



# STAFF REPORT

**Report To:** Board of Health

**Meeting Date:** July 21, 2016

**Staff Contact:** Nicki Aaker; (naaker@carson.org)

**Agenda Title:** Presentation Only: Presentation and discussion by Bruce Lockwood, Professional Research Consultants, Inc. of Carson Tahoe Health's 2016 Community Health Needs Assessment.

**Staff Summary:** Key findings and areas for opportunities from Carson Tahoe Health's 2016 Community Health Needs Assessment (CHNA) will be presented. The 2016 PRC Community Health Needs Assessment, a follow-up to a similar study conducted in 2010 and 2013, is a systematic, data-driven, approach to determining the health status, behaviors and needs of residents in the service area of the Carson Tahoe Health. PRC is a nationally-recognized healthcare consulting firm with extensive experience conducting CHNA in hundreds of communities across the United States since 1994.

Carson City Health and Human Services will conduct the Local Public Health System Performance Assessment in August which assesses the community public health system and community partnerships, which has a different focus than Carson Tahoe Health's CHNA. Both assessments will be used to develop CCHHS' next Community Health Improvement Plan.

**Agenda Action:** Other/Presentation

**Time Requested:** 30 minutes

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## **Proposed Motion**

Presentation and discussion only

## **Board's Strategic Goal**

Quality of Life

## **Previous Action**

N/A

## **Background/Issues & Analysis**

N/A

## **Applicable Statute, Code, Policy, Rule or Regulation**

N/A

## **Financial Information**

Is there a fiscal impact?  Yes  No

If yes, account name/number:

Is it currently budgeted?  Yes  No

Explanation of Fiscal Impact:

**Alternatives**

None

**Board Action Taken:**

Motion: \_\_\_\_\_

1) \_\_\_\_\_

2) \_\_\_\_\_

Aye/Nay

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\_\_\_\_\_  
(Vote Recorded By)

# 2016 Community Health Needs Assessment

## *Executive Summary*

### Primary Service Area

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*Prepared for:*

**Carson Tahoe Health**

*By:*

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## Project Overview

### Project Goals

This Community Health Needs Assessment, a follow-up to similar studies conducted regionally in 2010 and 2013, 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 System (CTHS), 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), Sierra Surgery Hospital, LLC (SSH), 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.

### 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.

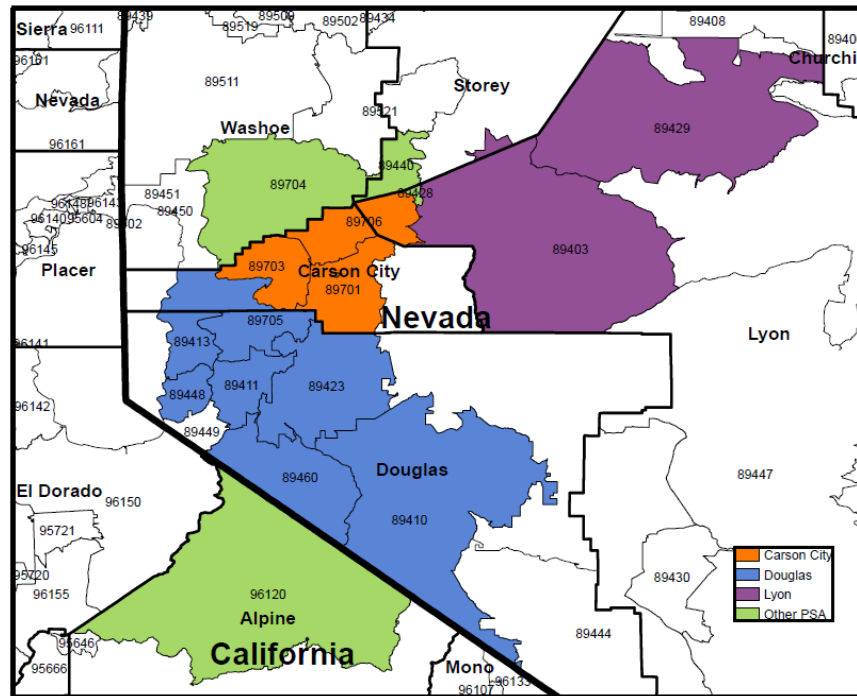
### PRC Community Health Survey

#### *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 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) includes residential ZIP Codes in Carson City and portions of Douglas County, Lyon County, and adjacent areas. This community definition, determined based on the ZIP Codes of residence of recent patients of Carson Tahoe Health, is illustrated in the following map.



### Sample Approach & Design

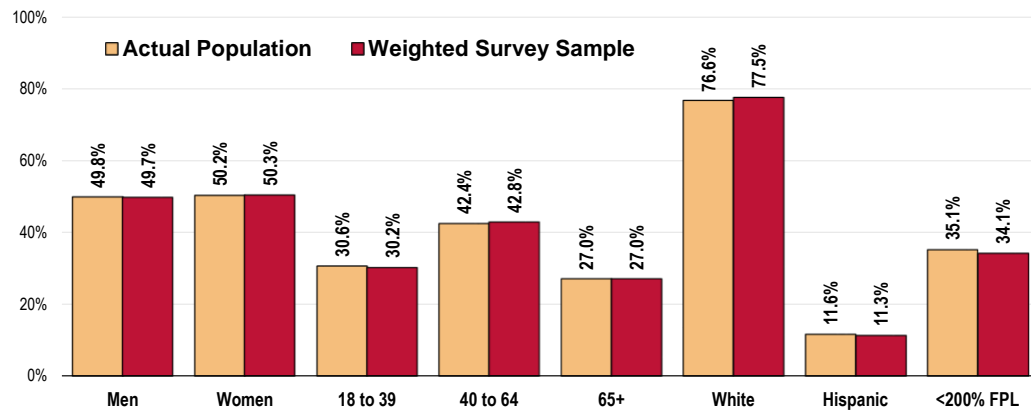
A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the *PRC Community Health Survey*. Thus, to ensure the best representation of the population surveyed, a telephone interview methodology — one that incorporates both landline and cell phone interviews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

The sample design used for this effort consisted of a random sample of 800 individuals age 18 and older in the Primary Service Area, resulting in 338 surveys in Carson City, 271 in Douglas County, 150 in Lyon County, and 41 in other areas. All administration of the surveys, data collection and data analysis was conducted by Professional Research Consultants, Inc. (PRC).

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

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, 2016)



Sources:   
 • Census 2010, Summary File 3 (SF 3). US Census Bureau.   
 • 2016 PRC Community Health Survey, Professional Research Consultants, Inc.

