart Retail Clinics	• Maintain presence in local Wal-Marts • Pilot DOT assessments to Gardnerville Wal-Mart • Expand hours of service at Gardnerville and Market Street Wal-Marts	Baseline: 2015 – 6,778 Visits # of visits – dropped in 2014 to 4,768 and in 2018 increased to 7,126 (50% increase) DOT physical pilot successful in Gardnerville and extended to all three Wal Mart locations. Hours of service also match at all three locations.	Wal-Mart
Explore mobile clinic service	• Evaluate the need for mobile clinic services in the community	# of visits – need identified for mobile suicide risk assessments with the Carson City School District. In the first year (2018), 61 assessments were completed.	• Boys & Girls Club • Carson City Health & Human Services
Cancer			
Strategy	**Action**	**Measurement**	**Partner**
Continue University of Utah Health Care (UUHC)/Huntsman Cancer Institute Affiliation	• Recruit a full time oncologist • Explore physician services arrangements with other oncology group • Expand clinical trial offerings • Develop Bone Marrow Transplant clinic	# of referrals to UUHC – average 11 a year (2016-2018) # of second opinions – average 11 a year (2016-2018) # of clinical trial enrollments – increased from 52 a year to 234 in 2018 (350% increase) # of providers added – added 2 new physicians to the oncology clinic both of whom are hematology oncology fellowship trained. With the addition of two more oncologists a physician services arrangement with another oncology group was not needed. A Bone Marrow Transplant clinic was opened with the University of Utah in May 2017 and was closed shortly after that due to lack of need and referrals.	University of Utah Health Care & Huntsman Cancer Institute

Continue HopeFest Event	• Maintain fundraising focus for local cancer patients	# of patients supported – number of patients supported increased from 170 to 476 in 2018 (180% increase) Annual funding is approximately $114,000	Local businesses and community
Promote Lung Cancer Screening program	• Identify new physician champion • Develop marketing campaign	Baseline: 2015 – 36 patients # of screenings – the program was put on hold due to loss of physician champion when the pulmonologist who supported this program left the community	• Tahoe Carson Radiology • Mountain Medical Pulmonary
Evaluate skin cancer screening program	• Identify providers to participate • Develop marketing campaign	# of screenings – screenings increased from 23 to 44 in 2018 (91% increase) Marketing materials were developed to increase awareness and public education about sun safety, sunscreen use, and importance of skin cancer screening.	

Promote Carson Tahoe Breast Center	• Install 3-D breast tomosynthesis • Add a breast health nurse navigator • Add 2nd fellowship trained breast mammographer • Provide discounted mammos in October as part of breast health awareness • Mammo screening education campaign	# of screening mammograms – screening mammos increased annually from 10,966 to 12,670 in 2018 (15% increase) 3-D breast imaging offered at the comprehensive breast center in Carson City and at the imaging center in Minden. The breast health nurse navigator was added when the breast center opened in 2016. Nurse navigator visits increased from 400 to 546 in 2018 (37% increase) A 2nd fellowship trained breast mammographer was added for a short time in 2017. Scheduling changes were made so the one fellowship trained breast mammographer is now staffing the breast center. Discounted mammos offered in October every year as part of breast health awareness. Extensive marketing took place with the opening of the breast center along with the addition of the 3-D mammo technology. Carson Tahoe Health is also a leading clinical trial site for the international TMIST (Tomographic Mammographic Imaging Screening Trials) study which covers the cost for 3-D mammos for eligible patients.	Tahoe Carson Radiology

