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# Washoe County Chronic Disease Report Card

A Summary Report of Chronic Health Conditions  
and their Primary Risk Factors

July 2014



# Table of Contents

Note from the District Health Officer .....	4
Introduction.....	5
Overview of Chronic Disease in Washoe County.....	6
Age Adjusted Mortality Rates.....	6
Adults without Health Insurance .....	7
Years of Potential Life Lost .....	8
Population Health Indicators .....	10
Demographics.....	10
Socioeconomic Status .....	11
Life Expectancy at Birth:.....	13
Overall Health Status.....	14
Health-Related Quality of Life: .....	15
Chronic Disease Risk Factors.....	17
Adult Physical Activity and Nutrition .....	17
Youth Physical Activity and Nutrition .....	18
Adult Overweight and Obesity.....	20
Youth Overweight and Obesity .....	22
Tobacco Use and Exposure.....	25
Specific Chronic Health Conditions .....	30
Asthma.....	30
Cancer.....	31
Coronary Heart Disease (CHD) .....	34
Heart Failure .....	35
Chronic Liver Diseases.....	36
Chronic Obstructive Pulmonary Disease (COPD) .....	37
Diabetes .....	38
Hip Fracture and Vertebral Fracture.....	39
Stroke.....	40
Economics of Chronic Disease.....	41
Policy, Systems, and Environmental Indicators .....	42
Nutrition.....	43
Physical Activity.....	46
Tobacco .....	48
Technical Notes .....	50
Data Sources .....	51
Acknowledgements .....	52

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## About the Washoe County Health District and the Chronic Disease Prevention Program

The Washoe County Health District (Health District) is the local public health authority for Washoe County, including Incline Village and the cities of Reno, and Sparks. It was established by the Nevada State Legislature in 1969 and is responsible for disease prevention and health promotion for all Washoe County residents. The Health District provides services in the areas of air quality, environmental health, epidemiology and public health preparedness, and community and clinical health services. The District Board of Health provides governance for the Health District and is comprised of a seven-person group that includes representatives of city and county government as well as a physician licensed to practice medicine in Nevada.

At the Washoe County Health District, chronic diseases have been a priority for over a decade. Since 1998, the Health District has been supporting initiatives that address chronic diseases and their risk factors. Today, these efforts are organized within the Chronic Disease Prevention Program, which serves as an umbrella for all of the Health District's work to improve nutrition, physical activity, and tobacco use and exposure, and to ultimately reduce the burden of chronic disease in our community. The mission of the Chronic Disease Prevention Program is to work to empower Washoe County communities to be tobacco free, live active lifestyles, and eat nutritiously through education, collaboration, policy and evaluation. Included in these efforts are activities to collect and analyze data on chronic diseases and their risk factors in Washoe County.



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## Note from the District Health Officer



Dear Residents of Reno, Sparks and Washoe County,

The Washoe County Health District is pleased to provide the following report to the community. Chronic diseases are a major health concern for our community and impact people of all ages, races and incomes. Habits that we adopt as early as childhood and adolescence such as smoking, poor diet, and physical inactivity are primary contributors to many chronic diseases. Such habits have a long-lasting effect on both individuals and our entire society.

Nationally, chronic diseases account for seven out of every ten deaths and negatively affect the quality of life of over 90 million Americans. This means that practically every individual is directly or indirectly affected by chronic disease. In addition to impacts on health and wellbeing, the financial costs of chronic diseases are significant, with 75% of direct health care costs being attributed to chronic disease. In addition, there are indirect costs such as lost productivity and lower wages and income.

Each person has the ability to take steps towards prevention. I strongly encourage everyone living in Washoe County to support and promote healthy habits in themselves and in the larger community. Encourage those in your life to avoid tobacco, eat well, and take part in daily physical activity.

The intent of this report is to provide a summary of chronic diseases and their risk factors in Washoe County and to serve as a source of currently-available chronic disease data. It is also intended to provide local health care providers, chronic disease practitioners, and other interested persons and programs with data they may use in their work to improve the health of Washoe County. Thank you for taking the time to read this report.

Sincerely,

A handwritten signature in blue ink that reads "Kevin L. Dick". The signature is written in a cursive style.

Kevin Dick  
District Health Officer  
Washoe County Health District

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## Introduction

According to the Centers for Disease Control and Prevention (CDC), chronic diseases are among the most common, costly and preventable of all health problems in the United States. A chronic disease is a long-lasting illness that generally can be controlled, but not cured completely. Examples of common chronic diseases include heart disease, cancer, and diabetes. Almost all of the leading causes of death and disability in Washoe County are due to chronic diseases that relate to one or more risk factors, including poor nutrition, physical inactivity, and tobacco use and exposure. According to the CDC, chronic diseases account for 70 percent of all deaths nationwide, and cause major limitations in daily living for almost 10 percent of all Americans.

Chronic diseases are among the most common and costly health problems, while also being among the most preventable. Adopting healthy behaviors such as eating healthy foods, being physically active, avoiding tobacco and excessive alcohol consumption can significantly reduce the risk of developing a chronic disease. In many cases, these lifestyle changes can also help prevent additional complications for individuals already living with a chronic disease.

The 2014 Washoe County Chronic Disease Report Card is a compilation of data, including data on chronic diseases and their leading health indicators. The data represented is the most current and available information about chronic diseases and their risk factors for Washoe County, Nevada, and the United States. Data for the report comes from both surveillance and behavioral self-reporting sources. Therefore, some limitations to the data exist. For more detail about limitations of the data see the Technical Notes section. With these limitations in mind, the data contained in this report is valuable in a variety of ways. Analysis of specific chronic diseases by demographic variables such as gender, age, or ethnicity is useful for identifying segments of the population that may be at greater risk of disease. Such information allows public health programs to focus prevention measures in ways that will have maximum impact. In addition, analysis of surveillance data can aid in the determination of disease priorities. This enables communities to direct resources at illnesses that are taking the greatest toll on their members.

## Overview of Chronic Disease in Washoe County

Age-adjusted Mortality Rates per 100,000 Population for the Leading Causes of Death among Washoe County and Nevada Residents, 2012

Cause of Death	2012*			Healthy People 2020 Target
	Washoe County	Nevada	Rank W/N**	
Diseases of the Heart	226.6	189.2	1/1	NA
Malignant Neoplasms (Cancer)	174.5	160.8	2/2	160.6
Chronic Lower Respiratory Diseases	51.8	51.9	3/4	NA
Accidents (Unintentional injuries)	39.4	61.9	4/3	36.0
Cerebrovascular Diseases (Stroke)	38.0	33.5	5/5	33.8
Alzheimer's Disease	35.7	15.3	6/9	NA
Atherosclerosis	22.6	3.8	7/15	NA
Intentional Self-harm (Suicide)	17.5	17.5	11/7	10.2
Influenza and Pneumonia	18.3	18.8	10/6	NA
Septicemia	14.1	10.0	12/12	NA
Diabetes Mellitus	19.0	15.6	8/8	65.8
Chronic Liver Disease and Cirrhosis	18.5	12.6	9/11	NA
Nephritis, Nephrotic Syndrome & Nephrosis	7.4	14.4	14/10	NA
Essential Hypertensive Renal Disease	11.4	6.7	13/13	NA
Assault (Homicide) & Legal Intervention	3.1	4.1	15/14	5.5

\* 2012 data is not final and is subject to change

\*\* Rank for Washoe County/Nevada

Color coding of cells:

Dark=Washoe County rates for specific disease for the particular year is statistically significantly higher than Nevada's rate;

Light=Washoe County rates for specific disease for the particular year is statistically significantly lower than Nevada rates;

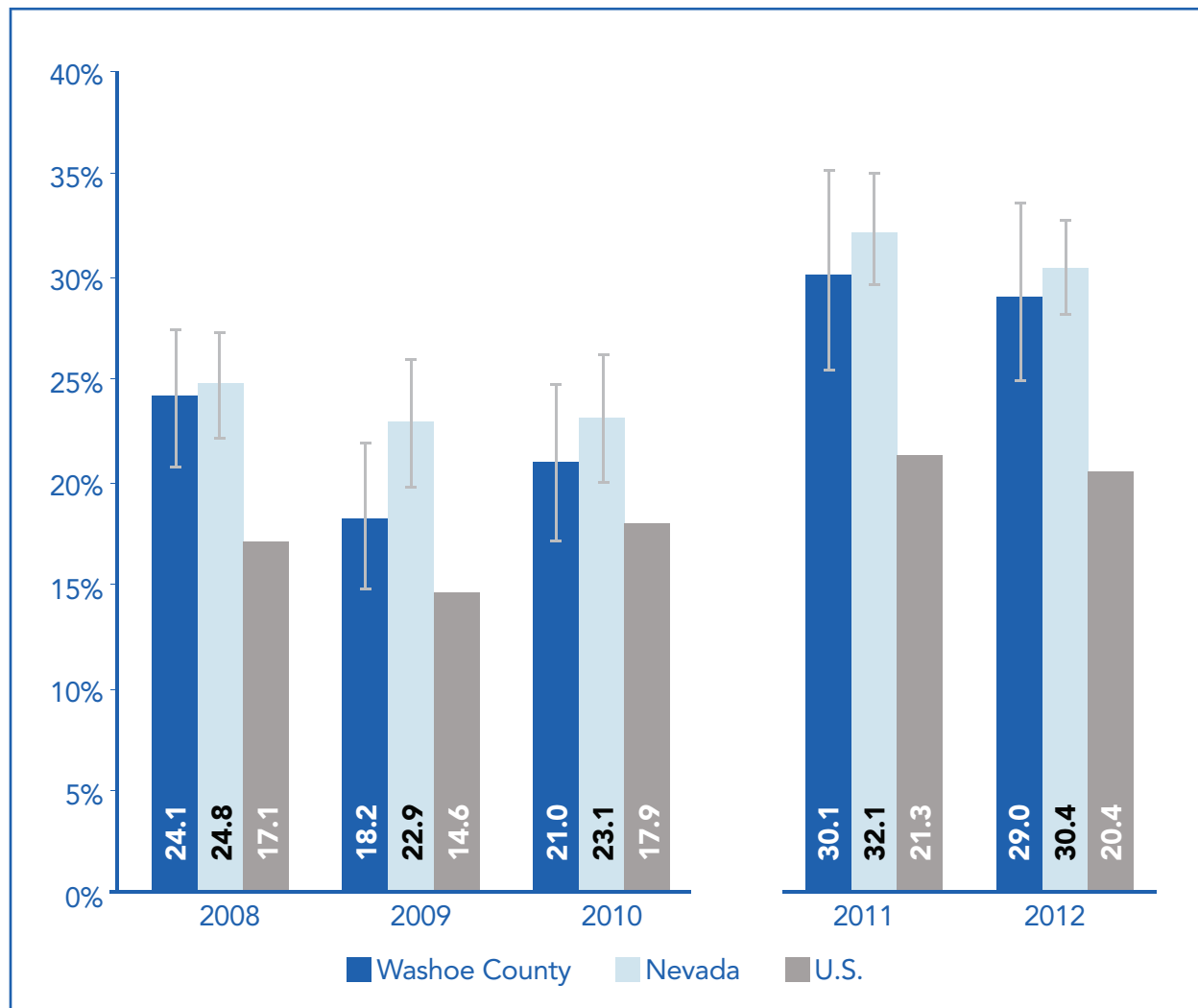
Clear=No difference between Washoe County and Nevada rates for specific disease for the particular year.

Data Source: Vital Statistics – Death Certificates; Nevada State Health Division.

Heart disease, cancer, chronic respiratory disease, accidents, and stroke were the top five causes of death among Washoe County residents in 2012. Other chronic conditions, including diabetes, chronic liver disease, Alzheimer's disease, atherosclerosis and chronic kidney disease have remained in the top 15 causes of death each year as well. When compared to Nevada, death rates from heart disease, Alzheimer's disease, atherosclerosis, chronic liver disease and cirrhosis, and essential hypertensive renal disease were consistently higher in Washoe County in 2012. Death rates from nephritis, nephrotic syndrome and nephrosis were lower in Washoe County than in Nevada in 2012.

## Adults without Health Insurance

Adults Age 18 – 64 without Health Insurance  
Washoe County, Nevada and U.S., 2008 – 2012



Data Source: Behavior Risk Factor Surveillance System (BRFSS) 2008-2012; 2011 and 2012 data not comparable to previous years; 95% confidence interval not available for U.S.

Note: Starting in 2011, BRFSS changed the sampling methodology to include cell phone users and changed the weighting methodology. As a result of these changes, 2011 data cannot be compared to data from previous years. In this report, trend data is presented with a space between 2010 and 2011 data as a reminder that data between these years cannot be compared.

In 2012, 29% of Washoe County adults aged 18-64 reported having no current health insurance compared to 20.4% of U.S. adults. Percentage of those who reported having no health insurance is similar between Washoe County and Nevada, but higher than the U.S. from 2008-2012.

## Years of Potential Life Lost

Years of Potential Life Lost (YPLL) for Persons  
Under the Age of 75 by Cause of Death, Washoe County Residents, 2012\*

Cause of Death	Total YPLL	Mean YPLL	YPLL Rate**	Rank^
Diseases of the Heart	4,531	5.4	1,121.7	2
Malignant Neoplasms (Cancer)	5,482	7.9	1,357.2	1
Accidents (Unintentional injuries)	3,908	23.7	967.5	3
Chronic Lower Respiratory Diseases	746	3.9	184.7	7
Cerebrovascular Diseases (Stroke)	774	5.6	191.6	6
Intentional Self-harm (Suicide)	2,006	25.7	496.6	4
Alzheimer's Disease	42	0.4	10.4	13
Atherosclerosis	29	0.4	7.2	14
Influenza and Pneumonia	260	3.9	64.4	12
Septicemia	429	7.8	106.2	10
Diabetes Mellitus	596	7.9	147.5	8
Chronic Liver Disease and Cirrhosis	1,491	18.4	369.1	5
Nephritis, Nephrotic Syndrome & Nephrosis	262	8.7	64.9	11
Essential Hypertensive Renal Disease	18	0.5	4.5	15
Assault (Homicide) & Legal Intervention	530	37.9	131.2	9
All Others	5,889	9.3	1,457.9	---
Total	26,993	8.2	6,682.6	---

\* 2012 data not final and subject to change.

YPLL is calculated by summing the difference between standard age of 75 years and the age of death for each person.

\*\* YPLL rate: Total number of years of potential life lost per 100,000 population

^ Rank based on YPLL Rate and excludes the all others category.

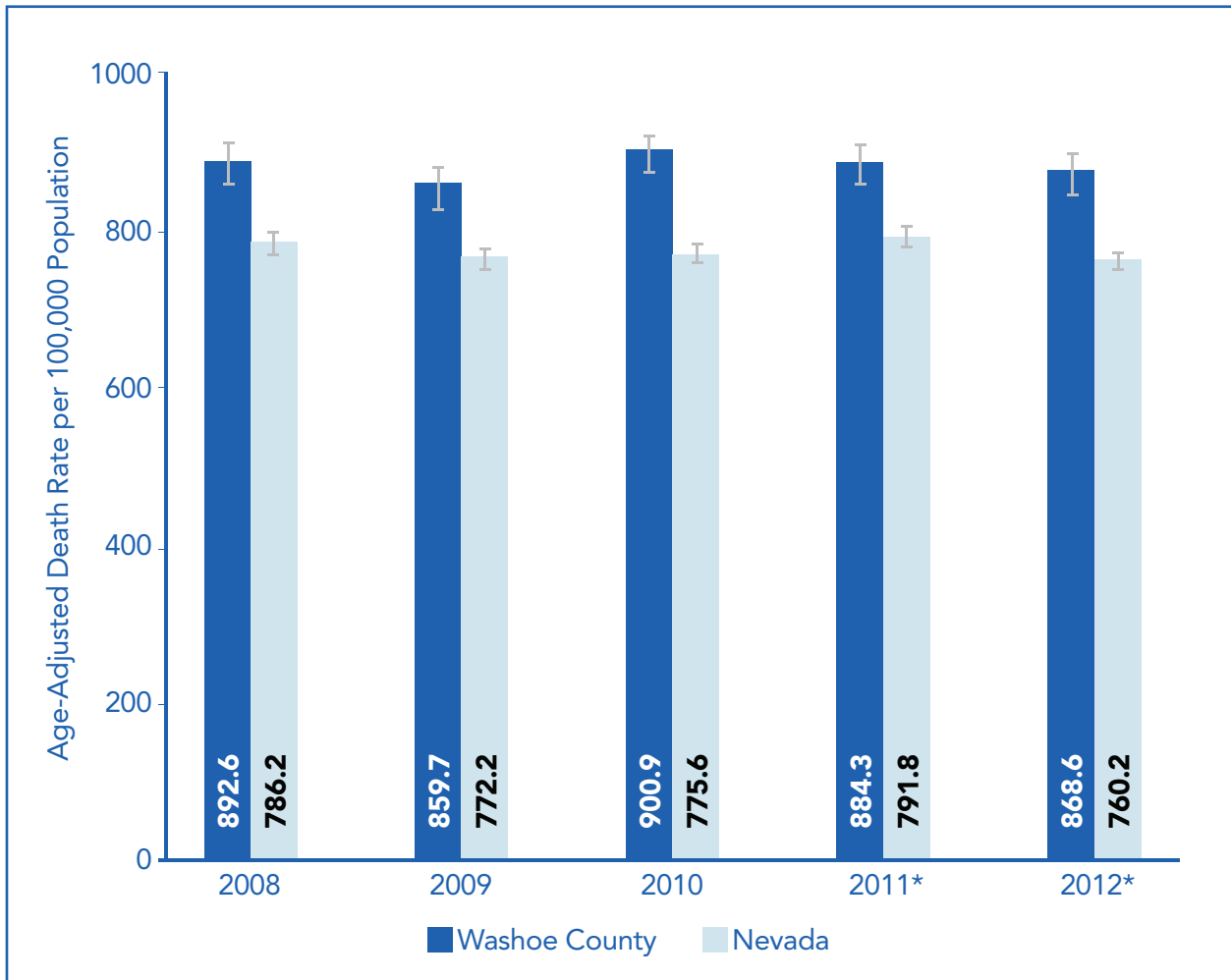
Data Source: Vital Statistics – Death Certificates; Nevada Division of Public and Behavioral Health. The 2012 projections were provided by the State Demographer in May, 2013.