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 was also 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. In all, 136 community stakeholders took part in the Online Key Informant Survey, as outlined below:

### 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 (Carson City, Douglas County, Lyon County) were obtained from the following sources (specific citations are included with the graphs throughout this report):

- Center for Applied Research and Environmental Systems (CARES)
- Centers for Disease Control & Prevention, Office of Infectious Disease, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
- Centers for Disease Control & Prevention, Office of Public Health Science Services, Center for Surveillance, Epidemiology and Laboratory Services, Division of Health Informatics and Surveillance (DHIS)
- Centers for Disease Control & Prevention, Office of Public Health Science Services,

#### National Center for Health Statistics

- Community Commons
- ESRI ArcGIS Map Gallery
- National Cancer Institute, State Cancer Profiles
- OpenStreetMap (OSM)
- US Census Bureau, American Community Survey
- US Census Bureau, County Business Patterns
- US Census Bureau, Decennial Census
- US Department of Agriculture, Economic Research Service
- US Department of Health & Human Services
- US Department of Health & Human Services, Health Resources and Services Administration (HRSA)
- US Department of Justice, Federal Bureau of Investigation
- US Department of Labor, Bureau of Labor Statistics

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 and 2013 by PRC on behalf of Carson Tahoe Regional Medical Center. Trending data, as revealed by comparison to prior survey results, are provided throughout this report whenever available. Historical data for secondary data indicators are also included for the purposes of trending.

#### *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 *2015 PRC National Health Survey*; the methodological approach for the national study is identical to that employed in this assessment, and these data may be generalized to the US population with a high degree of confidence. National-level vital statistics are also provided for comparison of secondary data indicators.

#### *Healthy People 2020*

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. 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; and 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 secondary data indicators (which do not carry sampling error, but might be subject to reporting error), “significance,” for the purpose of this report, is determined by a 5% variation from the comparative measure.



## Summary of Findings

### Significant Health Needs of the Community

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

The Areas of Opportunity were determined after consideration of various criteria, including: standing in comparison with benchmark data (particularly national data); identified trends; the preponderance of significant findings within topic areas; the magnitude of the issue in terms of the number of persons affected; and the potential health impact of a given issue.

Areas of Opportunity Identified Through This Assessment	
<b>Access to Healthcare Services</b>	<ul style="list-style-type: none"> <li>• Barriers to Access                             <ul style="list-style-type: none"> <li>○ Cost of Prescriptions</li> <li>○ Cost of Physician Visits</li> <li>○ Appointment Availability</li> <li>○ Finding a Physician</li> </ul> </li> <li>• Skipping/Stretching Prescriptions</li> <li>• Primary Care Physician Ratio</li> <li>• Routine Medical Care (Children)</li> <li>• Attendance at Health Promotion Event</li> </ul>
<b>Cancer</b>	<ul style="list-style-type: none"> <li>• <i>Cancer is a leading cause of death.</i></li> <li>• Colorectal and Female Breast Cancer Deaths</li> <li>• Skin Cancer Prevalence</li> <li>• Female Breast Cancer Screening</li> <li>• Cervical Cancer Screening</li> </ul>
<b>Dementia, Including Alzheimer’s Disease</b>	<ul style="list-style-type: none"> <li>• Alzheimer’s Disease Deaths</li> </ul>
<b>Diabetes</b>	<ul style="list-style-type: none"> <li>• Prevalence of Borderline/Pre-Diabetes</li> <li>• <i>Diabetes ranked as a top concern in the Online Key Informant Survey.</i></li> </ul>
<b>Heart Disease &amp; Stroke</b>	<ul style="list-style-type: none"> <li>• <i>Cardiovascular disease is a leading cause of death.</i></li> <li>• High Blood Cholesterol Management</li> </ul>
<b>Infant Health &amp; Family Planning</b>	<ul style="list-style-type: none"> <li>• Infant Mortality</li> </ul>
<b>Injury &amp; Violence</b>	<ul style="list-style-type: none"> <li>• Unintentional Injury Deaths                             <ul style="list-style-type: none"> <li>○ Including Motor Vehicle Crash Deaths</li> </ul> </li> <li>• Firearm-Related Deaths</li> </ul>

—continued on next page—

Areas of Opportunity (continued)	
<b>Mental Health</b>	<ul style="list-style-type: none"> <li>• “Fair/Poor” Mental Health</li> <li>• Suicide Deaths</li> <li>• <i>Mental Health ranked as a top concern in the Online Key Informant Survey.</i></li> </ul>
<b>Nutrition, Physical Activity &amp; Weight</b>	<ul style="list-style-type: none"> <li>• Fruit/Vegetable Consumption</li> <li>• Low Food Access</li> <li>• Obesity [Adults]</li> <li>• Healthy Weight [Children]</li> </ul>
<b>Oral Health</b>	<ul style="list-style-type: none"> <li>• Dental Insurance Coverage</li> </ul>
<b>Potentially Disabling Conditions</b>	<ul style="list-style-type: none"> <li>• Activity Limitations</li> <li>• Sciatica/Back Pain Prevalence</li> <li>• Caregiver</li> </ul>
<b>Respiratory Diseases</b>	<ul style="list-style-type: none"> <li>• Chronic Lower Respiratory Disease (CLRD) Deaths</li> <li>• Chronic Obstructive Pulmonary Disease (COPD) Prevalence</li> <li>• Flu Vaccination [65+]</li> </ul>
<b>Substance Abuse</b>	<ul style="list-style-type: none"> <li>• Cirrhosis/Liver Disease Deaths</li> <li>• Drug-Induced Deaths</li> <li>• Personally Impacted by Substance Abuse (Self or Other’s)</li> <li>• Seeking Help for Alcohol/Drug Issues</li> <li>• <i>Substance Abuse ranked as a top concern in the Online Key Informant Survey.</i></li> </ul>

## 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 to correspond with the Focus Areas presented in Healthy People 2020.

### Reading the Summary Tables

■ In the following charts, Primary Service Area (PSA) results are shown in the larger, blue column.

■ The green columns [to the left of the Primary Service Area (PSA) column] provide comparisons among the 3 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 targets. 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.*
















#### TREND SUMMARY (Current vs. Baseline Data)







**Survey Data Indicators:** Trends for survey-derived indicators represent significant changes since 2010. 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.