Continue Tobacco cessation classes	• Maintain current classes • Make referrals to 1-800-QUIT-NOW • Begin smoking cessation conversations in physician offices, emergency department, and with inpatients	Baseline: 2015 – 104 interested with 34 finishing a 7-week session # of attendees – average 26 attendees a year (2016-2018) # of referrals – average 52 referrals a year (2016-2018)	• State of Nevada • Physician Offices • Hospitalists • ED providers
Diabetes			
Strategy	**Action**	**Measurement**	**Partner**
Continue Public Education Classes	• Continue the following: Diabetes Support Group Evening Class for Diabetes Education Diabetes Awareness Month Educational Series Carson Tahoe Medical Group Monthly Diabetes Wellness Sessions CDC National Diabetes Prevention Program - Promote program to primary care physicians - Education offerings to primary care providers on early identification of pre-diabetics	Baseline: 2015 (Sept – Dec) – 14 attendees Attendees increased from 78 to 133 in 2018 (70% increase) Baseline: 2015 (Sept class) – 6 patients and 3 family members Attendees average 100 per year (2016-2018) Baseline: 11/19/2015 – 20 people attended 11/12/2015 – 20 people attended 11/5/2015 – 33 people attended Attendees average 72 annually (2016-2018) Baseline: 2015 – 94 attendees Pilot program was cancelled due to low interest and duplication with other classes Baseline: 2015 – 5 staff members trained as lifestyle coaches to teach the CDC's curriculum. The first Diabetes Prevention Program launched in February 2016 with 9 participants. # of attendees averages 17 a year (2016-2018)	

Develop Diabetes Services	• Recruit Endocrinology providers • Explore creation of a comprehensive "diabetes center" • Explore expansion of endocrinology to Reno, Dayton, and Douglas • Implement population health management software • Implement direct calls to patients with A1C's > 9	# of providers added – 2 physicians and 1 nurse practitioner joined Carson Tahoe Medical Group. Once all new providers get established will look at further development of a comprehensive "diabetes center" and expansion of endocrinology clinics to other communities. # of patients – visits in the clinic increased from 439 to 4,059 in 2018 (824% increase) # of patient calls – direct calls to patients were put on hold and clinic was being re-established.	
Promote Center for Wound Healing	• Add Integrated Community Wound Care Program • Promote Wound Care Week Awareness including diabetes focused visits to local primary care offices	# of patients – average of 1,000 new patients annually (2016-2018) # of offices visited – average just under 3,000 community education visits a year (2016-2018)	• Carson Nursing and Rehab • Ormsby • Primary care providers
Mental Health			
Strategy	**Action**	**Measurement**	**Partner**
Skilled Nursing and Memory Care Facility in development	• New Facility to open in November 2017	# of beds/census – new facility will open April 2019 with 54 memory care and 80 skilled nursing beds	Prestige Care
Increase BHS inpatient beds	• Increase chemical dependency beds by 6. CTH now has 20 adult psych beds, 16 chemical dependency beds and 16 geri psych beds. The beds are licensed to "flex" depending on community need. • Recruit additional providers	# of patients – inpatient BHS discharges increased from 1,785 to 1,914 in 2018 (7% increase) # of providers added – 1 physician and 2 nurse practitioners added	

Participate in regional mental health collaborative	• Continue super utilizers meeting • Add Churchill County to the collaborative • Increase awareness of services to Incline Village	# of frequent users – Community Coalition tracks roughly 30 frequent utilizers Regional Behavioral Health Coalition includes Carson City, Douglas County, Lyon County, and the rurals. Northern Nevada Behavioral Health Coalition includes Carson City, Douglas County, and Washoe County which includes Incline Village.	• Carson City • Douglas County • Lyon County • Churchill County
Open Crisis Triage Center	• Add a 10 bed locked unit	# of patients – Mallory Crisis Triage opened in 2017 and treated 1,625 patients in 2018 that number increased to 2,502 (54% increase)	• First responders • Carson City Sheriff & Jail
Infant Health			
Strategy	**Action**	**Measurement**	**Partner**
Maintain Baby Friendly Certification	• Prepare for re-survey that occurs in Spring 2018 • Add Lactation phone line • Increase Lactation consultants who are certified	Pass Survey – re-certification occurred May 2018 # of calls – Lactation phone line added in 2018 with 550 calls. # of Consultants – now have 7 certified lactation consultants. # of classes – on average 110 breastfeeding classes are held each year.	OB/GYNs
Support MOMS prenatal clinic	• Explore expansion of hours • Provide food drives and baby clothing swap opportunities	Baseline: 2015 – 1,883 Nurse Visits; 1,962 Doctor Visits; and 401 New Patients # of visits – In 2018, 1,375 Nurse Visits; 1,881 Doctor Visits; and 344 New Patients Due to changes in leadership, no food drives or baby clothing swap opportunities were developed.	OB/GYNs