Years of potential life lost (YPLL) is an important measure of mortality, because it takes into account the effect of premature deaths. Mean YPLL will be higher for a specific cause of death that is more common in younger people than in older people. For example, total YPLL due to deaths from homicide (more common among young people) was 530 years with the highest mean of 37.9 YPLL per death in Washoe County in 2012. Higher mean YPLL is also seen among deaths due to suicide and accidents, which are also more common among younger people.



In 2012, 1,122 years were lost due to heart diseases, 1,357 years were lost due to cancer, and 369 years were lost due to chronic liver disease and cirrhosis before age 75 per 100,000 population younger than 75 years of age.

### Age-Adjusted Death Rates Washoe County and Nevada Residents, 2008 – 2012



\*Preliminary data used for 2011 and 2012. Therefore, counts are not final and are subject to change.

Data Source: Vital Statistics – Death Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health. The 2008-2011 estimates and 2012 projections were provided by the State Demographer in May, 2013.

# Population Health Indicators

## Demographics

### Total Population Estimates and Projections, Washoe County, 2008-2012

		2008	2009	2010	2011*	2012**
<b>Total</b>	<b>Total</b>	<b>409,801</b>	<b>412,772</b>	<b>417,336</b>	<b>421,593</b>	<b>422,994</b>
Gender	Male	207,612	208,963	211,149	213,164	213,681
	Female	202,188	203,809	206,187	208,429	209,313
Race	White, non-Hispanic	278,740	279,112	280,400	281,140	280,430
	Black, non-Hispanic	9,105	9,179	9,321	9,424	9,465
	Native American, non-Hispanic	7,902	7,965	8,055	8,149	8,186
	Asian or Pacific Islander, non-Hispanic	24,875	25,211	25,712	26,149	26,299
	Hispanic	89,179	91,305	93,849	96,731	98,614
Age Group	<1	5,754	5,503	5,429	6,319	6,368
	1-4	23,773	23,866	23,649	22,865	22,853
	5-14	54,585	54,801	55,407	56,277	56,796
	15-24	60,777	60,492	60,699	60,586	59,498
	25-34	58,174	59,321	60,615	61,635	61,995
	35-44	57,504	56,697	56,410	56,115	55,774
	45-54	59,758	59,909	59,849	59,460	58,881
	55-64	45,440	47,043	48,880	50,724	51,420
	65-74	25,786	26,741	27,733	28,688	30,347
	75-84	13,827	13,854	13,956	14,132	14,271
	85+	4,423	4,543	4,710	4,790	4,790

\* Estimates

\*\* Projections

Data Source: Nevada State Demographer, May, 2013.

# Population Health Indicators

## Socioeconomic Status

Indicators for Washoe County, Nevada and U.S., 2011

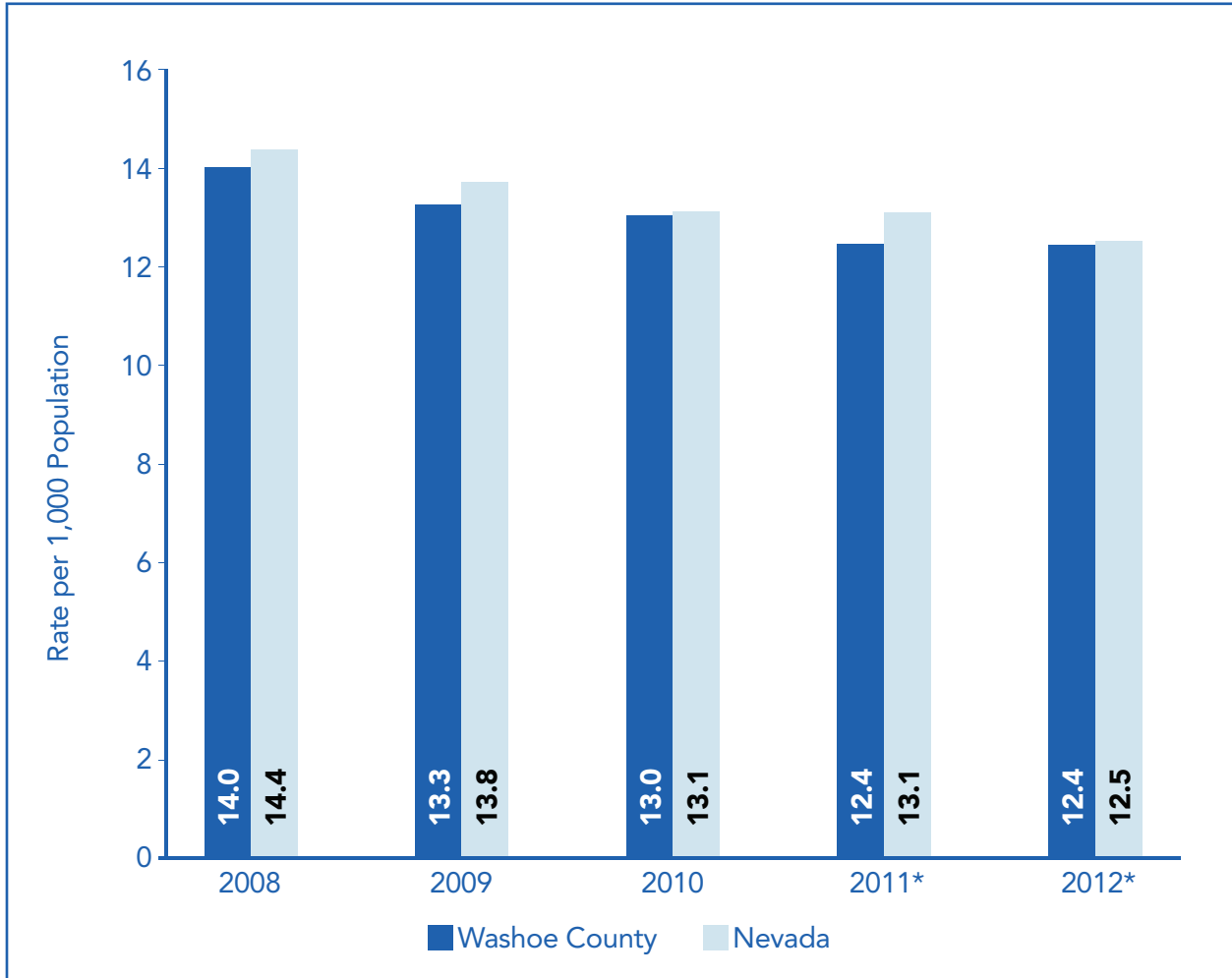
	Washoe County	Nevada	United States
<b>Economic Indicators</b>			
Median Household Income	\$50,733	\$48,927	\$50,502
Poverty Rate - All individuals	13.1%	15.9%	15.9%
Average Unemployment Rate	10.3%	12.7%	10.3%
<b>Other Indicators</b>			
Married, age 15+	47.1%	46.5%	48.3%
Foreign Born	14.6%	11.3%	13.0%
High School Graduate, age 25+	25.4%	29.2%	28.8%
Speaking Language other than English at home, age 5+	23.5%	29.7%	20.8%

Data Source: U.S. Census Bureau, 2011 American Community Survey

# Population Health Indicators

## Birth Rates

Washoe County and Nevada Residents, 2008 – 2012



\*Preliminary data used for 2011 and 2012. Therefore, counts are not final and are subject to change.

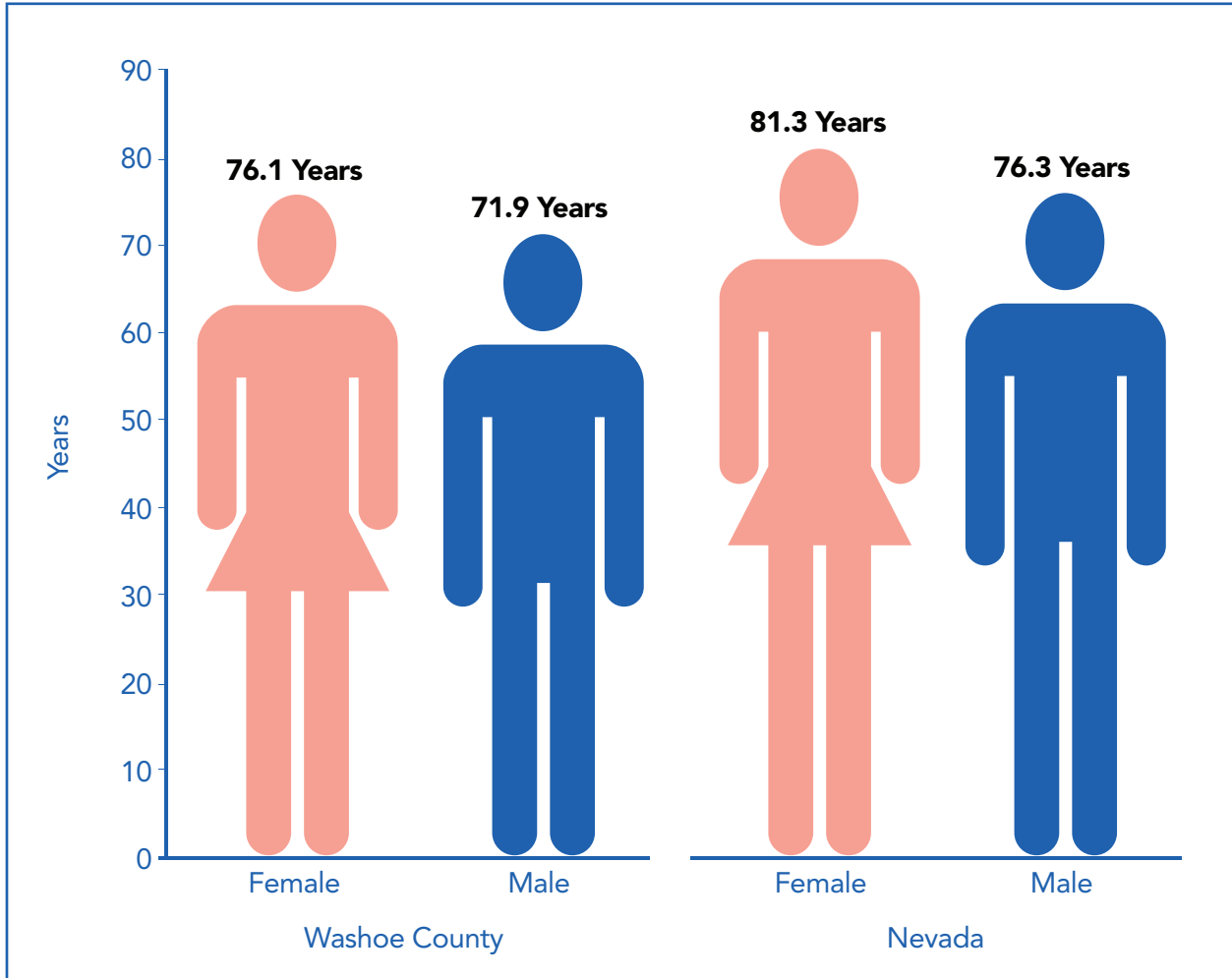
Data Source: Vital Statistics – Birth Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

Birth rate among Washoe County residents has significantly decreased (by approximately 11%) during the five-year period between 2008 and 2012. Overall, birth rates in Washoe County and Nevada have been similar, except in 2009 and 2011 when birth rates in Washoe County were slightly lower.

# Population Health Indicators

## Life Expectancy at Birth

Washoe County and Nevada Residents, 2012



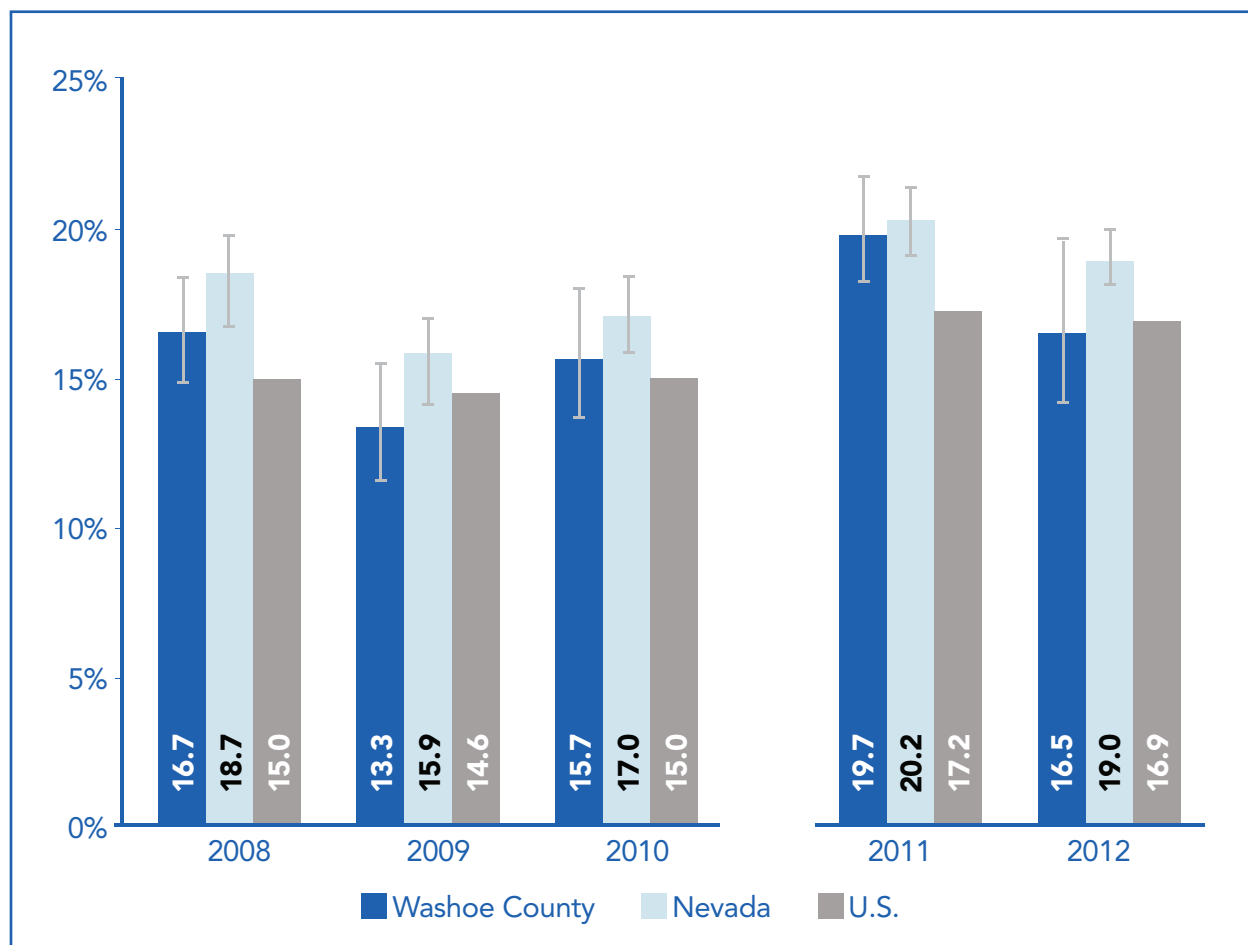
Data Source: Office of Public Health Informatics and Epidemiology, Nevada Division of Public and Behavioral Health.

Females born in Washoe County in 2012 will have an average life expectancy of 76 years, approximately four years longer than males born in Washoe County in 2012. Although Washoe County females are likely to live longer than Washoe County males, Washoe County females are likely to live five years less than Nevada females. Washoe County males are likely to live approximately four years less than Nevada males.

# Population Health Indicators

## Overall Health Status

Percentage of Adults Who Reported Fair or Poor Health Status  
Washoe County, Nevada and U.S., 2008 – 2012



Data Source: BRFSS 2008-2012; 2011 & 2012 data not comparable to previous years; 95% confidence interval not available for U.S.

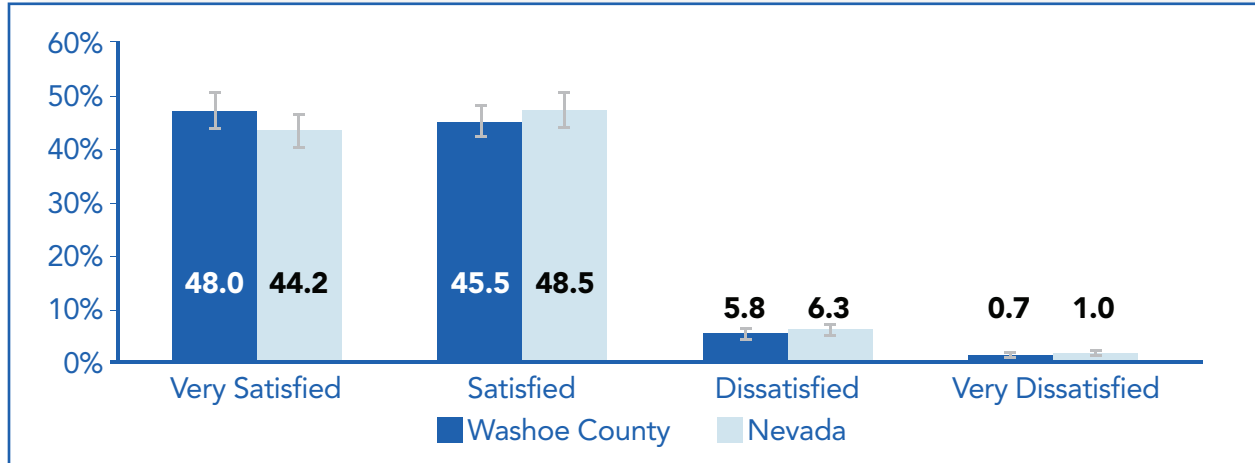
Note: In this report, trend data is presented with a space between 2010 and 2011 data as a reminder that data between these years cannot be compared. More information on this can be found in the technical notes.

The Behavioral Risk Factor Surveillance System (BRFSS) asks individuals to describe their current health status as excellent, very good, good, fair, or poor. Just over 16% of Washoe County adults reported having fair or poor health status in 2012, which is similar to Nevada's percentage. Washoe County's percentages remained similar (statistically non-significant) from 2008 to 2010, as were Nevada's percentages for the same time period.