Social Determinants	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Linguistically Isolated Population (Percent)	 6.7	 1.4	 1.3
Population in Poverty (Percent)	 17.1	 10.5	 14.9
Population Below 200% FPL (Percent)	 37.5	 27.7	 39.5
Children Below 200% FPL (Percent)	 51.6	 36.5	 52.2
No High School Diploma (Age 25+, Percent)	 13.2	 7.0	 15.7
Unemployment Rate (Age 16+, Percent)	 8.5	 7.9	 10.1
<small>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.</small>			














































PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
3.2	 6.5	 4.7		
14.3	 15.6	 15.6		
35.1	 36.6	 34.5		
47.7	 49.0	 44.2		
12.0	 15.2	 13.7		
8.8	 7.9	 6.2		
	 better	 similar	 worse	

























Overall Health	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% "Fair/Poor" Physical Health	 21.8	 19.8	 21.9
% Activity Limitations	 29.6	 23.7	 34.8
<small>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.</small>			

















PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
20.8	 18.5	 18.3		 15.6
28.4	 20.2	 20.0		 25.8
	 better	 similar	 worse	










Access to Health Services	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% [Age 18-64] Lack Health Insurance	 17.2	 8.9	 0.8
% [Insured 18-64] have Coverage Through ACA	 12.6	 16.3	 16.9
% Difficulty Accessing Healthcare in Past Year (Composite)	 46.6	 39.6	 48.6
% Inconvenient Hrs Prevented Dr Visit in Past Year	 12.1	 12.2	 16.3
% Cost Prevented Getting Prescription in Past Year	 16.7	 9.2	 16.3
% Cost Prevented Physician Visit in Past Year	 15.8	 14.5	 20.9









PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
11.4	 20.8	 10.1	 0.0	 18.8
14.5		 10.8		
44.3		 35.0		 40.4
13.3		 14.4		 12.1
14.2		 9.5		 16.3
16.3		 11.5		 18.3





















Access to Health Services (continued)	Each Sub-Area vs. Others			PSA	PSA vs. Benchmarks			
	Carson City	Douglas County	Lyon County		vs. NV	vs. US	vs. HP2020	TREND
% Difficulty Getting Appointment in Past Year	 25.4	 23.3	 23.7	24.3		 15.4	 14.3	
% Difficulty Finding Physician in Past Year	 13.2	 18.0	 15.7	15.8		 8.7	 10.9	
% Transportation Hindered Dr Visit in Past Year	 9.5	 3.3	 5.7	6.5		 5.0	 5.4	
% Language/Culture Prevented Care in Past Year	 0.4	 0.8	 0.8	0.6		 1.7		
% Skipped Prescription Doses to Save Costs	 16.8	 15.0	 11.0	15.4		 10.2	 18.9	
% Difficulty Getting Child's Healthcare in Past Year				6.2		 3.9	 4.7	
% Have Completed Advance Directive Documents	 41.4	 46.9	 41.0	43.2		 33.7		
% Low Health Literacy	 11.4	 16.1	 20.1	18.2		 23.3		
Primary Care Doctors per 100,000	 80.2	 63.8	 15.6	53.5	 56.3	 74.5		
% [Age 18+] Have a Specific Source of Ongoing Care	 73.4	 69.9	 73.5	71.9		 74.0	 95.0	 70.9




































Access to Health Services (continued)	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% [Age 18-64] Have a Specific Source of Ongoing Care	 71.9	 62.6	 74.1
% [Age 65+] Have a Specific Source of Ongoing Care	 79.1	 84.5	 69.8
% Have Had Routine Checkup in Past Year	 65.7	 67.0	 74.1
% Child Has Had Checkup in Past Year			
% Two or More ER Visits in Past Year	 8.2	 8.2	 13.5
% Rate Local Healthcare "Fair/Poor"	 15.5	 13.0	 22.2
% Member of HH Received Inpatient Care/2 Yrs	 37.3	 32.0	 35.4
% Member of HH Received Long-Term Acute Care/3 Yrs	 3.4	 4.1	 6.4
% Use Social Media to Find Local Healthcare Info	 18.5	 15.1	 21.1

PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
69.0		 73.1	 89.4	
78.9		 76.8	 100.0	
68.4	 63.8	 70.5		 57.1
79.2		 89.3		 80.1
9.1		 8.5		 6.6
15.5		 14.2		 16.4
34.3				 32.9
4.7				 3.8
17.4				 9.9







Arthritis, Osteoporosis & Chronic Back Conditions	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% [50+] Arthritis/Rheumatism	 34.6	 32.9	 43.3
% Sciatica/Chronic Back Pain	 24.1	 25.7	 37.3
% Caregiver to a Friend/Family Member	 22.8	 28.9	 30.7
<small>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.</small>			










PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
35.5		 32.0	 37.4	
27.3		 19.4	 22.7	
27.1		 20.9		
	 better	 similar	 worse	






Cancer	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Cancer (Age-Adjusted Death Rate)	 183.0	 131.3	 182.0
Lung Cancer (Age-Adjusted Death Rate)			
Prostate Cancer (Age-Adjusted Death Rate)			
Female Breast Cancer (Age-Adjusted Death Rate)			
Colorectal Cancer (Age-Adjusted Death Rate)			
% Skin Cancer	 11.4	 14.5	 11.6
% Cancer (Other Than Skin)	 6.6	 8.8	 9.1
% [Men 50+] Prostate Exam in Past 2 Years	 76.4	 81.7	 84.1
% [Women 50-74] Mammogram in Past 2 Years	 69.7	 67.7	 65.8
% [Women 21-65] Pap Smear in Past 3 Years	 65.2	 77.8	 60.1
% [Age 50+] Sigmoid/Colonoscopy Ever	 74.4	 80.1	 75.2









PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
165.2	 164.2	 163.6	 161.4	 199.5
45.4	 45.6	 43.4	 45.5	
17.8	 21.0	 19.2	 21.8	
23.4	 22.2	 20.9	 20.7	
17.5	 16.9	 14.6	 14.5	
12.7	 6.3	 7.7		 11.2
7.9	 5.9	 7.7		 7.8
79.1		 75.0		 77.1
68.5	 72.1	 80.3	 81.1	 80.0
68.9	 78.1	 84.8	 93.0	 79.6
76.1	 63.0	 75.6		 68.0
















Cancer (continued)	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% [Age 50+] Blood Stool Test in Past 2 Years	 24.1	 22.7	 29.8
% [Age 50-75] Colorectal Cancer Screening	 69.9	 75.8	 76.1
<small>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.</small>			













PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
24.4	 17.0	 31.8		 29.8
73.1		 74.5	 70.5	 68.5
	 better	 similar	 worse	














Chronic Kidney Disease	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Kidney Disease (Age-Adjusted Death Rate)	 11.4	 10.0	
% Kidney Disease	 2.3	 3.3	 3.1
<small>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.</small>			




PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
10.3	 13.5	 13.2		 14.8
2.9	 3.2	 3.6		
	 better	 similar	 worse	