Offer Health Institute educational programs	• Continue the following: Pelvic Floor Strengthening Class Continue Breastfeeding Support • Add the following: Childbirth Classes Newborn Education	Baseline: 2015 – 96 participants On average 65 participants a year (2016-2018) Baseline: 2015 – 1425 participants On average 1100 participants a year (2016-2018) # of participants # of participants Due to staffing changes, these statistics did not get tracked.	
Expansion of Delivery Service Area	• Explore expansion of infant health services to Dayton	Baseline: PSA, Market Share OB Other 78.3% in 2015; Normal Newborns 77.1% in 2015; and OB Deliveries 74.1% in 2015 Market share percentage – OB deliveries market share has averaged 73%. OB/GYNs decided to pursue a new clinic in South Reno versus in Dayton.	Carson Medical Group
Nutrition, Physical Activity, & Weight			
Strategy	**Action**	**Measurement**	**Partner**
Expand Community Garden	• Install hoop houses • Develop educational programming • Donate items grown in the garden	Hoop houses were installed on campus in 2017 and named the Foothill Community Garden Amount of fresh produce – 933 lbs of fresh produce was donated in 2018 As part of the Foothill Garden, educational programming has been provided by the Urban Roots/Greenhouse Project	Urban Roots Greenhouse Project

Maintain Walking trails on RMC campus	• Continue marketing walking trails	Walking trails are promoted through CTH blogs, website, annual report, social media and newsletters # of participants – average 20 per day (2016-2018)	
Sponsor of various walk/run events	• Sponsor various events	# of sponsorships – average 30 events a year (2016-2018)	
Offer Healthy Cooking Classes	• Continue the following: Intuitive Eating Family Meal Planning • Add the following: Mediterranean Diet	Baseline: 2015 – 104 participants Cancelled due to low participation Baseline: 2015 – 62 participants Average 12 a year (2016-2018) # of participants – average 141 per year (2016-2018)	
Offer Health Institute educational programs	• Provide education to individuals and families on meal prep and food security • Explore expansion of communities served by educational programs • Add weight loss program with fitness & eating habits • Add youth activities with nutrition education • Add brown bag lunch series with local businesses • Continue the following: Yoga Bariatric Support Group	# of participants – due to staffing changes these were not developed through CTH, dietician did these on her own volunteer time outside of CTH Baseline: 2015 – 1982 participants Average 1025 participants per year (2016-2018) Baseline: 2015 – 131 participants Average 73 participants per year (2016-2018)	• Primary Care providers include pediatricians • Schools • Local businesses

Heart Disease & Stroke			
Strategy	**Action**	**Measurement**	**Partner**
Expand Low Cost Heart Smart Screenings	• Add Dayton as a screening site • Continue current screening sites in Carson City, Minden, and S. Reno	Baseline: September 2015 – 516 screened April 2015 – 439 screened # of completed screenings – average 852 per year (2016-2018)	
Continue Heart Failure Clinic	• Maintain HF Clinic services • Maintain inpatient assessment and screening for HF Clinic by cardiology RN	# of patients seen within 5 days of inpatient discharge – Increased from 125 in 2017 to 208 in 2018	
Continue Cardiac Rehab program	• Maintain cardiac rehab clinic and expand hours according to volume • Maintain scholarships for low income patients	# of patients seen – average 218 a year (2016-2018)	

Offer Health Institute educational programs	• Continue the following:
	  • Cardiac Connection
	  • Heart Month Lecture Series
	
	• Evaluate need for community CPR and/ or AED classes
		Baseline: 2015 – 26 participants
		Average 30 per year (2016-2018)
		
		Baseline: 2015 – 235 participants
		Average 123 per year (2016-2018)
		
		Already offered in the community so no need for CTH to provide	

Continue development of neurology service line	• Maintain telestroke capabilities • Add neurology providers	# of telestroke consults - increased from 61 in 2016 to 155 in 2018 (154% increase) # of providers added – Dr. Pedneker recruited for Spring 2019.	University of Utah