# Population Health Indicators

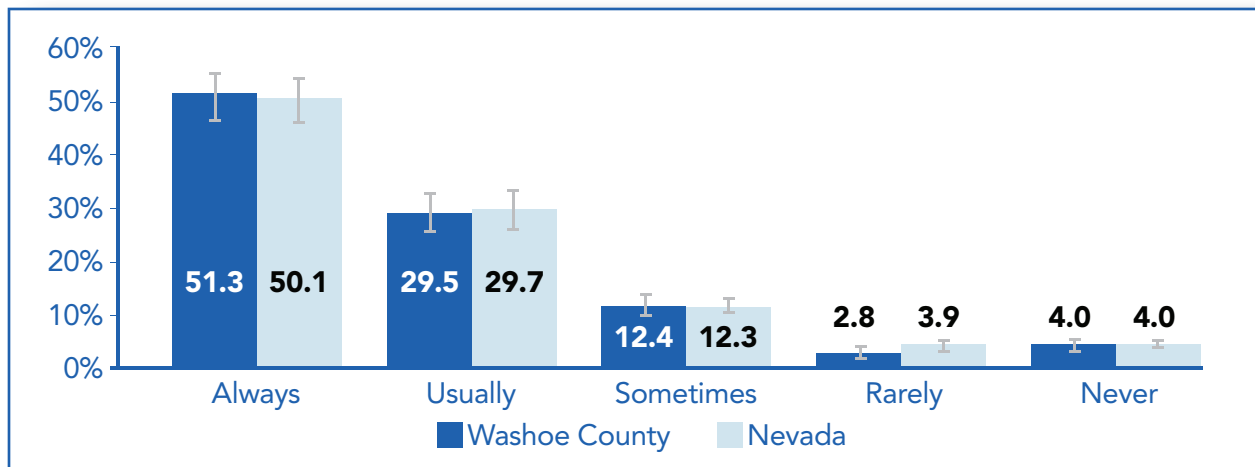
## Health-Related Quality of Life

### Life Satisfaction, Washoe County and Nevada, 2010



Data Source: BRFSS 2010; Data not available for U.S.

### How Often Received Emotional Support, Washoe County and Nevada, 2010



Data Source: BRFSS 2010; Data not available for U.S.

2010 BRFSS included questions on life satisfaction and emotional support. Adult respondents were asked to rate how satisfied they were with their life and how often they get social and emotional support they needed. Approximately 7% of Washoe County and Nevada respondents reported that they were dissatisfied or very dissatisfied with their life. 7% of Washoe County respondents reported that they rarely or never received emotional support when they needed it, compared to 8% of Nevada's respondents.

# Population Health Indicators

## Number of Bad Mental Health Days in the Past 30 Days, Washoe County, Nevada and U.S., 2011

Number of Days	Washoe County	Nevada	United States
	% (95% CI)	% (95% CI)	% *
0 days	64.3 (60.5-68.1)	65.0 (62.8-67.3)	64.3
1-5 days	18.2 (15.1-21.4)	16.8 (15.0-18.6)	18.1
6-15 days	9.0 (6.8-11.2)	8.9 (7.5-10.4)	9.0
16-25 days	2.5 (1.2-3.7)	2.6 (1.9-3.4)	2.6
26-30 days	6.0 (4.2-7.8)	6.6 (5.4-7.7)	6.0

\* 95% CI not available for U.S.

Data Source: BRFSS 2011; 95% Confidence Interval (CI)

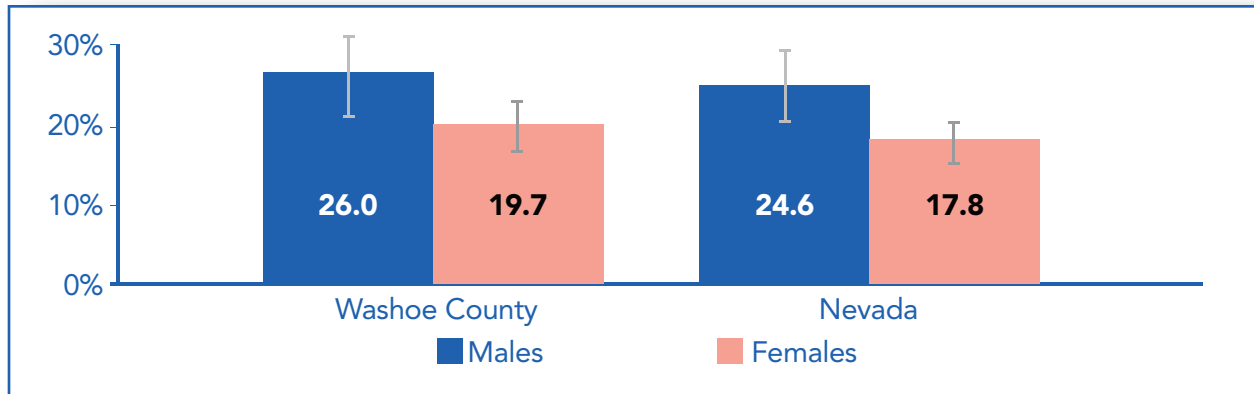
BRFSS asks individuals how many days in the past 30 days their mental health was not good, due to stress, depression and problems with emotions. Approximately 9% of respondents in Washoe County reported 16 or more days of bad mental health days. Washoe County's percentage is similar to both Nevada and the national percentage.



# Chronic Disease Risk Factors

## Adult Physical Activity and Nutrition

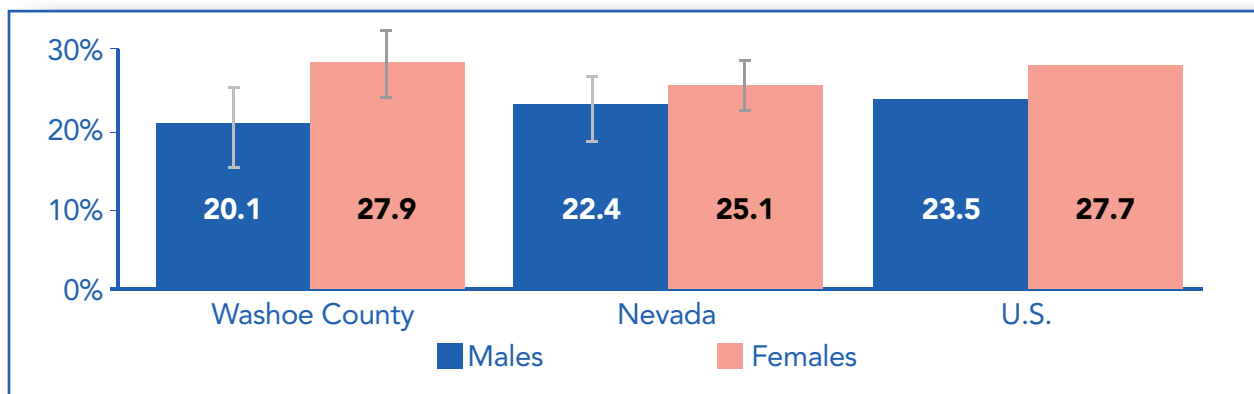
Percentage of Adults that Met the Recommended Physical Activity Guidelines by Gender, Washoe County and Nevada, 2011



Data Source: BRFSS 2010; Data not available for U.S.

According to the 2008 Physical Activity Guidelines, an adult (ages 18-64) needs two and a half hours a week of moderate-intensity activity, or seventy-five minutes a week of vigorous-intensity activity, or an equivalent combination of moderate and vigorous-intensity aerobic physical activity. Muscle-strengthening activities that involve all major muscle groups are recommended two or more days per week. For both Washoe County and Nevada, more males met both aerobic and muscle strengthening physical activity guidelines than females in 2011. Washoe County and Nevada are similar across gender categories.

Percentage of Adults Who Consumed Five or More Servings of Fruits and Vegetables per Day by Gender, Washoe County and Nevada, 2009\*



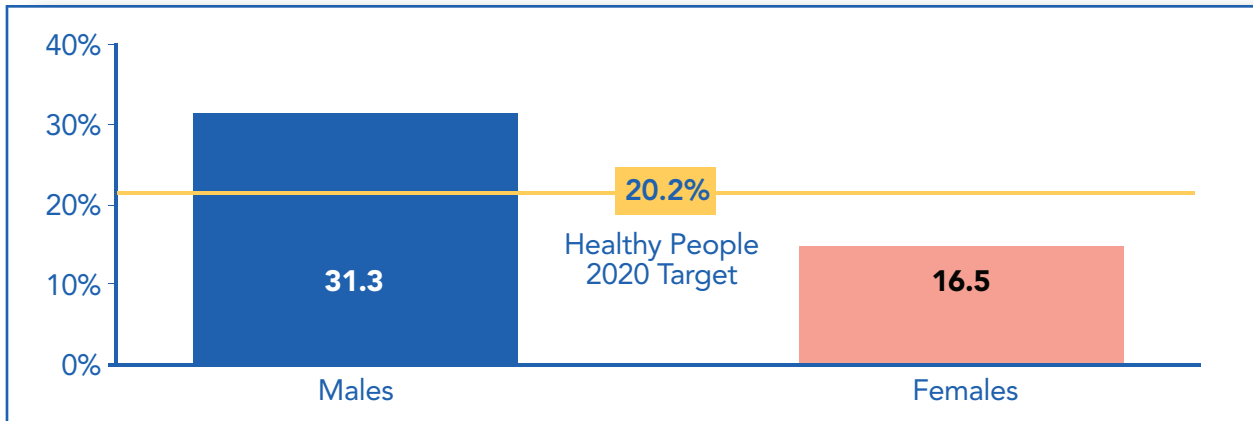
\*Fruit and vegetable consumption – last year collected was 2009

Data Source: BRFSS 2009

# Chronic Disease Risk Factors

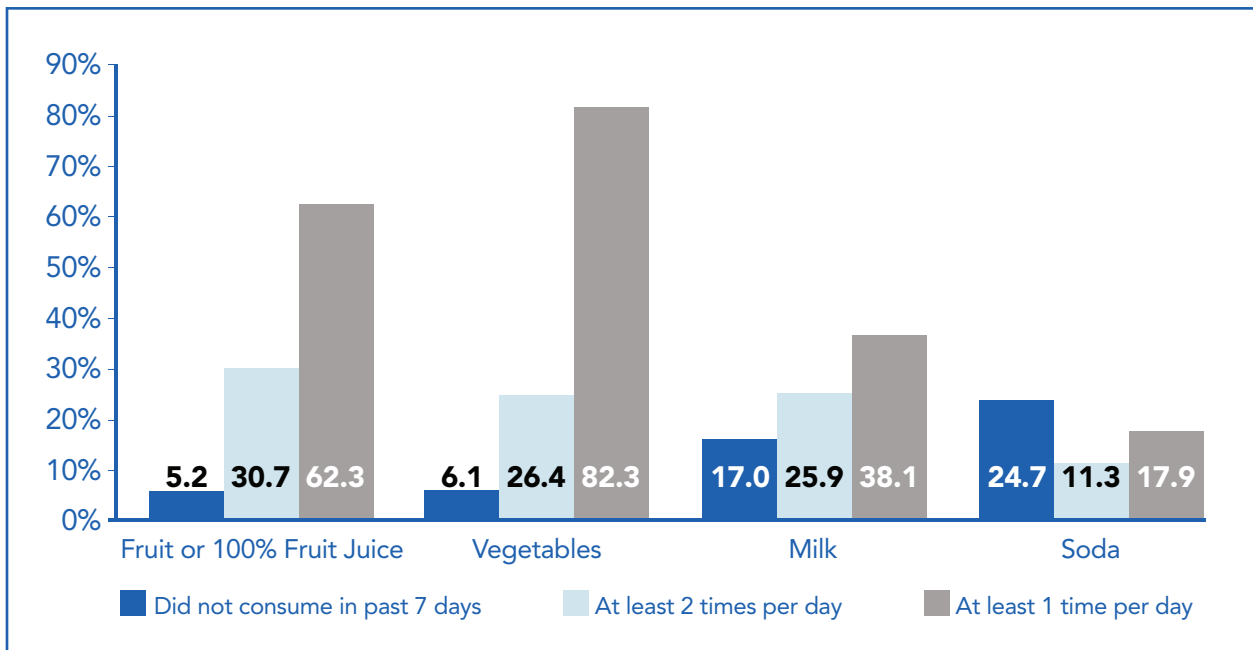
## Youth Physical Activity and Nutrition

Percentage of High School Students Reporting Having Met the Recommended Physical Activity Level by Gender, Washoe County, 2013



Data Source: Washoe County Youth Risk Behavioral Surveillance System (YRBSS); high school.

Percentage of Washoe County High School Students Who reported Consumption of Fruit or Fruit Juice, Vegetables, Milk and Soda, 2013

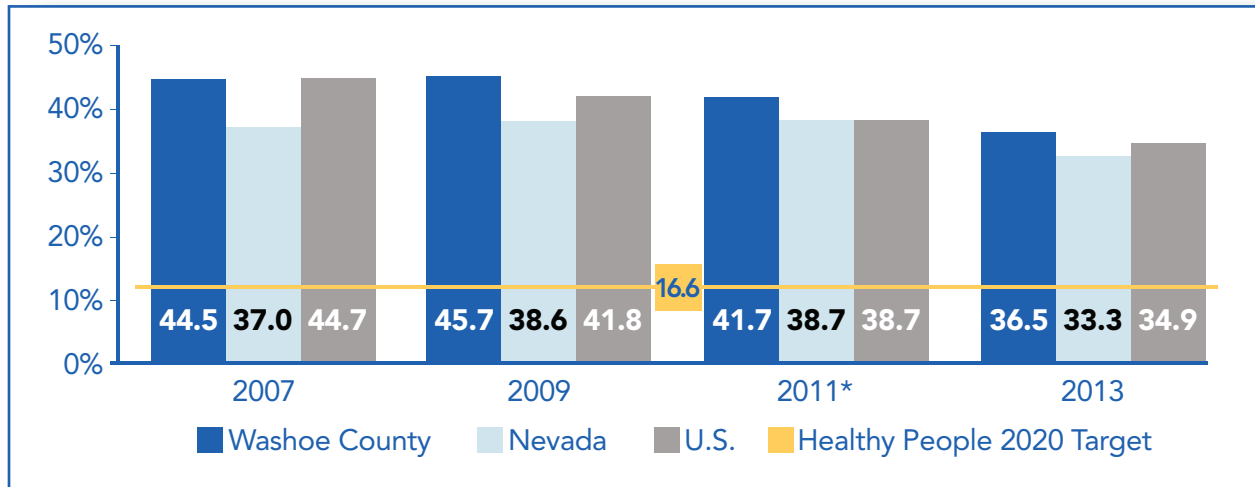


Data Source: Washoe County Youth Risk Behavioral Surveillance System (YRBSS); high school.

# Chronic Disease Risk Factors

## Youth Physical Activity and Nutrition

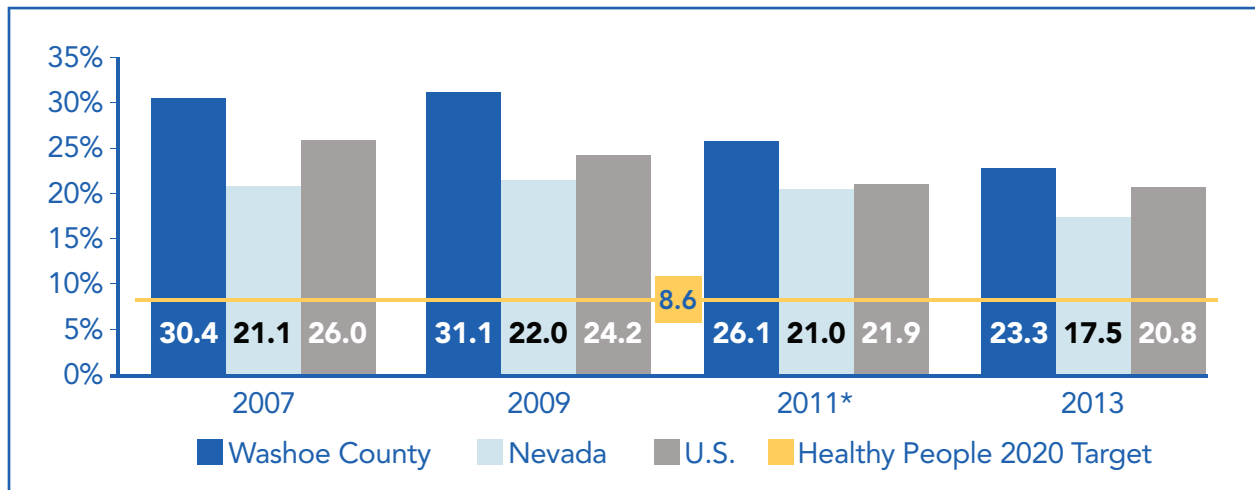
Prevalence of Alcohol Use Among High School Students in the Past 30 Days:  
Washoe County, Nevada and U.S., 2007 – 2013



\* Weighted data not available for Washoe County and Nevada for 2011. Therefore, take caution when interpreting as 2011 rates are not representative of Washoe County or Nevada.

Data Source: Washoe County Youth Risk Behavioral Surveillance System (YRBSS); high school.