Dementias, Including Alzheimer's Disease	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Alzheimer's Disease (Age-Adjusted Death Rate)	 37.2	 27.4	 25.3
% [Age 45+] Increasing Confusion/Memory Loss in Past Yr	 15.8	 15.3	 14.6
<small>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.</small>			




PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
30.7	 19.2	 24.2		 20.0
15.3		 12.8		
 better  similar  worse				







Diabetes	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Diabetes Mellitus (Age-Adjusted Death Rate)	 22.6	 10.5	 35.6
% Diabetes/High Blood Sugar	 13.9	 9.9	 16.2
% Borderline/Pre-Diabetes	 9.3	 9.3	 9.5
% [Non-Diabetes] Blood Sugar Tested in Past 3 Years	 50.4	 51.1	 63.7
% [Adults w/Diabetes] Taking Insulin			
<small>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.</small>			










PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
21.9	 14.0	 21.1	 20.5	 22.6
12.7	 9.6	 14.5		 12.4
9.3		 5.7		
52.9		 55.1		
85.5				 81.4
 better  similar  worse				











Educational & Community-Based Programs	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% Attended Health Event in Past Year	 12.9	 18.6	 17.0
<small>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.</small>			

























PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
16.2		 23.8		 17.7
	 better	 similar	 worse	



























Family Planning	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Teen Births per 1,000 (Age 15-19)	 50.7	 18.9	 39.4
<small>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.</small>			




PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
37.4	 43.6	 36.6		 48.3
	 better	 similar	 worse	








Heart Disease & Stroke	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Diseases of the Heart (Age-Adjusted Death Rate)	 191.5	 145.6	 180.4
Stroke (Age-Adjusted Death Rate)	 39.3	 33.5	 41.6
% Heart Disease (Heart Attack, Angina, Coronary Disease)	 8.9	 9.1	 6.7







PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
172.5	 194.9	 169.1	 156.9	 203.9
37.7	 33.8	 36.5	 34.8	 43.9
8.4		 6.9		 10.6












Heart Disease & Stroke (continued)	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% Stroke	 4.0	 3.0	 6.1
% Blood Pressure Checked in Past 2 Years	 89.3	 92.5	 93.4
% Told Have High Blood Pressure (Ever)	 37.8	 41.3	 40.3
% [HBP] Taking Action to Control High Blood Pressure	 93.0	 86.6	 92.9
% Cholesterol Checked in Past 5 Years	 94.7	 88.9	 94.8
% Told Have High Cholesterol (Ever)	 35.6	 32.9	 37.3
% [HBC] Taking Action to Control High Blood Cholesterol	 82.8	 85.9	 89.2
% 1+ Cardiovascular Risk Factor	 85.4	 84.0	 91.7
<small>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.</small>			










PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
4.0	 3.2	 2.6		 2.8
91.4		 93.6	 92.6	 92.6
39.1	 30.6	 36.5	 26.9	 36.3
90.5		 92.5		 92.4
92.1	 74.0	 87.4	 82.1	 83.9
34.7		 33.5	 13.5	 36.6
84.6		 84.2		 90.4
85.9		 83.0		 83.8
	 better	 similar	 worse	



























HIV	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
HIV Prevalence per 100,000	 330.0	 85.1	 80.9
% [Age 18-44] HIV Test in the Past Year			
<small>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.</small>			






PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
170.2	 331.8	 353.2		
19.3		 21.3		18.9
	 better	 similar	 worse	










Immunization & Infectious Diseases	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% [Age 65+] Flu Vaccine in Past Year	 55.1	 53.3	 30.5
% [Age 65+] Pneumonia Vaccine Ever	 83.3	 82.8	 66.9
<small>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.</small>			



















PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
49.4	 52.9	 58.9	 70.0	 68.3
79.0	 71.0	 76.3	 90.0	 67.3
	 better	 similar	 worse	












Injury & Violence Prevention	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Unintentional Injury (Age-Adjusted Death Rate)	 48.5	 42.2	 44.8
Motor Vehicle Crashes (Age-Adjusted Death Rate)			
% Child [Age 0-17] "Always" Uses Seat Belt/Car Seat			
% Child [Age 5-17] "Always" Wears Bicycle Helmet			
[65+] Falls (Age-Adjusted Death Rate)			
Firearm-Related Deaths (Age-Adjusted Death Rate)	 18.5	 14.7	 26.6
Homicide (Age-Adjusted Death Rate)			
Violent Crime per 100,000	 264.4	 121.9	 244.0
<small>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.</small>			







PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
45.5	 41.5	 39.7	 36.4	 49.0
12.5	 10.0	 10.6	 12.4	 21.4
93.9		 95.7		 95.0
53.0		 46.5		 42.0
43.3	 43.6	 57.2		
20.1	 13.8	 10.4	 9.3	 15.2
3.5	 6.2	 5.6	 5.5	
214.1	 622.1	 395.5		
	 better	 similar	 worse	








Maternal, Infant & Child Health	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Low Birthweight Births (Percent)	 7.0	 8.4	 7.4
Infant Death Rate		 13.0	 9.5
<small>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.</small>			
















PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
7.5	 8.2	 8.2	 7.8	
8.1	 5.2	 5.9	 6.0	
	 better	 similar	 worse	







Mental Health & Mental Disorders	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% "Fair/Poor" Mental Health	 13.6	 8.8	 15.6
% Diagnosed Depression	 18.0	 16.6	 27.0
% Symptoms of Chronic Depression (2+ Years)	 30.4	 27.0	 31.8
Suicide (Age-Adjusted Death Rate)	 25.0	 17.2	 31.9
% Taking Rx/Receiving Mental Health Trtmt	 14.1	 10.3	 18.4
% Unable to Get Mental Health Svcs in Past Yr	 3.7	 1.9	 3.4

PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
12.4		 15.5		 8.6
19.2		 17.9		
29.9		 29.9		 28.3
25.0	 18.8	 12.7	 10.2	 20.3
13.6		 13.6		
3.3		 4.4		

Mental Health & Mental Disorders (continued)	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% Have Ever Sought Help for Mental Health	 26.5	 24.8	 39.6
% [Those With Diagnosed Depression] Seeking Help			
% Typical Day Is "Extremely/Very" Stressful	 9.1	 9.5	 10.2
<small>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.</small>			

PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
28.7		 27.4		
87.9		 91.7		
9.8		 11.7		 8.5
	 better	 similar	 worse	
















Nutrition, Physical Activity & Weight	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% Eat 5+ Servings of Fruit or Vegetables per Day	 34.7	 42.2	 37.2
% "Very/Somewhat" Difficult to Buy Fresh Produce	 19.2	 15.5	 19.3
% Worried About Food in the Past Year	 26.7	 16.2	 21.8
Population With Low Food Access (Percent)	 20.9	 57.4	 51.5
% Medical Advice on Nutrition in Past Year	 37.1	 33.7	 36.3















PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
37.8		 27.4		 47.0
18.3		 21.9		
21.8				
42.3	 22.3	 23.6		
36.2				 38.4



Nutrition, Physical Activity & Weight (continued)	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% Healthy Weight (BMI 18.5-24.9)	32.8	29.7	25.6
% Overweight (BMI 25+)	66.0	69.4	71.9
% Obese (BMI 30+)	30.5	29.7	35.5
% Medical Advice on Weight in Past Year	25.9	21.0	23.4
% [Overweights] Counseled About Weight in Past Year	35.0	29.5	27.9
% [Obese Adults] Counseled About Weight in Past Year			
% [Overweights] Trying to Lose Weight Both Diet/Exercise	59.6	52.1	63.4
% Child [Age 5-17] Healthy Weight			
% Children [Age 5-17] Overweight (85th Percentile)			
% Children [Age 5-17] Obese (95th Percentile)			
<small>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.</small>			

PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
30.4		32.9	33.9	33.5
68.4	63.5	65.2		66.0
31.6	27.7	33.4	30.5	25.6
24.5		20.4		23.3
32.7		27.1		29.4
45.8		40.8		44.8
56.5		57.0		42.7
59.2		67.2		71.3
28.9		24.2		28.7
11.0		9.5	14.5	11.7
	better	similar	worse	

Nutrition, Physical Activity & Weight (continued)	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% No Leisure-Time Physical Activity	 22.5	 18.1	 14.8
% Meeting Physical Activity Guidelines	 47.8	 56.2	 57.8
% Moderate Physical Activity	 28.3	 44.1	 43.1
% Vigorous Physical Activity	 35.3	 40.6	 40.7
Recreation/Fitness Facilities per 100,000	 12.7	 14.9	 7.7
% Child [Age 2-17] Physically Active 1+ Hours per Day			
<small>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.</small>			










PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
19.0	 22.5	 27.9	 32.6	 19.7
52.6		 50.3		 55.0
36.8				 35.3
38.2				 40.5
11.7	 7.4	 9.7		
46.4		 47.9		
	 better	 similar	 worse	








Oral Health	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% [Age 18+] Dental Visit in Past Year	67.3	71.6	64.7
% Child [Age 2-17] Dental Visit in Past Year			
% Have Dental Insurance	56.1	66.0	71.5
<small>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.</small>			
















PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
67.8	59.9	67.2	49.0	67.6
86.5		90.7	49.0	80.4
62.0		66.5		63.7
	better	similar	worse	

















Respiratory Diseases	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
CLRD (Age-Adjusted Death Rate)	58.7	41.6	63.3
Pneumonia/Influenza (Age-Adjusted Death Rate)	12.5	12.3	22.3
% COPD (Lung Disease)	13.0	12.4	14.0
% [Child 0-17] Currently Has Asthma			
<small>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.</small>			

PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
54.2	53.0	51.4		53.4
15.0	20.5	15.1		14.7
12.8	6.9	9.5		10.0
9.2		6.5		5.4
	better	similar	worse	

Sexually Transmitted Diseases	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Gonorrhea Incidence per 100,000	 51.8	 12.7	 27.2
Chlamydia Incidence per 100,000	 395.7	 176.2	 271.5
% Have Never Been Tested for an STD	 53.2	 60.9	 50.5
<small>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.</small>			

PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
31.4	 84.7	 110.7		
286.1	 423.8	 456.1		
54.7				
	 better	 similar	 worse	

Substance Abuse	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	 21.1	 12.5	 12.6
% Current Drinker	 54.7	 60.6	 59.7
% Excessive Drinker	 21.1	 21.2	 24.1
% Drinking & Driving in Past Month	 1.9	 3.2	 0.7
Drug-Induced Deaths (Age-Adjusted Death Rate)	 20.7	 17.9	 17.8







PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
15.4	 12.7	 10.2	 8.2	 15.5
58.2	 50.6	 59.7		 60.9
22.1		 22.2	 25.4	 23.1
2.1		 4.1		 3.0
18.9	 20.5	 14.6	 11.3	 13.3












Substance Abuse (continued)	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% Illicit Drug Use in Past Month	2.6	4.5	0.7
% Ever Sought Help for Alcohol or Drug Problem	3.9	4.6	2.9
% Life Negatively Affected by Substance Abuse	43.7	41.2	40.9
<small>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.</small>			







PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
2.8		3.0	7.1	2.9
4.1		4.1		6.4
43.0		32.2		
	better	similar	worse	









Tobacco Use	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% Current Smoker	12.2	14.3	19.5
% Someone Smokes at Home	9.6	9.1	10.2
% [Nonsmokers] Someone Smokes in the Home	4.8	3.9	4.2
% [Household With Children] Someone Smokes in the Home			
% [Smokers] Received Advice to Quit Smoking			

PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
14.6	17.0	14.0	12.0	18.4
9.5		10.2		11.2
4.4		3.9		4.4
5.5		10.2		7.0
63.4		76.0		57.5

Tobacco Use (continued)	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% [Smokers] Have Quit Smoking 1+ Days in Past Year			
% [Smokers] Interested in Cessation Classes			
% [Smokers] Aware of Nevada Quitline			
% Use Smokeless Tobacco	 3.1	 0.4	 2.8
% Currently Use Electronic Cigarettes	 6.5	 1.7	 7.0
<small>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.</small>			

PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
57.3		 43.7	 80.0	 49.3
46.8				
40.5				
2.8	 3.2	 3.0	 0.3	 4.3
4.9		 3.8		
 better  similar  worse				

Vision	Each Sub-Area vs. Others		
	Carson City	Douglas County	Lyon County
% Blindness/Trouble Seeing	 6.8	 8.1	 5.2
% Eye Exam in Past 2 Years	 62.4	 65.5	 55.7
<small>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.</small>			

PSA	PSA vs. Benchmarks			TREND
	vs. NV	vs. US	vs. HP2020	
6.9	 5.0	 7.3		 8.4
61.3		 59.3		 63.2
 better  similar  worse				



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# 2016 PRC Community Health Needs Assessment

Carson Tahoe Health Primary Service Area (PSA)  
Carson City, Nevada & Surrounding Areas

Prepared for:

Carson Tahoe Health

By Professional Research Consultants, Inc.