Prevalence of Binge Drinking Among High School Students in the Past 30 Days:  
Washoe County, Nevada and U.S., 2007 – 2013



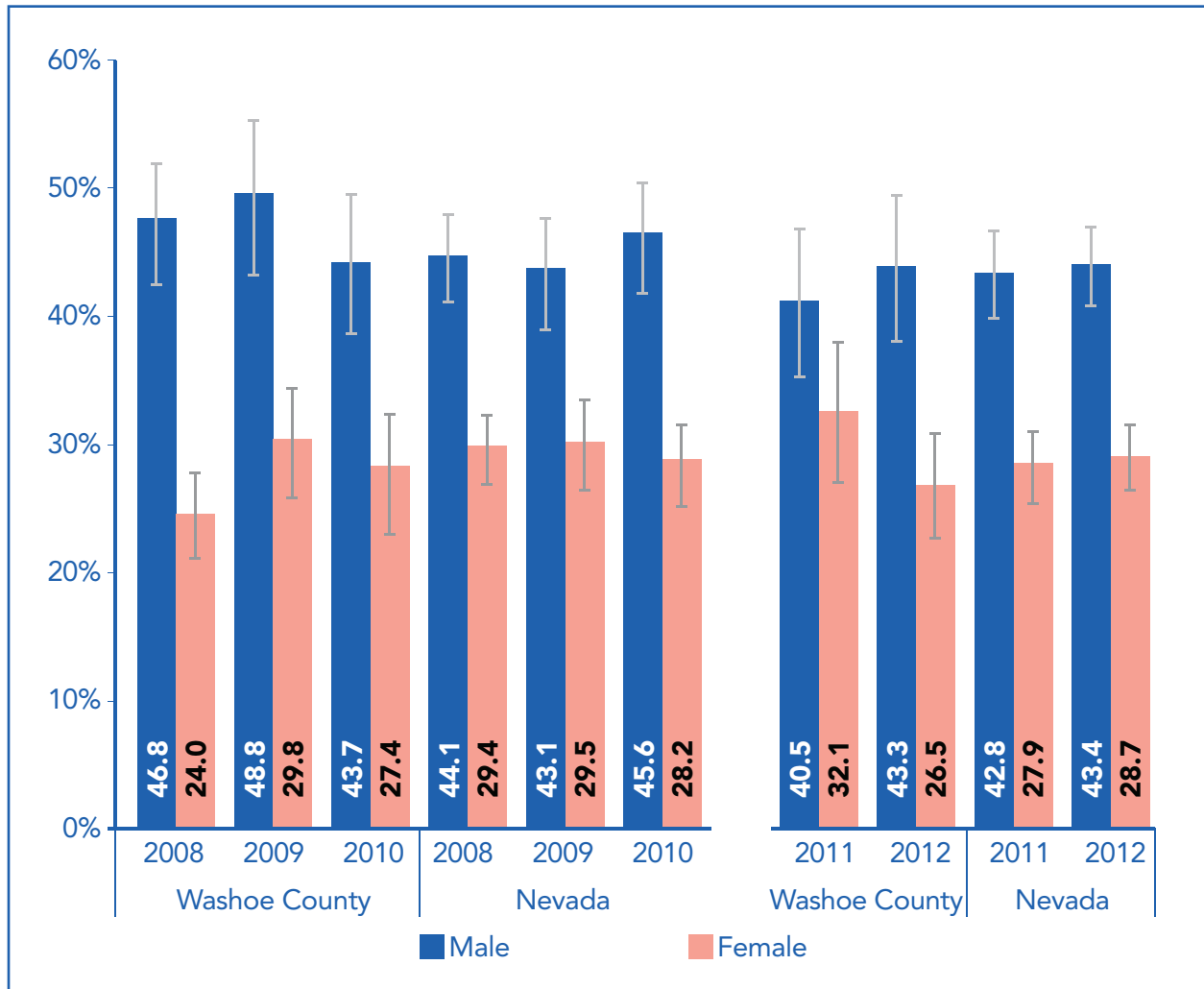
\* Weighted data not available for Washoe County and Nevada for 2011. Therefore, take caution when interpreting as 2011 rates are not representative of Washoe County or Nevada.

Data Source: Washoe County Youth Risk Behavioral Surveillance System (YRBSS); high school.

# Chronic Disease Risk Factors

## Adult Overweight and Obesity

Prevalence of Overweight Adults by Gender  
Washoe County and Nevada, 2008 – 2012



Data Source: BRFSS 2008-2012

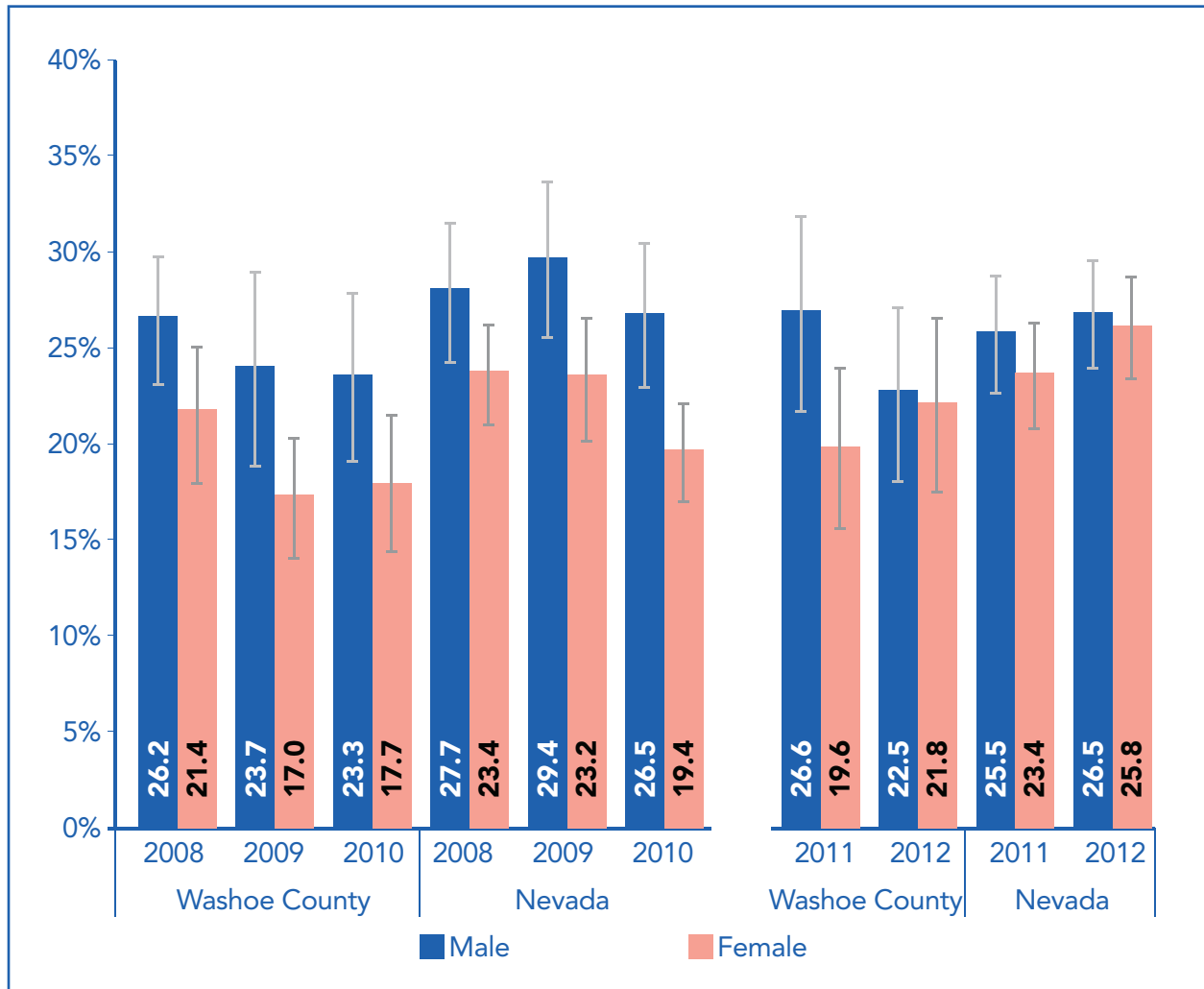
Note: In this report, trend data is presented with a space between 2010 and 2011 data as a reminder that data between these years cannot be compared. See Technical Notes for more information.

BRFSS calculates body mass index (BMI) by using self-reported weight and height. Adult males are more likely to be overweight (BMI 25.0-29.9) than females in Washoe County every year from 2008 to 2010 and 2012. Between 2008 and 2012, prevalence of overweight adults in Washoe County has remained fairly consistent and is similar to Nevada's prevalence across this five-year period.

# Chronic Disease Risk Factors

## Adult Overweight and Obesity

Prevalence of Obese Adults by Gender  
Washoe County and Nevada, 2008 – 2012



Data Source: BRFSS 2008-2012

Note: In this report, trend data is presented with a space between 2010 and 2011 data as a reminder that data between these years cannot be compared. See Technical Notes for more information.

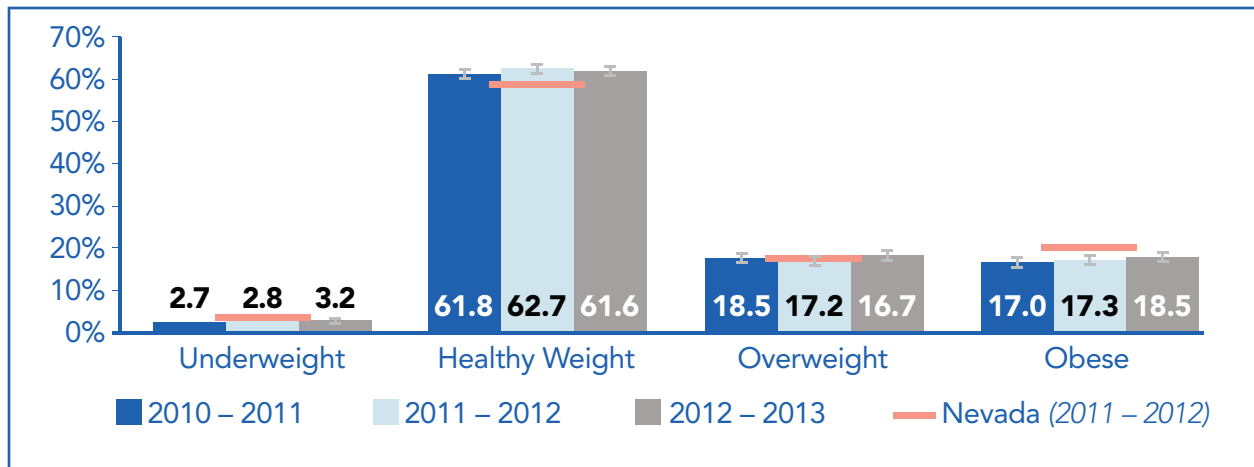
Proportion of obese (BMI  $\geq 30$ ) males and females in Washoe County and Nevada are similar throughout the timeframe of 2008 – 2012, except for a statistically significant difference between obese males and females in Nevada in 2010.

# Chronic Disease Risk Factors

## Youth Overweight and Obesity

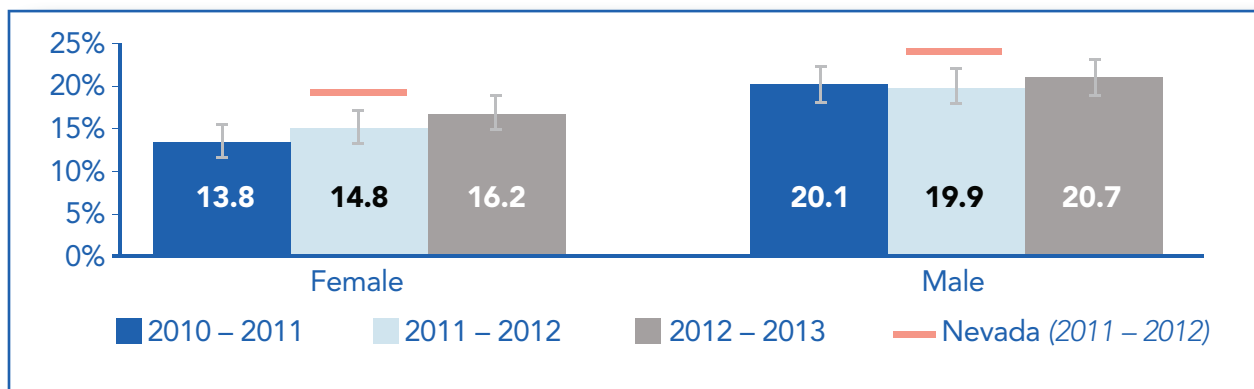
The following data on youth weight comes from height and weight data collected in the Washoe County School District (WCSD). Height and weight have been collected on samples of WCSD 4th, 7th, and 10th grade students since the 2007/2008 school year.

### Weight Categories of 4th, 7th, and 10th Grade Students in WCSD by School Year



In the 2011-2012 school year, Washoe County had a higher proportion of students who were at a healthy weight and a lower proportion of students who were obese than Nevada. These weight categories have been consistent in the last three school years, with no significant increase or decrease.

### Obesity Among 4th, 7th and 10th Grade Students in WCSD by Gender for the Past Three School Years

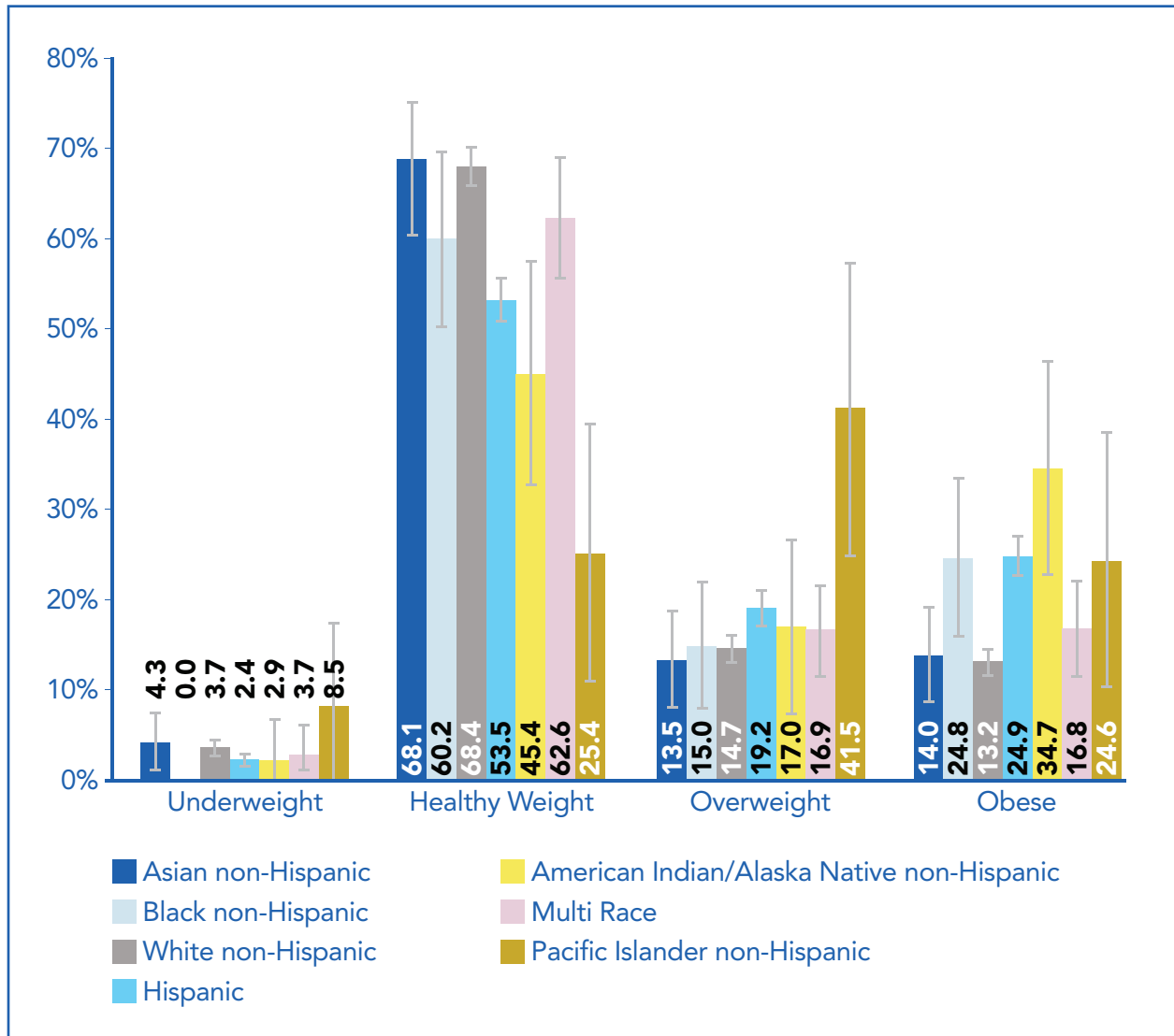


A higher proportion of male students are obese when compared to female students over the three school years from 2010-2013.

# Chronic Disease Risk Factors

## Youth Overweight and Obesity

Weight Categories of 4th, 7th, and 10th Grade Students in WCSD by Race/Ethnicity, 2012 – 2013

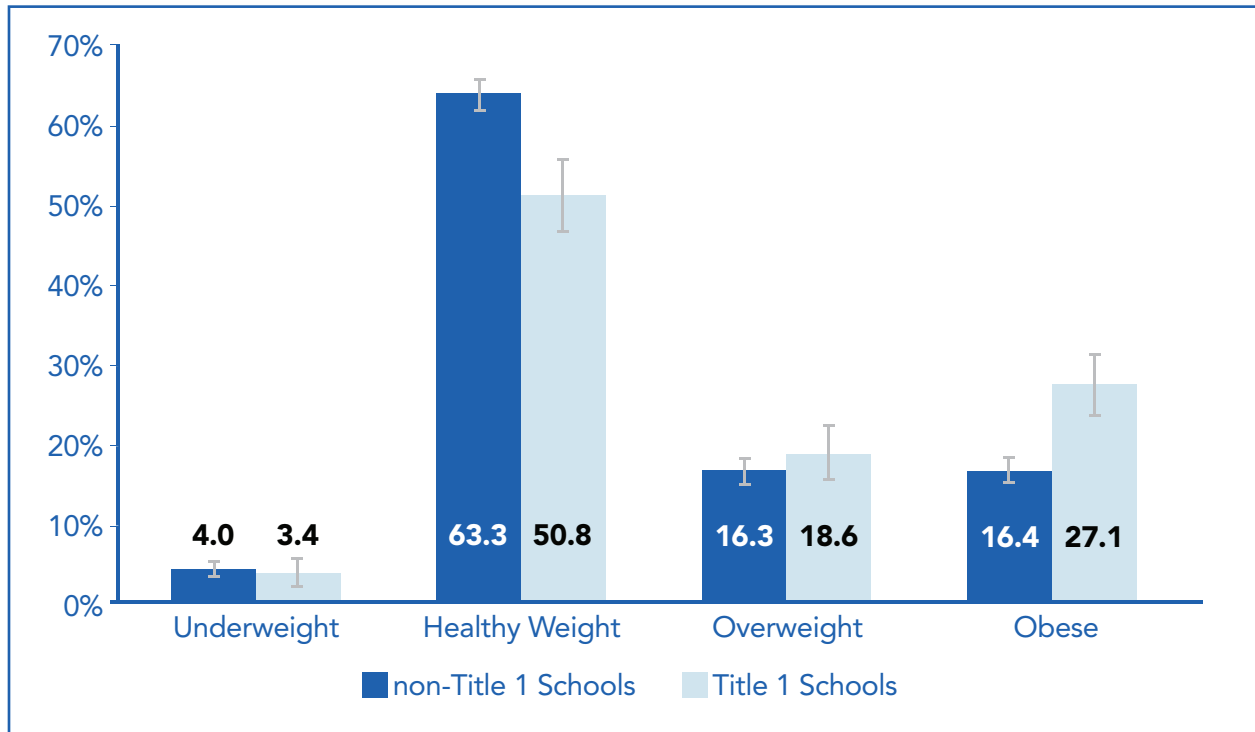


A lower proportion of Hispanic and American Indian/Alaska Native (AI/AN), and Pacific Islander students were a healthy weight when compared to Asian and White students. A higher proportion of Pacific Islanders were overweight when compared to every other race/ethnic group (except for AI/AN whose confidence intervals overlap with those of Pacific Islanders). A higher proportion of Hispanic students were overweight compared to White non-Hispanic students. A higher proportion of Hispanic and AI/AN students were obese when compared to White, Asian, and Multi-Race students.