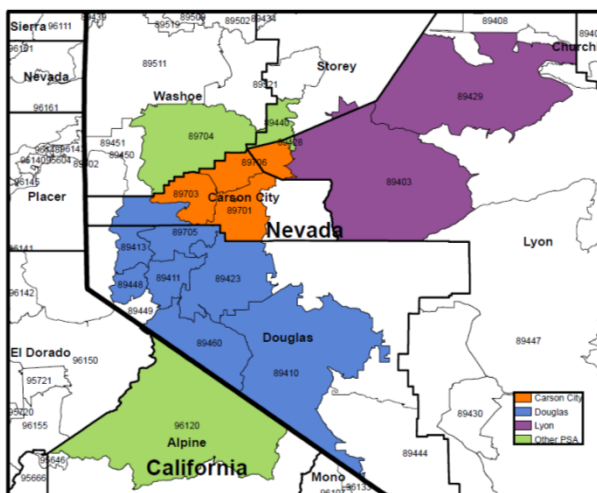
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## Carson Tahoe Health Primary Service Area (PSA)

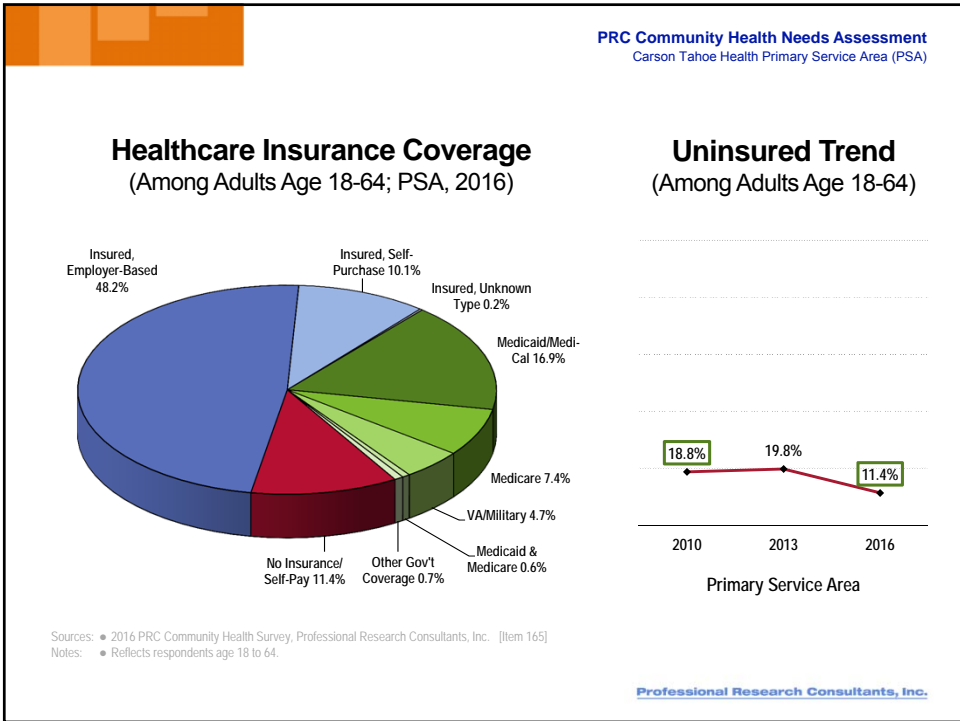
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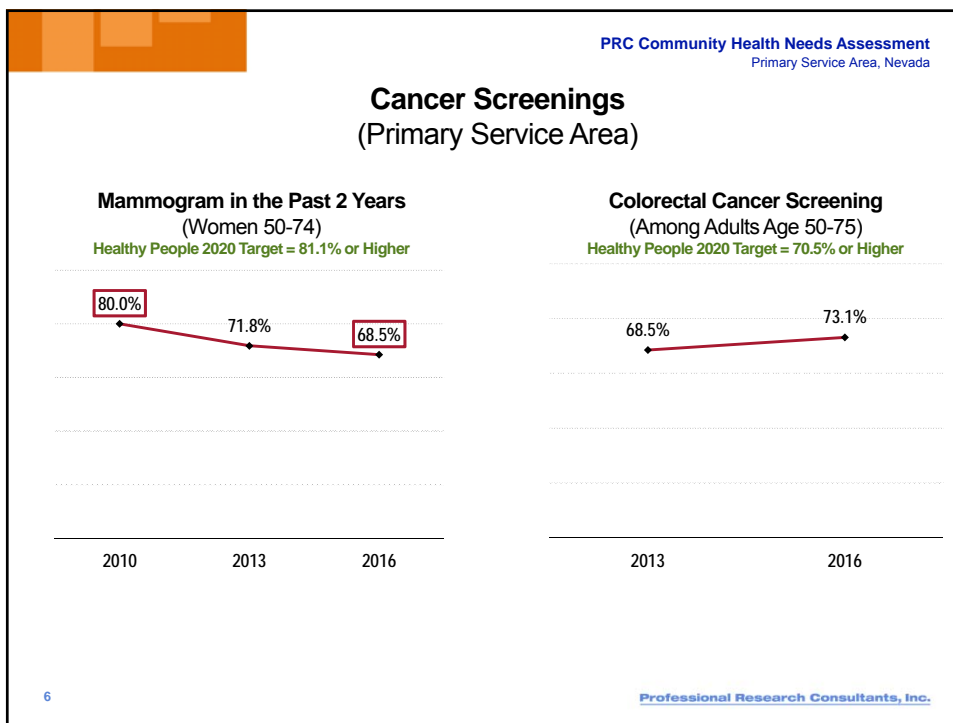
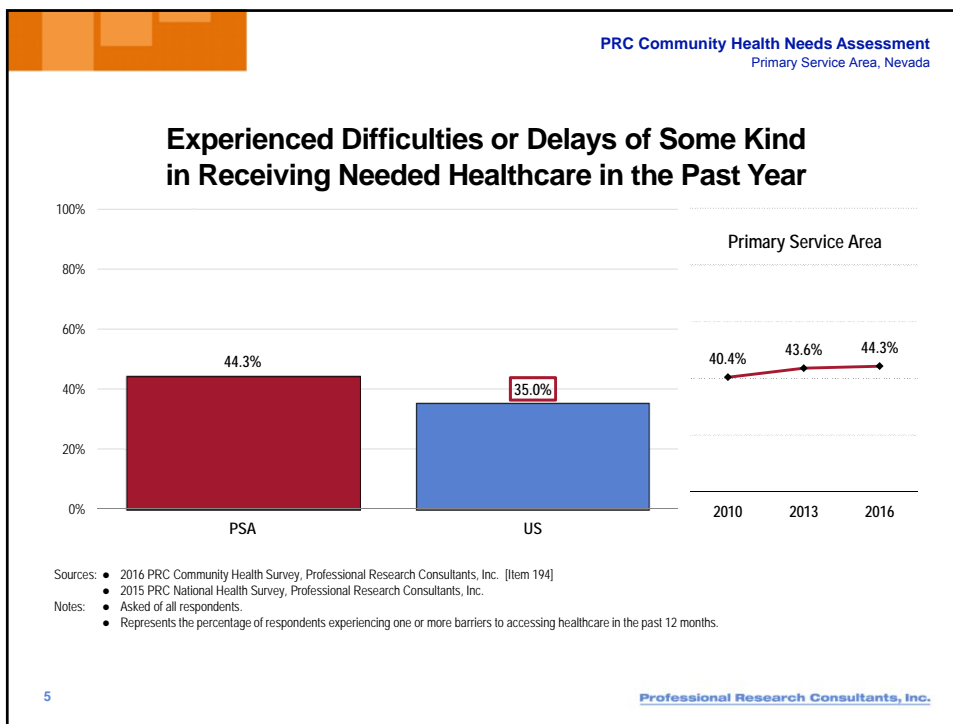
- Customized Local Survey
- Secondary Data
- Online Key Informant Survey





# Select Data Findings

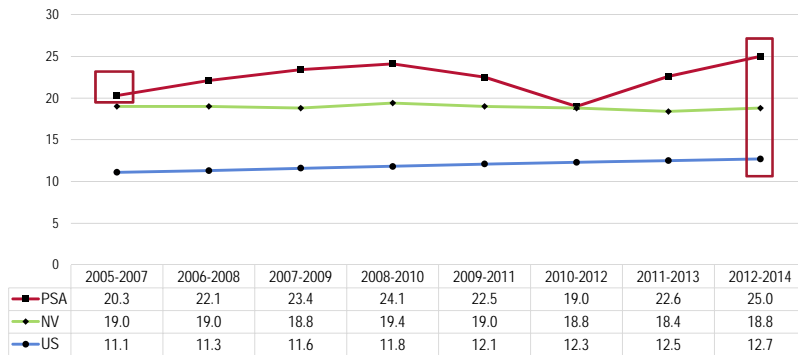





### Suicide: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 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 May 2016.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MHMD-1]

Notes: 

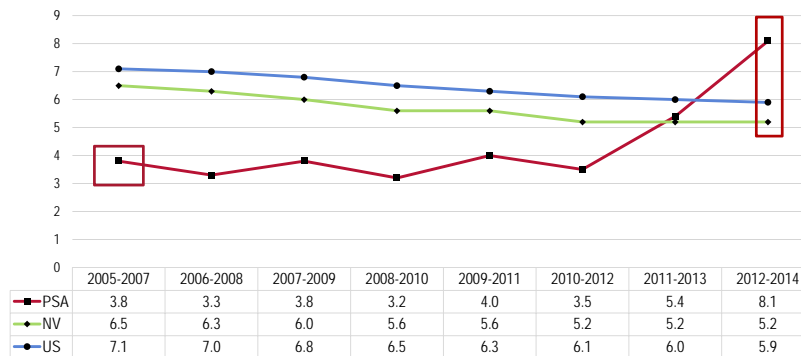
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

PRC Community Health Needs Assessment  
Carson Tahoe Health Primary Service Area (PSA)