# Chronic Disease Risk Factors

## Youth Overweight and Obesity

Weight Categories of 4th, 7th, and 10th Grade Students  
in WCSD by Title 1 Status, 2012 – 2013

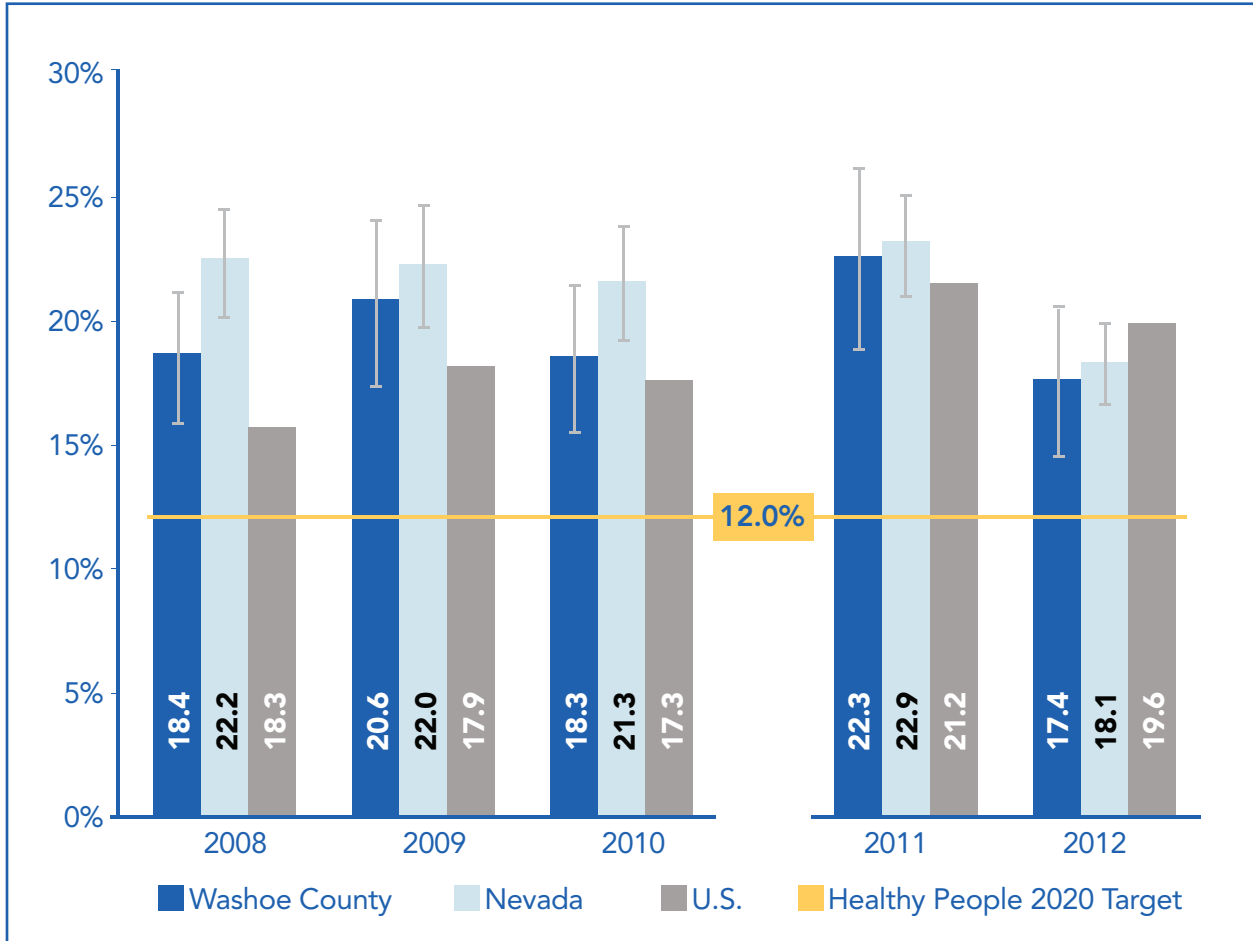


Title 1 schools are those that receive federal funds because they serve high numbers of economically disadvantaged children. Title 1 schools have a lower proportion of healthy weight students and a higher proportion of obese students compared to non-Title 1 schools.



# Chronic Disease Risk Factors

## Tobacco Use and Exposure Prevalence of Current Smokers Washoe County, Nevada and U.S., 2008 – 2012



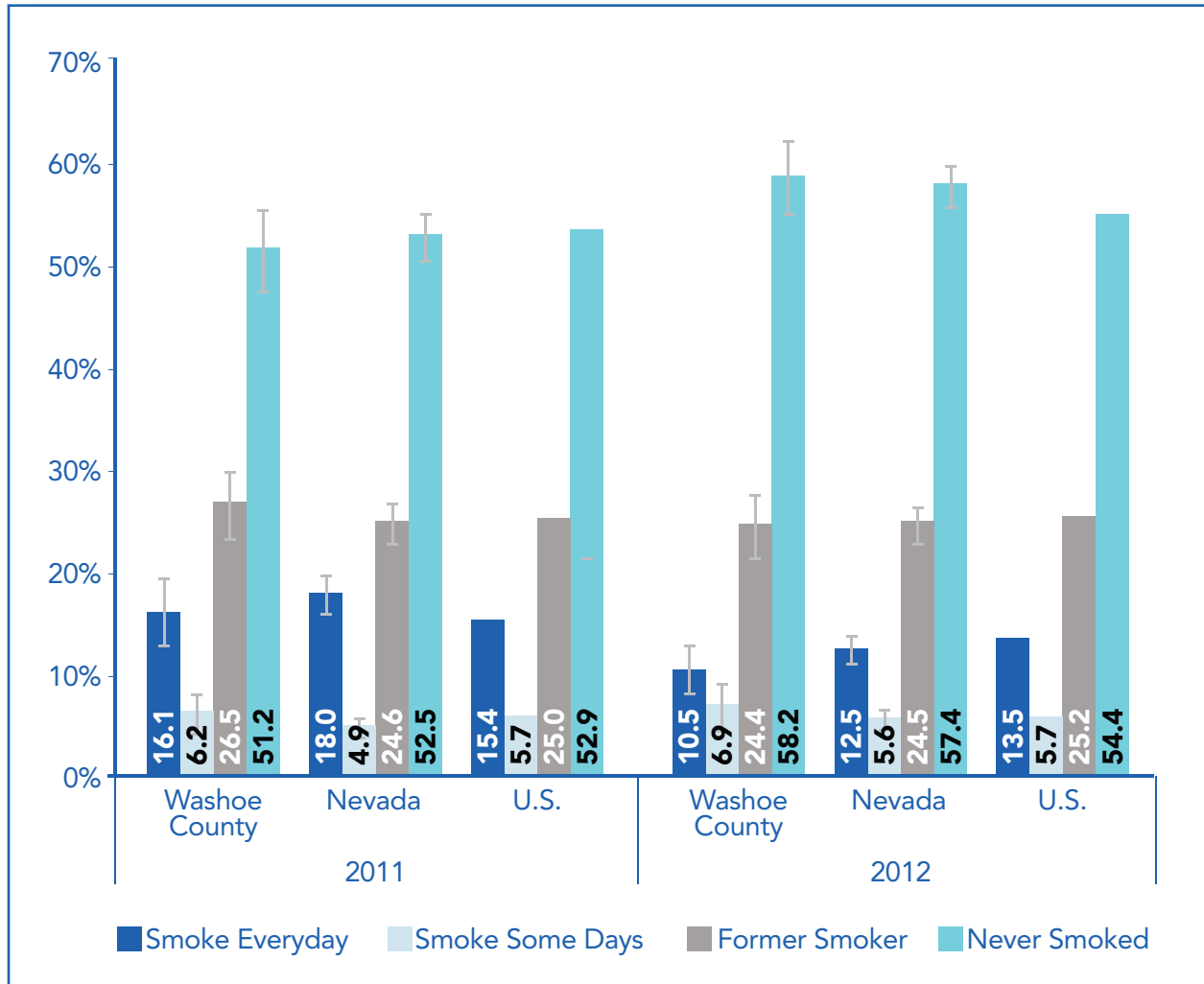
Data Source: BRFSS 2008-2012

Note: In this report, trend data is presented with a space between 2010 and 2011 data as a reminder that data between these years cannot be compared. More information on this can be found in the technical notes.

Tobacco use and exposure is the leading cause of death and disability in the United States.

# Chronic Disease Risk Factors

## Tobacco Use and Exposure Smoking Status of Adults Washoe County, Nevada and U.S., 2011 – 2012



Data Source: BRFSS 2011-2012. Confidence intervals not available for U.S. data.

There was a significant decrease between 2011 and 2012 for those in Washoe County that reported smoking every day. Rates in Washoe County are comparable to those in Nevada and the U.S. for the various smoking statuses.

# Chronic Disease Risk Factors

## Tobacco Use and Exposure

### Prevalence of Adult Smokers by Population Characteristics Washoe County, Nevada and U.S., 2012

Population Characteristics		2012 Current Smoker Prevalence						
		Washoe			Nevada			U.S.
		N	%	95% CI	N	%	95% CI	Median %
Total	Total	231	17.4	(14.3-20.4)	851	18.1	(16.5-19.7)	19.6
Gender	Female	121	14.7	(11.1-18.2)	381	16.4	(14.5-18.3)	17.4
	Male	110	20.1	(15.2-25.1)	470	19.9	(17.4-22.4)	21.6
Age	18-24	11	14.7	(4.6-24.8)	41	15.4	(10.2-20.5)	21.3
	25-34	29	26.5	(16.1-36.9)	113	19.6	(15.5-23.7)	26.5
	35-44	27	16.1	(8.9-23.4)	95	14.8	(11.3-18.3)	21.5
	45-54	45	17.5	(11.0-24.0)	163	21.2	(17.2-25.1)	22.1
	55-64	56	15.5	(10.6-20.3)	207	23.3	(19.2-27.5)	18.4
	65+	63	13.1	(9.0-17.1)	232	14.3	(11.7-16.8)	8.8
Race	White	167	18.1	(14.4-21.8)	606	20.9	(18.8-23.0)	19.2
	Black	6	22.1	(4.5-39.8)	52	22.7	(16.2-29.3)	22.7
	Hispanic	16	14.8	(6.7-22.9)	72	12.3	(9.2-15.5)	18.9
	Other	15	11.3	(3.9-18.8)	52	11.9	(7.1-16.6)	21.3
	MultiRacial	27	48.4	(31.9-65.0)	63	27.9	(18.2-37.6)	30.2
Income	Less than \$15,000	27	23.2	(12.2-34.1)	126	26.5	(20.6-32.4)	32.7
	\$15,000 - 24,999	61	30.8	(20.8-40.9)	212	24.8	(20.5-29.1)	27.3
	\$25,000 - 34,999	22	13.6	(6.3-20.9)	94	20.4	(15.3-25.4)	23.1
	\$35,000 - 49,999	41	26.1	(16.1-36.1)	128	21.1	(16.5-25.6)	20.1
	\$50,000+	57	10.2	(6.4-13.9)	209	12.9	(10.6-15.2)	12.9
Education	Less than HS	27	25.7	(13.8-37.5)	108	24.9	(19.5-30.3)	33.0
	HS or GED	78	23.1	(16.5-29.8)	315	22.8	(19.7-25.8)	24.0
	Some College or Technical	77	15.8	(11.2-20.4)	285	15.6	(13.3-18.0)	19.6
	College Graduate	49	8.0	(5.0-11.0)	143	10.1	(7.7-12.5)	8.2
Employment	Employed for wages	92	18.2	(13.2-23.2)			NA	
	Self-employed	17	19.2	(7.7-30.7)				
	Out of work > 1 year	16	22.1	(8.3-35.8)				
	Out of work < 1 year	7	18.1	(3.4-32.8)				
	Homemaker	10	11.8	(2.3-21.2)				
	Student	4	14.2	(0.0-30.3)				
	Retired	57	10.9	(7.4-14.4)				
	Unable to work	28	33.1	(19.6-46.7)				

# Chronic Disease Risk Factors

## Tobacco Use and Exposure

### Prevalence of Adult Smokers by Population Characteristics Washoe County, Nevada and U.S., 2012

Population Characteristics		2012 Current Smoker Prevalence (continued)					
		Washoe			Nevada		
		N	%	95% CI	N	%	95% CI
Marital Status	Married	93	12.0	(8.9-15.0)			NA
	Divorced	60	29.6	(19.8-39.3)			
	Widowed	32	19.5	(12.0-27.0)			
	Separated	5	29.1	(0.0-58.5)			
	Never married	34	21.5	(13.1-30.0)			
	Member of unmarried couple	7	18.9	(2.7-35.0)			
Veteran Status	Yes	37	17.2	(10.1-24.3)			NA
	No	194	17.4	(14.1-20.7)			
Health Insurance Status	Insured	162	13.3	(10.4-16.2)			NA
	Uninsured	68	30.9	(22.3-39.5)			
General Health Status	Excellent	23	8.3	(3.9-12.7)			NA
	Very good	58	15.3	(10.0-20.6)			
	Good	77	19.0	(13.1-24.9)			
	Fair	50	23.7	(14.9-32.5)			
	Poor	23	50.3	(31.4-69.1)			
Number of Bad Mental Health Days in Last 30 Days	0 days	118	15.1	(11.3-18.9)			NA
	1-5 days	39	14.5	(8.1-20.8)			
	6-15 days	32	33.6	(19.5-47.7)			
	16-25 days	8	13.3	(2.0-24.5)			
	26-30 days	30	33.9	(19.6-48.2)			
Activity Limited Due to Health Problems	Yes	111	26.7	(21.4-32.0)			NA
	No	243	15.0	(12.9-17.1)			

Data Source: BRFSS 2012. N=unweighted cell size, %=weighted %, CI=confidence interval, NA= Not available (if the unweighted sample size for the denominator was <50 or the CI half-width was > 10 for any cell). Take caution in interpreting cell size <50.

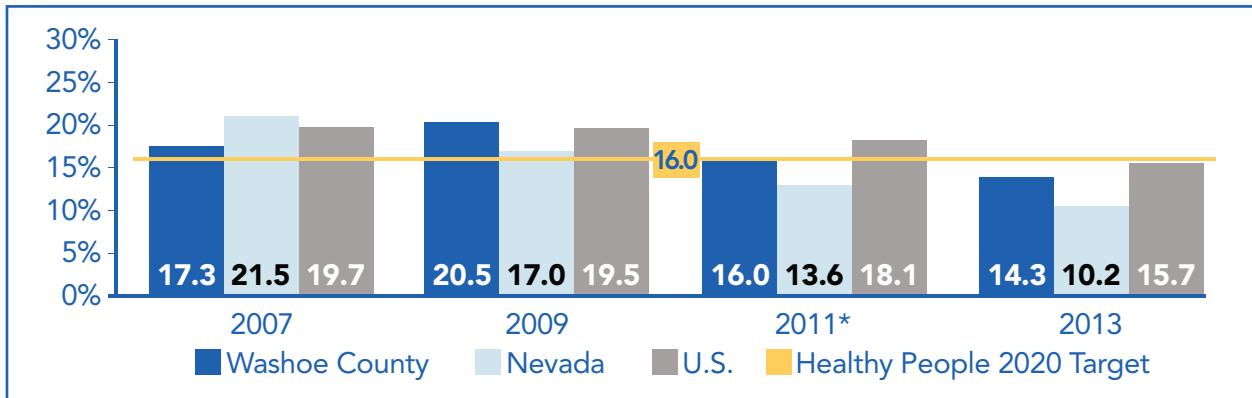
#### Key Findings in the prevalence of adult smokers by population characteristics.

2012 BRFSS shows an overall smoking rate of 17.4% for Washoe County. This rate is lower than Nevada's rate of 18.1%, and the national median rate of 19.6%. Both Washoe County and Nevada are far from the Center for Disease Control's (CDC) Healthy People 2020 target of 12%.

# Chronic Disease Risk Factors

## Youth Smoking Prevalence and Prevalence of Smokeless Tobacco and Other Tobacco Products

Prevalence of Smoking Among Youth: Washoe County, Nevada and U.S., 2007 – 2013

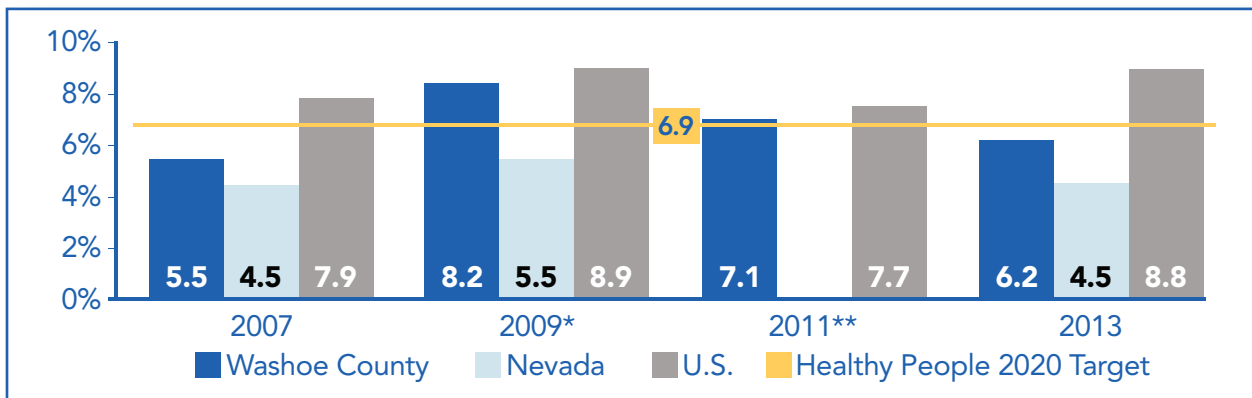


\* Weighted data not available for Washoe County and Nevada for 2011. Therefore, take caution when interpreting as 2011 percentages are not representative of Washoe County or Nevada and only represents this sample.

Data Source: Youth Risk Behavioral Surveillance System (YRBSS): High School.