### Infant Mortality Rate

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

Healthy People 2020 Target = 6.0 or Lower



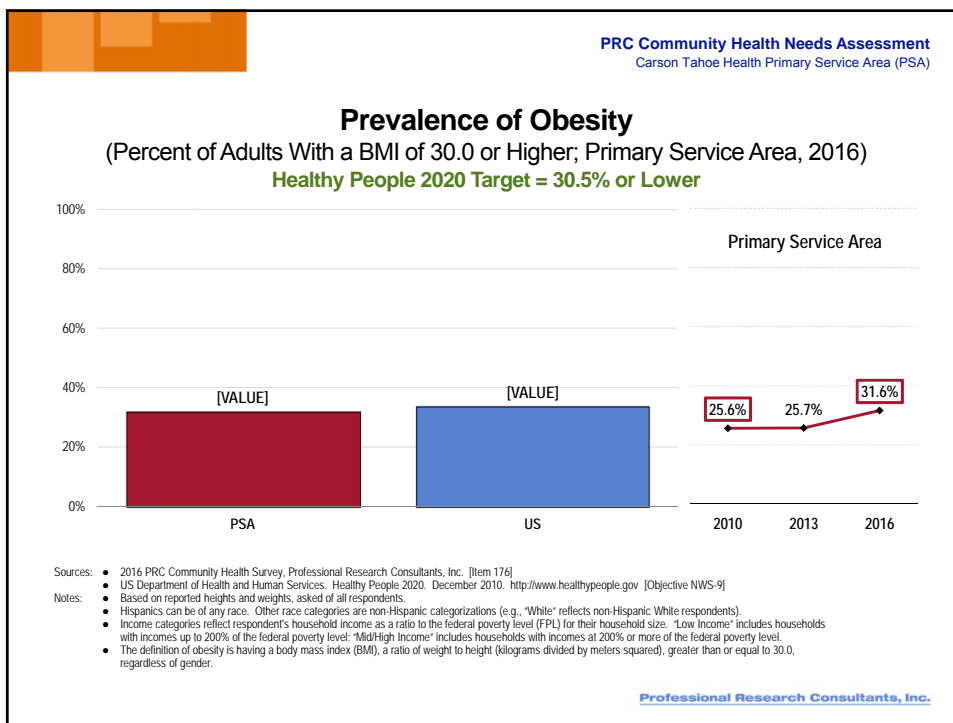
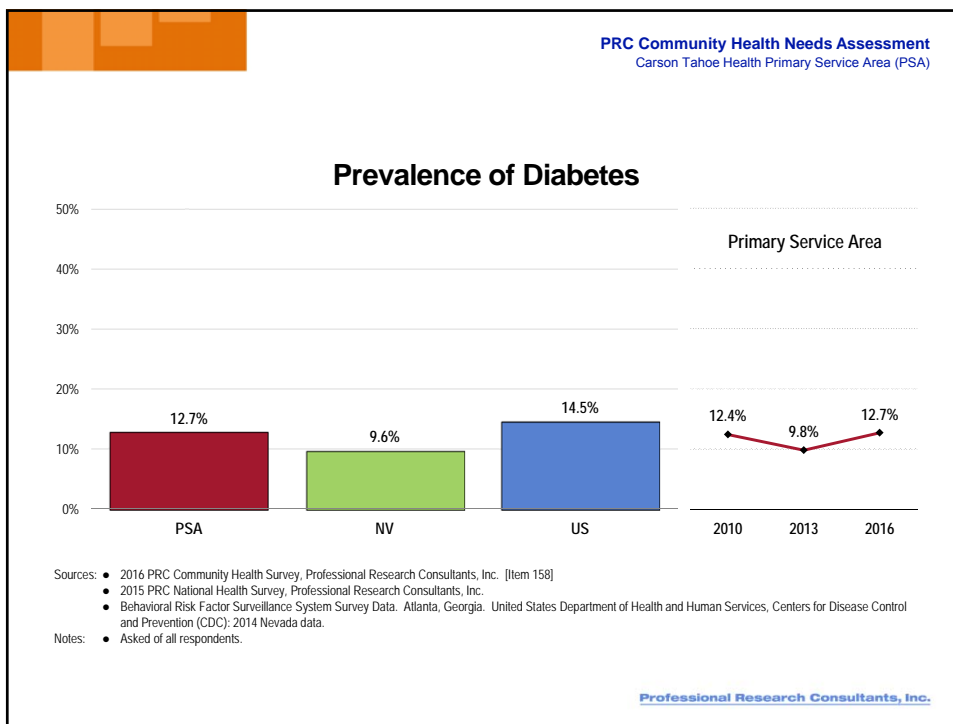
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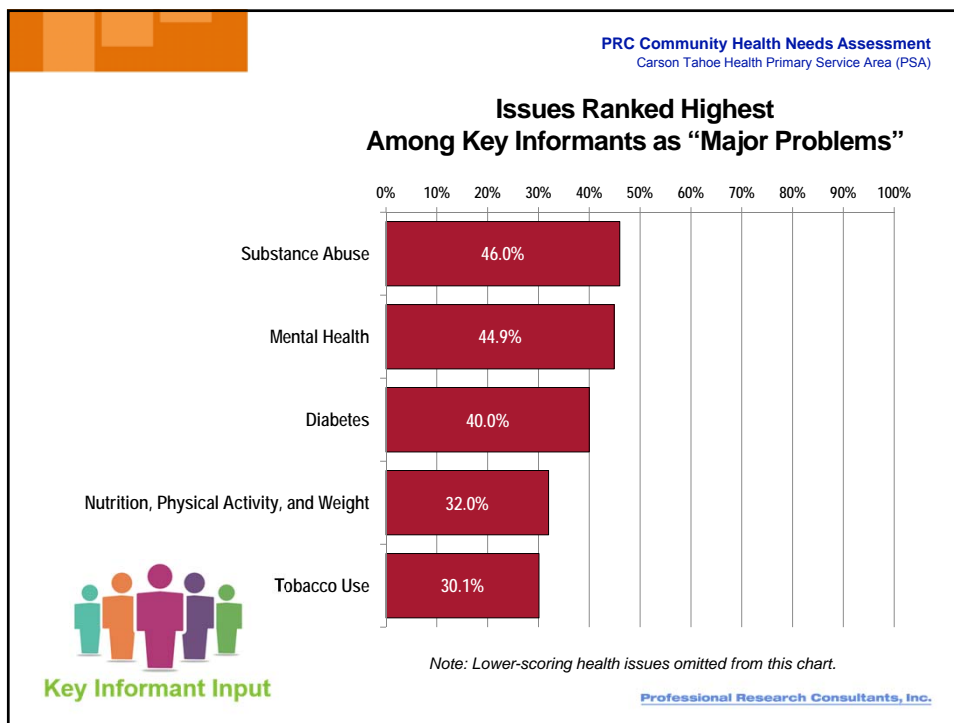
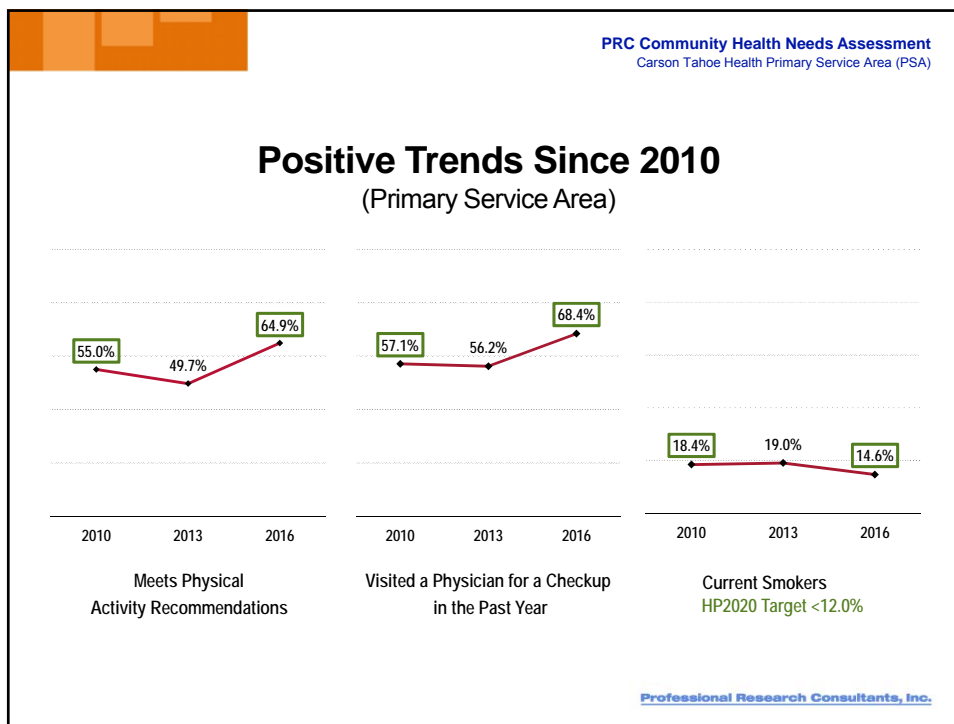
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2016.
- Centers for Disease Control and Prevention, National Center for Health Statistics.
- US Department of Health and 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.

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## 13 Identified Areas of Opportunity

Access	Death & Disease	Infant Health	Modifiable Health Risks
<ul style="list-style-type: none"><li>• Barriers to Accessing Healthcare Services</li><li>• Oral Health</li></ul>	<ul style="list-style-type: none"><li>• Cancer</li><li>• Dementia</li><li>• Diabetes</li><li>• Heart Disease &amp; Stroke</li><li>• Injury &amp; Violence</li><li>• Mental Health</li><li>• Potentially Disabling Conditions</li><li>• Respiratory Diseases</li></ul>	<ul style="list-style-type: none"><li>• Birth Outcomes</li></ul>	<ul style="list-style-type: none"><li>• Nutrition, Physical Activity &amp; Weight</li><li>• Substance Abuse</li></ul>

**Questions?**