In 2013, the prevalence of smoking among youth in Washoe County (14.3%) met and exceeded the Healthy People 2020 target (16.0%). Both Washoe County and Nevada show decreases in youth smoking from previous years.

## Prevalence of Smokeless Tobacco Use Among Youth: Washoe County, Nevada and U.S., 2007 – 2013



\* Weighted data not available for Washoe County for 2009 and 2011. \*\*Data not available for Nevada. Take caution when interpreting as 2009 and 2011 percentages are not representative of Washoe County's youth and only represents this sample.

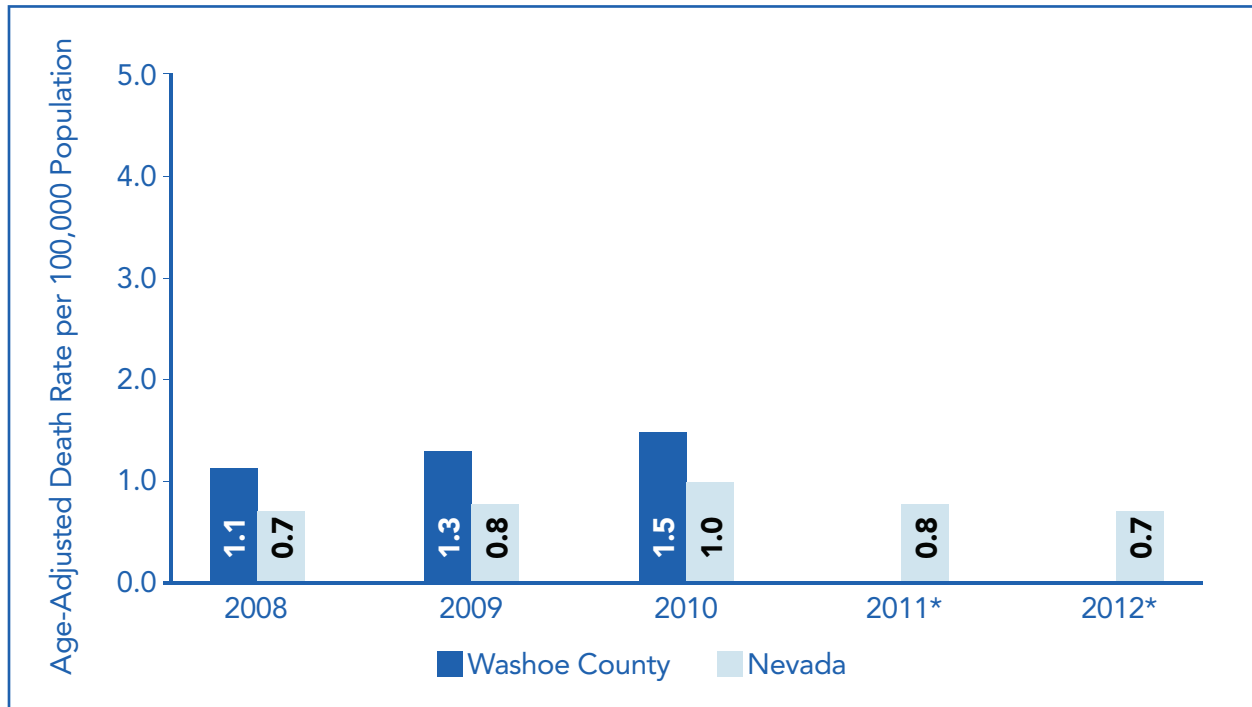
Data Source: Youth Risk Behavioral Surveillance System (YRBSS): High School.

Prevalence of smokeless tobacco use among youth in Nevada and Washoe County met and exceeded the Healthy People 2020 target of 6.9%.

# Specific Chronic Health Conditions

## Asthma

### Age-Adjusted Asthma Mortality Rates Washoe County and Nevada Residents, 2008 – 2012



\* Preliminary data used for 2011 and 2012. Therefore, counts are not final and are subject to change.

\* Rates not calculated for Washoe County because the number of asthma deaths was <5 in 2011 and 2012.

Data Source: Vital Statistics – Death Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

Mortality rates due to asthma among Washoe County residents were similar from 2008 to 2010. Washoe County's rate is also similar to Nevada's rate for the three years between 2008 and 2010.

#### Asthma related hospitalizations:

Approximately 6% of 40,804 hospitalizations among Washoe County residents in 2010 were asthma-related. Average total cost of hospitalizations that included an asthma-related diagnosis per hospitalization was approximately \$36,577 in 2010.\*

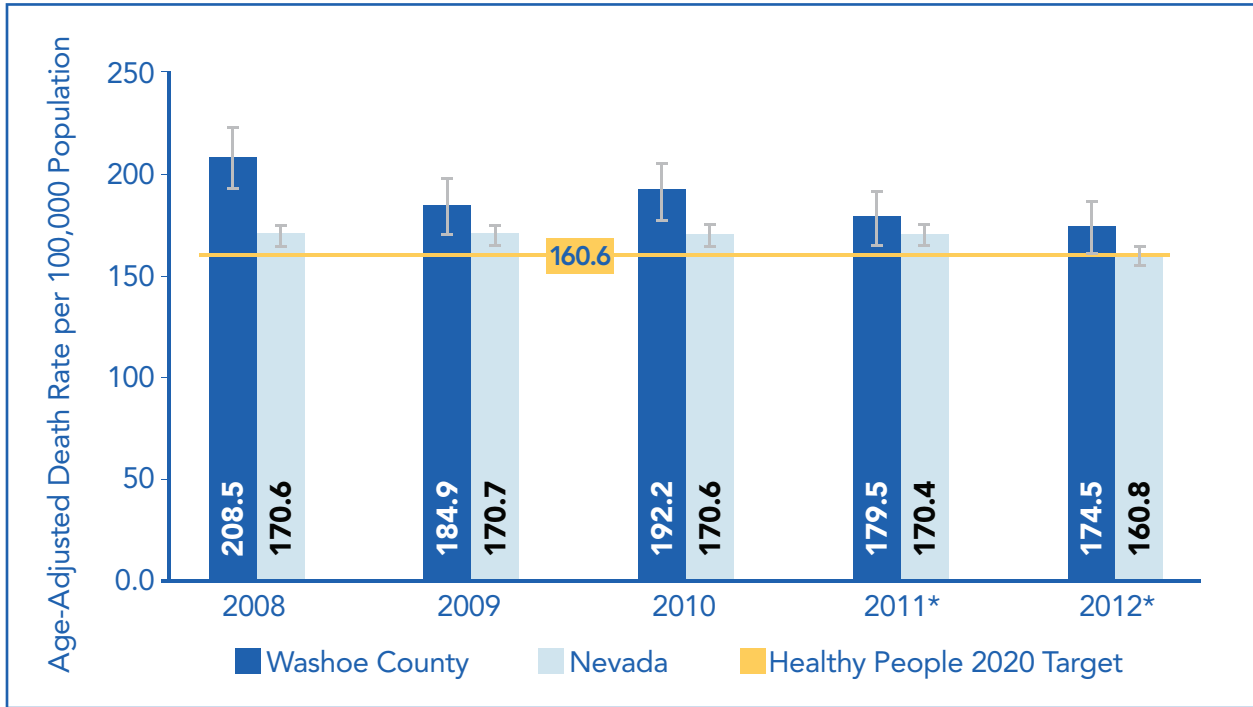
\* Take caution in interpreting hospitalization data as one single hospitalization has many diagnoses and cannot be attributed to one single cause. Also, take caution in interpreting costs, as the total cost for each hospitalization is not solely due to procedures relating to asthma.

Data Source: Hospital Discharge Data, 2010.

# Specific Chronic Health Conditions

## Cancer

Age-Adjusted Cancer Mortality Rates  
Washoe County and Nevada Residents, 2008 – 2012



\* Preliminary data used for 2011 and 2012. Therefore, counts are not final and are subject to change.

Data Source: Vital Statistics – Death Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

Age-Adjusted mortality rates from cancer in Washoe County had a statistically significant decrease of approximately 16% in a five-year period between 2008 and 2012. When comparing the rates with Nevada, cancer mortality rates in Washoe County were significantly higher.

# Specific Chronic Health Conditions

## Cancer

Age-Adjusted Cancer Mortality Rates per 100,000 Population, by Site  
Washoe County and Nevada Residents, 2010 – 2012

Cancer Site	2010		2011*		2012*	
	Washoe County	Nevada	Washoe County	Nevada	Washoe County	Nevada
Lip, Oral Cavity & Pharynx	3.5	2.3	3.0	2.3	3.7	2.3
Esophagus	5.0	4.6	4.4	5	7.6	4.3
Stomach	2.8	3.7	NA**	2.5	1.7	2.4
Colon, Rectum & Anus	19.1	17.0	14.4	16.8	15.8	17.6
Liver & Intrahepatic Bile Ducts	8.8	6.1	8.6	5.7	7.7	4.9
Pancreas	13.2	11.4	11.5	10.8	9.2	9.3
Larynx	NA**	0.9	NA**	1.0	1.4	1.3
Trachea, Bronchus, & Lung	46.7	46.4	45.2	48.7	41.5	45.8
Skin	3.8	2.6	4.8	3.8	3.8	2.9
Breast	11.7	22.9	14.3	23.4	13.6	21.6
Cervix Uteri	1.4	1.9	1.6	1.9	1.3	2.1
Corpus Uteri & Uterus, Part Unspecified	2.1	3.2	2.4	3.2	2.3	3.2
Ovary	4.1	6.8	3.9	7.1	3.1	7.0
Prostate	10.3	21.7	11.4	20.8	11.0	20.7
Kidney & Renal Pelvis	4.8	3.8	3.4	3.5	4.4	3.3
Bladder	5.8	6.0	5.7	5.1	4.2	4.6
Brain & Other Central Nervous System	4.8	4.1	5.0	4.5	4.6	4.1
Non-Hodgkin's Lymphoma	6.1	5.4	6.5	5.4	5.9	5.4
Leukemia	6.5	6.7	7.6	6.3	6.8	5.6
Multiple Myeloma & Immunoproliferative Neoplasms	2.7	2.8	5.8	3.5	3.6	2.5
Other and Unspecified Cancers	27.5	18.7	18.2	17.3	21.2	17.9

\* 2011 and 2012 data are not final and are subject to change.

\*\* Rates not calculated for fewer than 5 deaths.

Color coding of cells:

Dark = Washoe County rates for specific disease for the particular year is statistically significantly higher than NV rates;

Light = Washoe County rates for specific disease for the particular year is statistically significantly lower than NV rates;

Clear = No difference between Washoe County and NV rates for specific disease for the particular year.

Data Source: Vital Statistics – Death Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

Cancer of trachea, bronchus, and lung, cancer of colon, rectum, and anus, breast cancer, prostate cancer, and pancreas cancer were the top five types of cancer deaths among Washoe County residents from 2010 to 2012. Washoe County breast, ovary and prostate cancer rates have been constantly lower than Nevada from 2010-2012.



# Specific Chronic Health Conditions

## Cancer

5 Year Crude and Age-Adjusted Cancer Incidence Rate per 100,000 Population, by Cancer Type, Washoe County and Nevada Residents, 2006 – 2010

Cancer Type	Washoe County		Nevada	
	Crude Rate	Age Adj Rate	Crude Rate	Age Adj Rate
Prostate	71.3	72.3	64.3	63.1
Lung & Bronchus	63.5	69.2	63.3	65.4
Breast	68.0	69.0	57.1	57.0
Colorectal	40.6	43.4	40.8	42.3
All Other Sites	28.3	30.8	29.9	31.4
Urinary Bladder	20.1	22.5	20.7	21.9
Melanoma of the Skin	16.9	17.1	13.9	14.1
Non-Hodgkin Lymphoma	15.9	16.8	16.4	16.9
Kidney & Renal Pelvis	14.9	15.3	13.7	13.6
Thyroid Gland	14.6	14.2	13.9	13.7
Pancreas	12.2	13.2	11.0	11.3
Leukemia	9.5	10.5	12.2	12.8
Corpus Uteri & Uterus NOS	10.5	10.3	9.4	9.1
Lip, Oral Cavity & Pharynx	9.8	10.0	10.3	10.0
Liver & Intrahepatic Bile Ducts	8.0	8.1	6.4	6.4
Esophagus	6.7	6.8	5.1	5.2
Brain & Other Central Nervous System	6.5	6.6	5.7	5.6
Stomach	5.5	6.1	5.6	5.9
Ovary	5.9	5.9	5.3	5.2
Myeloma	4.5	4.7	4.0	4.1
Cervix Uteri	3.5	3.5	3.9	3.9
Testis	2.9	2.9	2.3	2.3
Connective, Subcutaneous, & Other Soft Tissues	2.3	2.4	2.6	2.7
Larynx	2.3	2.2	3.0	2.9
Hodgkin Lymphoma	1.9	1.9	2.3	2.3
Other Non-Epithelial Skin	1.0	1.1	1.5	1.6
<b>Total</b>	<b>447.2</b>	<b>466.7</b>	<b>424.6</b>	<b>430.9</b>

\* 2011 and 2012 data are not final and are subject to change.

Color coding of cells:

Dark = Washoe County rates for specific disease for the particular year is statistically significantly higher than NV rates;

Light = Washoe County rates for specific disease for the particular year is statistically significantly lower than NV rates;

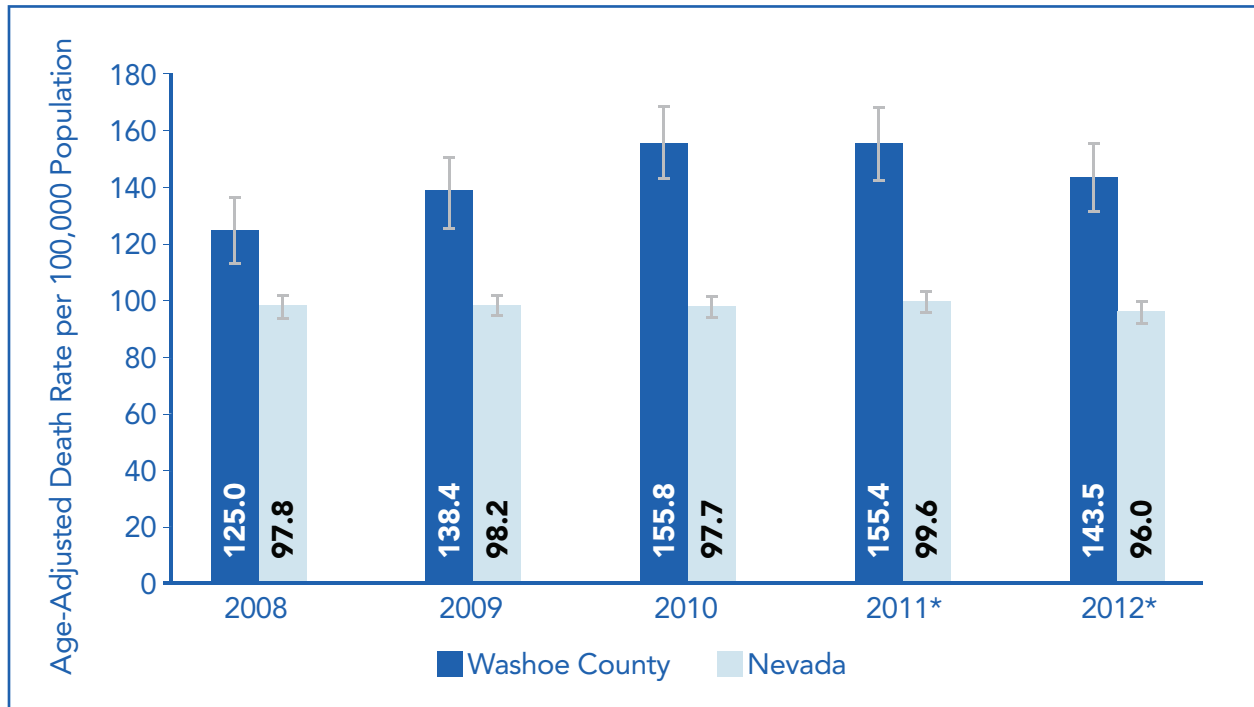
Clear = No difference between Washoe County and NV rates for specific disease for the particular year.

Data Source: NV Cancer Registry; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

Overall, approximately 467 new diagnoses of cancer per 100,000 Washoe County population were made between 2006 and 2010 (an average of 93 new diagnoses per 100,000 population). Prostate, lung and bronchus, breast, colorectal, and bladder cancers were the top five cancers in Washoe County from 2006 to 2010. When comparing to Nevada, Washoe County had higher five-year incidence rates of prostate, breast, melanoma, pancreas, liver and intrahepatic bile ducts, and esophagus cancer than Nevada. The five-year incidence rate of leukemia was lower in Washoe County than in Nevada from 2006 to 2010.

# Specific Chronic Health Conditions

## Coronary Heart Disease (CHD) Age-Adjusted CHD Mortality Rates Washoe County and Nevada Residents, 2008 – 2012



\* Preliminary data used for 2011 and 2012. Therefore, counts are not final and are subject to change.

Data Source: Vital Statistics – Death Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

Mortality rates due to coronary heart disease (CHD) among Washoe County residents increased approximately 15% from 2008 to 2012. When compared to Nevada, Washoe County's rate is significantly higher than Nevada's rate for all five years between 2008 and 2012.

### Coronary heart disease related hospitalizations:

Fourteen percent (14%) of 40,804 hospitalizations among Washoe County residents in 2010 were CHD-related. Average total cost of hospitalizations that included a CHD-related diagnosis per hospitalization was approximately \$51,789 in 2010. \*

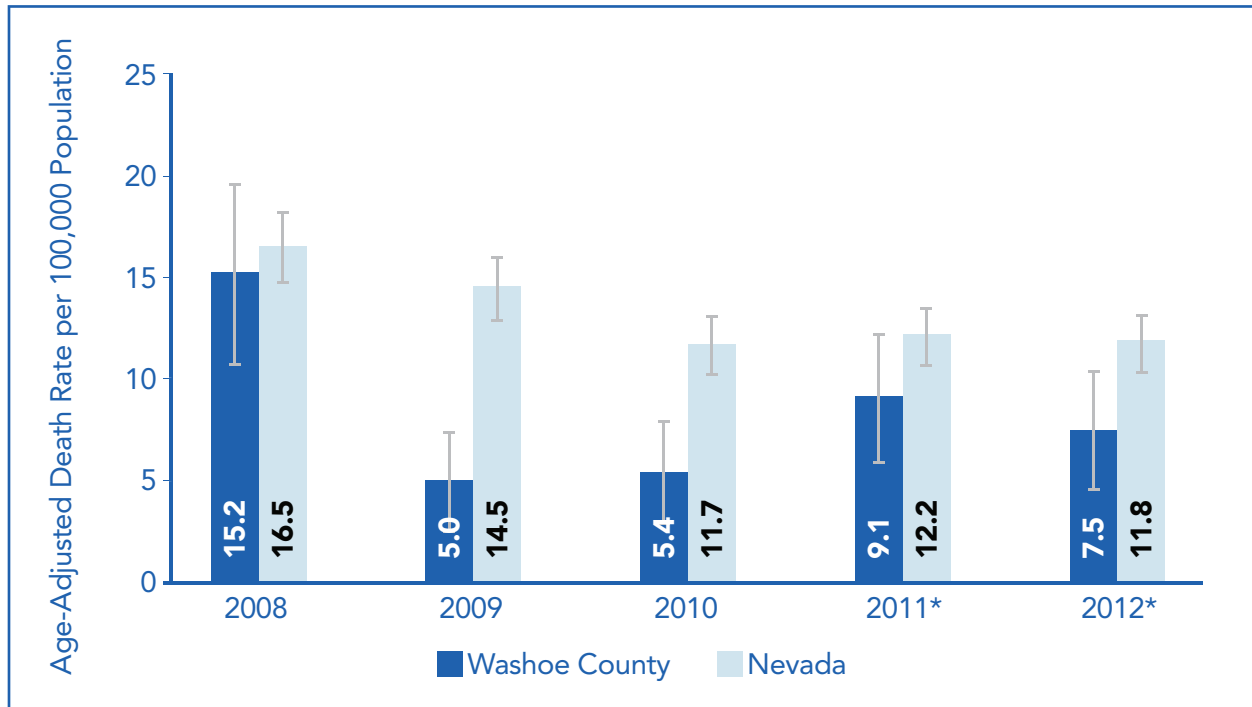
\* Take caution in interpreting hospitalization data as one single hospitalization has many diagnoses and cannot be attributed to one single cause. Also, take caution in interpreting costs, as the total cost for each hospitalization is not solely due to procedures relating to CHD.

Data Source: Hospital Discharge Data, 2010.

# Specific Chronic Health Conditions

## Heart Failure

Age-Adjusted Heart Failure Mortality Rates  
Washoe County and Nevada Residents, 2008 – 2012



\* Preliminary data used for 2011 and 2012. Therefore, counts are not final and are subject to change

Data Source: Vital Statistics – Death Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

Mortality rates due to heart failure (HF) among Washoe County residents decreased approximately 51% from 2008 to 2012. The fluctuations in Washoe County's rates are due to small numbers of deaths caused by heart failure each year. When compared to Nevada, Washoe County's rates are significantly lower than Nevada's rates during the four year period from 2009 to 2012.

### Heart failure related hospitalizations:

Nine percent of 40,804 hospitalizations among Washoe County residents in 2010 were HF-related. Average total cost of hospitalizations that included a HF-related diagnosis per hospitalization was approximately \$56,771 in 2010.\*

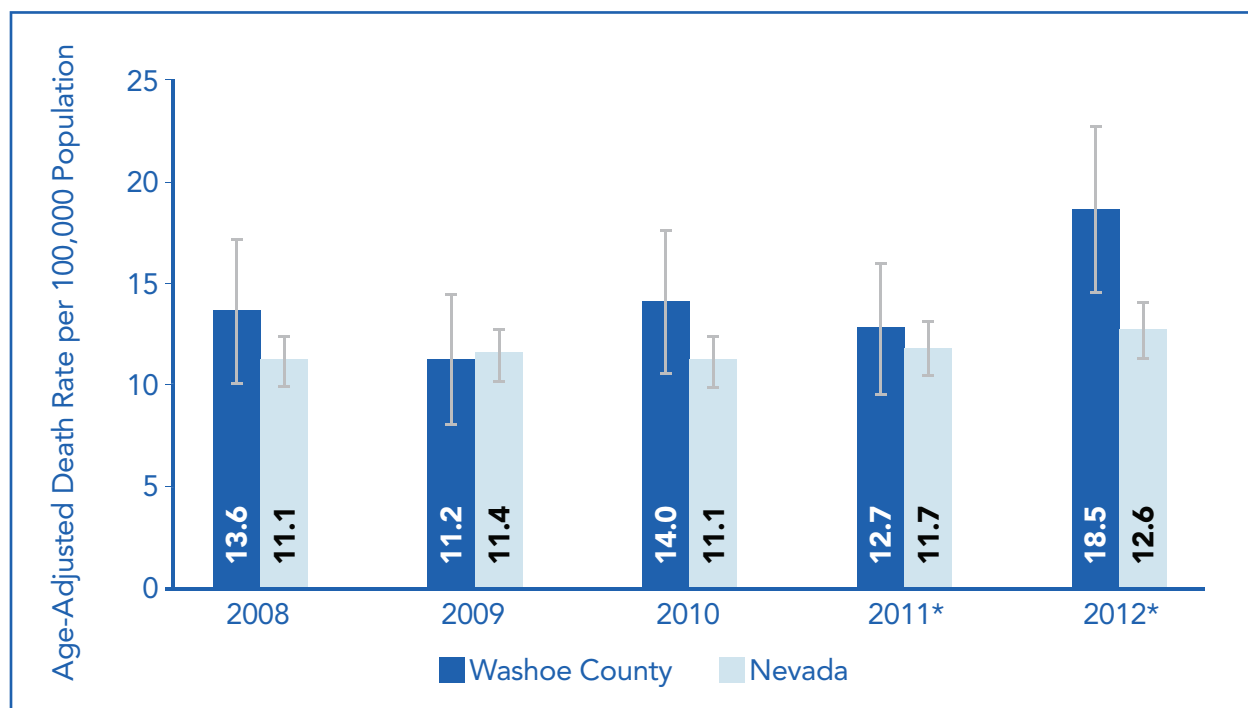
\* Take caution in interpreting hospitalization data as one single hospitalization has many diagnoses and cannot be attributed to one single cause. Also, take caution in interpreting costs, as the total cost for each hospitalization is not solely due to procedures relating to HF.

Data Source: Hospital Discharge Data, 2010.

# Specific Chronic Health Conditions

## Chronic Liver Diseases

Age-Adjusted Chronic Liver Diseases and Cirrhosis Mortality Rates  
Washoe County and Nevada Residents, 2008 – 2012



\* Preliminary data used for 2011 and 2012. Therefore, counts are not final and are subject to change.

Data Source: Vital Statistics – Death Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

Mortality rates from chronic liver diseases and cirrhosis in Washoe County increased by 36% from 2008 to 2012, but the increase is not statistically significant. When compared to Nevada, Washoe County's rate was significantly higher in 2012.

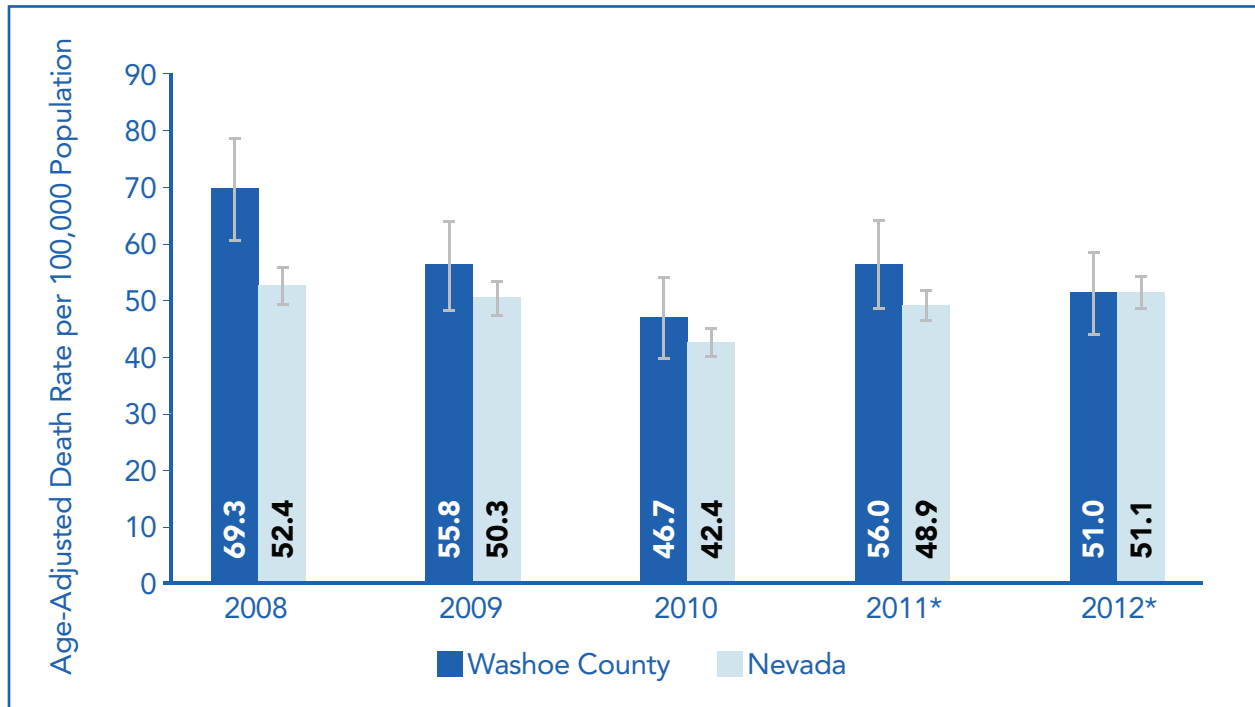
Data Source: Hospital Discharge Data, 2010.

# Specific Chronic Health Conditions

## Chronic Obstructive Pulmonary Disease (COPD)

### Age-Adjusted COPD Mortality Rates

Washoe County and Nevada Residents, 2008 – 2012



\* Preliminary data used for 2011 and 2012. Therefore, counts are not final and are subject to change.

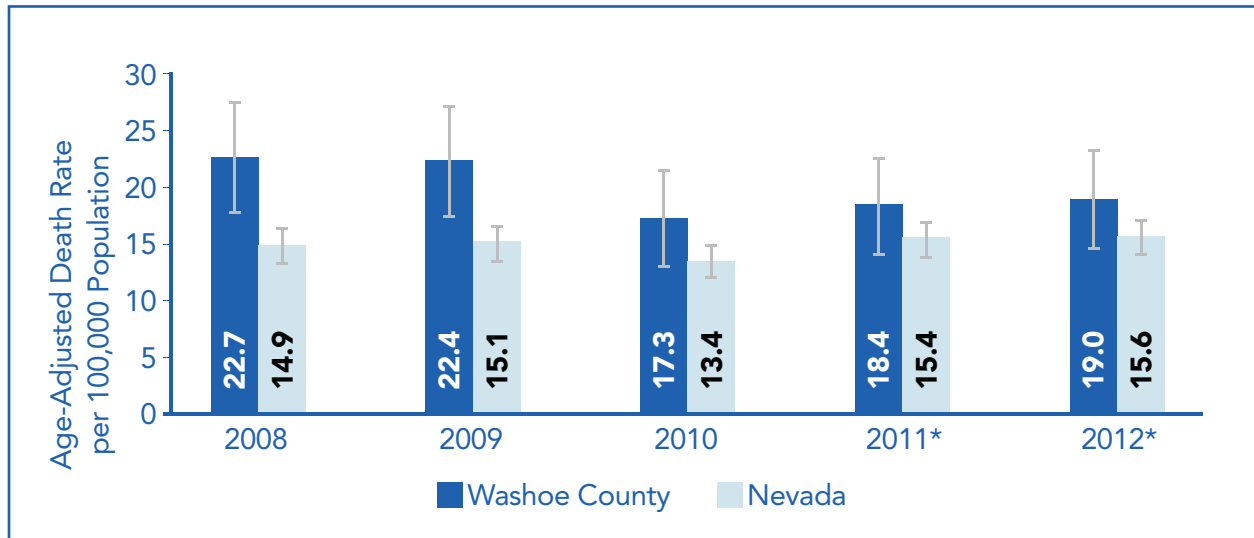
Data Source: Vital Statistics – Death Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

Mortality rates due to Chronic Obstructive Pulmonary Disease (COPD) in Washoe County decreased approximately 26% from 2008 to 2012. Washoe County's rates were similar to Nevada's rates except in 2008 and 2011 when Washoe County's rates were significantly higher.

# Specific Chronic Health Conditions

## Diabetes

### Age-Adjusted Diabetes Mortality Rates Washoe County and Nevada Residents, 2008 – 2012



\* Preliminary data used for 2011 and 2012. Therefore, counts are not final and are subject to change.

Data Source: Vital Statistics – Death Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

There have been no significant changes in diabetes mortality rates in Washoe County from 2008 to 2012. However, Washoe County had significantly higher rates than Nevada in 2008 and 2009.

#### Diabetes related hospitalizations:

Approximately 16% of 40,804 hospitalizations among Washoe County residents in 2010 were diabetes-related. Average total cost of hospitalization for a diabetes-related diagnosis per hospitalization was approximately \$47,142 in 2010.\*

\* Take caution in interpreting hospitalization data as one single hospitalization has many diagnoses and cannot be attributed to one single cause. Also, take caution in interpreting costs, as the total cost for each hospitalization is not solely due to procedures relating to diabetes.

Data Source: Hospital Discharge Data, 2010.

#### Lower extremity amputations among persons with diabetes:

Approximately 1.2% of diabetes-related hospitalizations among Washoe County residents involved amputation of a lower extremity compared to 0.04% among Nevada residents in 2010.

Data Source: Hospital Discharge Data, 2010.

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# Specific Chronic Health Conditions

## Hip Fracture and Vertebral Fracture

### **Hip Fracture Related Hospitalizations:**

Approximately 1% of 40,804 hospitalizations among Washoe County residents in 2010 were hip fracture related. Approximately 88% of hip fracture related hospitalizations were among people 55 years of age and older.\*

### **Vertebral Fracture Related Hospitalizations:**

Approximately 0.6% of 40,804 hospitalizations among Washoe County residents in 2010 were vertebral fracture-related. Approximately 66% of vertebral fracture-related hospitalizations were among people 55 years of age and older.\*

\* Take caution in interpreting hospitalization data as one single hospitalization has many diagnoses and cannot be attributed to one single cause.

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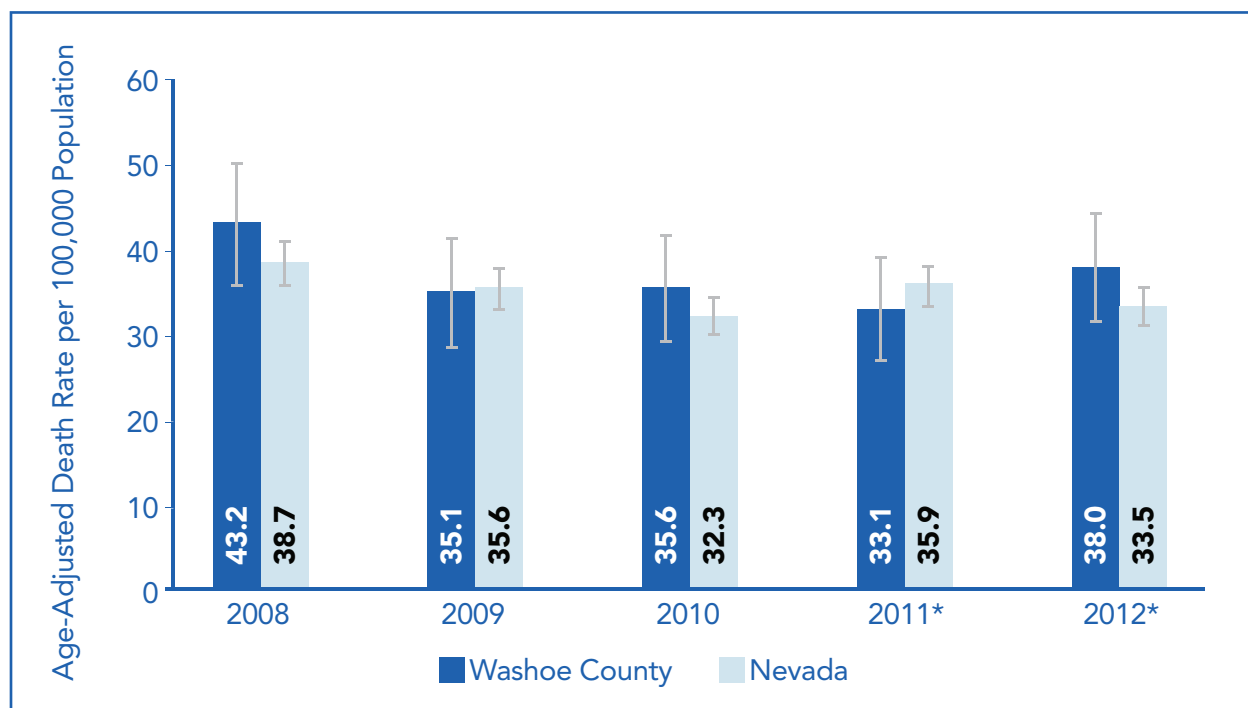
*Data Source: Hospital Discharge Data, 2010.*

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# Specific Chronic Health Conditions

## Stroke

Age-Adjusted Stroke Mortality Rates  
Washoe County and Nevada Residents, 2008 – 2012



\* Preliminary data used for 2011 and 2012. Therefore, counts are not final and are subject to change

Data Source: Vital Statistics – Death Certificates; 2000 U.S. Census; Nevada Division of Public and Behavioral Health.

Mortality rates due to stroke among Washoe County residents have been consistent from 2008 to 2012. When compared to Nevada, Washoe County’s rates are similar to Nevada’s rates for all five years between 2008 and 2012.

### Stroke-related hospitalizations:

Six percent of 40,804 hospitalizations among Washoe County residents in 2010 were stroke-related. Average total cost of hospitalizations that included a stroke-related diagnosis per hospitalization was approximately \$53,103 in 2010.\*

\* Take caution in interpreting hospitalization data as one single hospitalization has many diagnoses and cannot be attributed to one single cause. Also, take caution in interpreting costs, as the total cost for each hospitalization is not solely due to procedures relating to stroke.

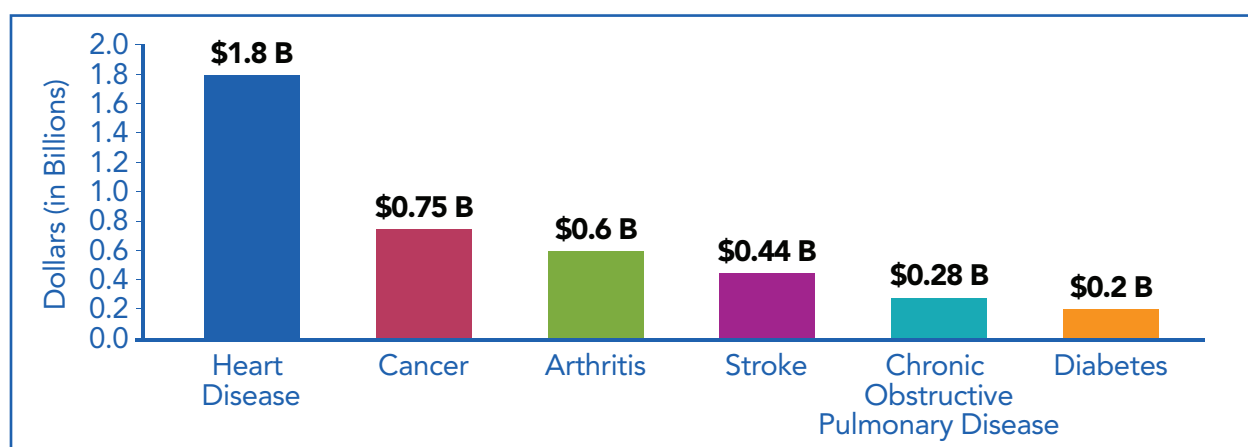
Data Source: Hospital Discharge Data, 2010.



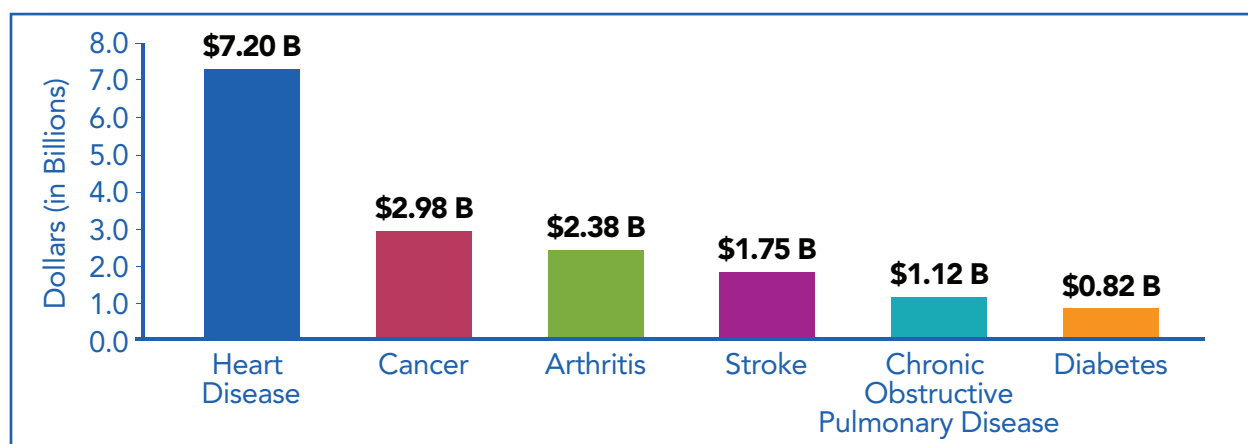
## Economics of Chronic Disease

According to the Centers for Disease Control and Prevention, more than 75% of health care costs are due to chronic conditions, and chronic diseases cause seven of every ten deaths in the United States. While Washoe County data is not available for costs of chronic diseases, the graphs below, from the report *Burden of Chronic Disease in Nevada*, depict the costs of specific chronic diseases in Nevada.

Estimated Direct Costs (in Billions) per Chronic Disease in Nevada, 2011  
Total Costs = \$4.063 Billion



Indirect Costs (in Billions) per Chronic Disease in Nevada, 2011  
Total Costs = \$16.25 Billion



Data Source: Whitehill, J., Flores, M., & Mburia-Mwalili, A. (2013). *The Burden of Chronic Disease in Nevada - 2013. Chronic Disease Prevention and Health Promotion*. Carson City: Nevada Division of Public and Behavioral Health.

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## Policy, Systems, and Environmental Indicators

Chronic diseases are common and costly health problems. They are also among the most preventable. Three health risk behaviors can be linked to the majority of chronic diseases: lack of physical activity, poor nutrition, and tobacco use. Interventions to impact these behaviors have moved beyond education and are focused on policies, systems, and environments enabling people to make healthy choices.

- Policy interventions may be a law, ordinance, resolution, mandate, regulation or rule that would impact health. For example a workplace can provide a flexible schedule during work hours for physical activity, or decide to only hold meetings in smoke-free locations.
- A systems intervention is a change that impacts all elements of an organization, institution, or system. For example a school district implementing a wellness policy would impact all schools in a district, or a city deciding to make their parks tobacco-free would impact all parks in the city.
- Environmental strategies involve those involving physical or material changes to the economic, social, or physical environment. This can include incorporating sidewalks, bike paths and recreation areas into community designs, or posting no-smoking signs near entrances to businesses.

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**“It is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change.”**

*~ Institute of Medicine, 2000*

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The following examples describe efforts in our community that impact policy, systems, and environmental strategies. This is not intended to be a complete list of community efforts.

# Policy, Systems, and Environmental Indicators

## Nutrition

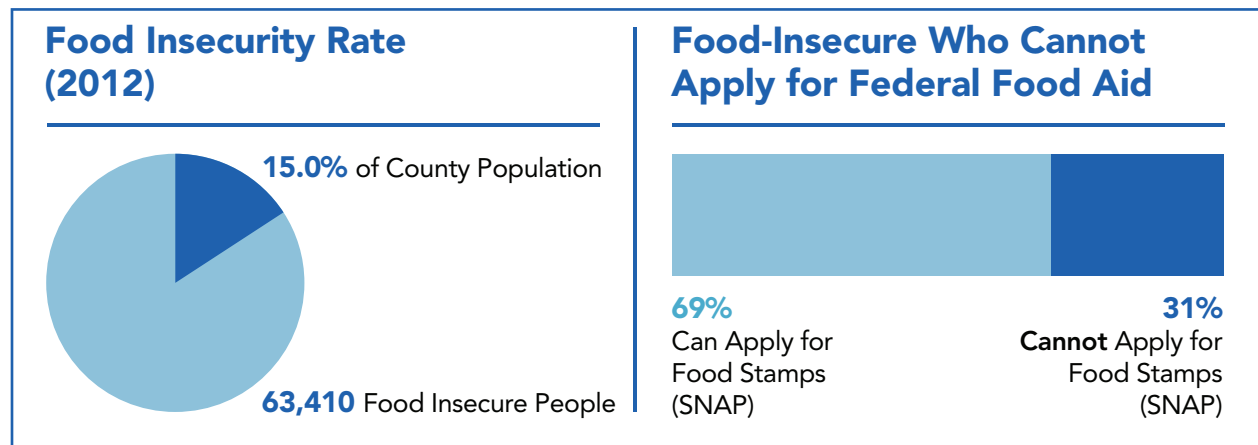
**Community and School Gardens:** There are six documented community gardens and 14 school gardens in Washoe County. One of the six community gardens has a formal rental scheme. Farm to School Programs are increasing in Washoe County and incorporate various aspects, including procurement of local foods for schools, education related to food and nutrition, and school gardens.\*

**Local Food Producers:** Farmers Markets are held at nine sites in the Reno/Sparks area. There are six separate Community Supported Agriculture providers, defined as locally grown or raised food provided by advance subscription. There are approximately 115 local growers supplying the Washoe County area.\*

**Food Deserts:** Food deserts are defined as neighborhoods and communities that have limited access to affordable and nutritious foods. Lack of transportation further impacts access to foods. In Washoe County there are approximately 64 grocery stores, 136 convenience stores, and one food cooperative. Only 29% of Washoe County zip codes had a “healthy food outlet,” defined as a grocery store, produce stand, or Farmers Market compared to the federal recommendation of 50%.\*

\*According to the Access to Healthy Food in Washoe County document

### Food Insecurity



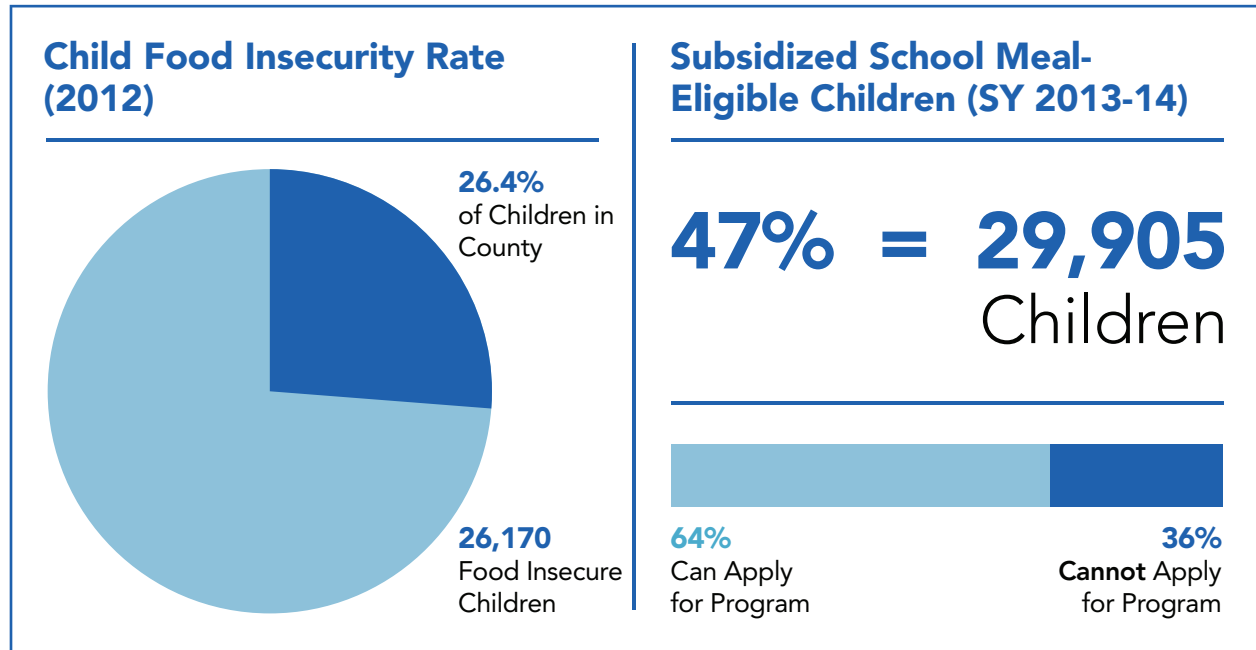
Data Source: Food Bank of Northern Nevada. Food insecurity for Washoe County 2012 data.

In Washoe in 2012, about 15% of residents were food-insecure. Of these food-insecure residents, 69% are eligible to apply for SNAP, leaving 31% who don't have enough food for an active and healthy life, but who also are not eligible to apply for the USDA's flagship nutrition program. To qualify for SNAP benefits applicants must be 130% of the Federal Poverty Level, which is an income of less than \$2552 a month for a family of four.

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### Food Insecurity



Data Source: Food Bank of Northern Nevada. Food insecurity for Washoe County 2012 data.

Households with children are more likely to face food insecurity – more than 26% of children in the Washoe County are food-insecure. Of these food-insecure children, 64% are likely eligible for federal nutrition assistance (185% FPL – e.g. reduced-price school meals). The percentage of children in Washoe County schools determined eligible for free or reduced-price school meals is 47%.

Obesity and hunger can go hand-in-hand, because foods high in fat, sugar, and empty calories are readily available, inexpensive, and meet the need to feel full. According to a 2011 report by the Food Research and Action Center, evidence shows that among food insecure populations, women are at the highest risk for overweight/obesity. Although the research for children is not as consistent as it is for women, several studies find a significant association between food insecurity and overweight/obesity among children.

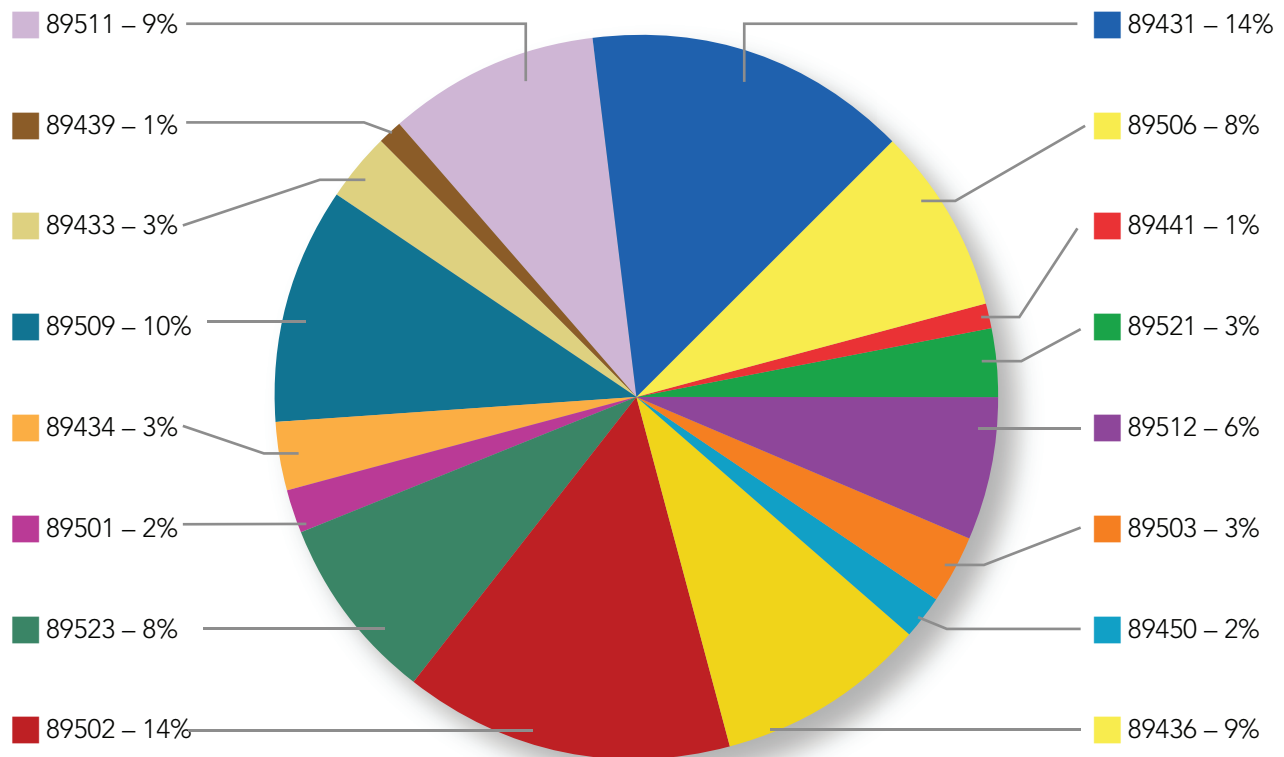
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This graph shows the percent of the total number of grocery stores by zip code. For the purposes of this graph, "grocery stores" include traditional supermarkets, convenience stores, bakeries, pharmacies (i.e. CVS), Dollar Stores, butchers, and specialty stores (i.e. international markets). Zip codes excluded in this graph had no grocery stores (89405, 89508, 89510, 89451, 89704, and 89519).

The zip codes with the lowest average income per household (under \$35,000) are 89501, 89512, and 89502. The zip codes with the highest average incomes (over \$80,000) are 89436, 89511 and 89519. The zip code 89501 has the lowest income and only 2% the area's grocery stores. In the higher income zip codes there are more grocery stores, except for the 89519 zip code which is the highest income and has zero grocery stores.

Percentage of Grocery Stores per Zip Code in Washoe County



*Adapted from data compiled by Morgan Hines (2014). Food and Tobacco Policies in Washoe County – internship in partnership with the Washoe County Health District Chronic Disease Prevention Program 2014.*

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## Physical Activity

**Active transportation:** Active transportation refers to activities like walking, bicycling, and even taking the bus since most bus travel requires walking or biking to the bus stop. When transportation infrastructure is designed to accommodate and encourage active transportation it can have positive impacts on the health of a community. This benefit to public health can be seen in increased activity levels, decreased motor vehicle accidents, and improved air quality.

**Shared use paths:** Shared use paths are facilities which are placed completely separated from the roadway for exclusive use of pedestrians and bicyclists.

**Bicycle lanes:** Bicycle lanes (bike lanes) are areas on the paved roadway that are marked for the semi-exclusive use of bicyclists. Having designated bike lanes improves safety for both cyclists and motorists. Cyclists are more likely to bike when there are bike lanes. Bike lanes also provide a barrier between cars and the sidewalk, which may make for a more pleasant walking experience for pedestrians.

**Shared bikeways:** Shared bikeways indicate that bicycles share the vehicle travel lane and are marked with signs and pavement markings designating the shared travel way.

**Bicycle facilities:** According to the 2011 Reno Sparks Bicycle & Pedestrian Plan: "The Reno Sparks area has an approximate total of 205 miles of bikeway facilities which break down to 43 miles of shared use paths, 148 miles of bicycle lanes, and 14 miles of shared bikeways. The information gathered from public outreach efforts demonstrate that there is a lack of connectivity through the central portions of the cities of Reno and Sparks." The Bicycle and Pedestrian Master Plan proposes adding an additional 89.3 miles of bike lanes.

**Pedestrian facilities:** According to the 2011 Reno Sparks Bicycle & Pedestrian Plan: "Sidewalks in the Reno and Sparks areas vary greatly in condition with newer areas of construction providing good sidewalk conditions with few obstructions whereas older sections of the area generally have high concentrations of obstruction with segments of deteriorated sidewalks. Connectivity in the Reno Sparks area is generally good for pedestrians."

The two tables on the following page provide information on transportation in Washoe County and were previously published in the 2011 Reno Sparks Bicycle & Pedestrian Plan:

# Policy, Systems, and Environmental Indicators

## Physical Activity

### Journey-to-Work Mode Split for Washoe County

Mode (Home-Based Work Trips)	1990	2000	2009
Drive Alone	74.4%	75.3%	76.7%
Carpool	13.5%	13.8%	11.0%
Public Transit	3.7%	3.2%	3.2%
Bicycling	0.7%	0.7%	0.6%
Walking	4.2%	3.2%	2.8%
Other Means	1.1%	0.9%	1.6%
Work at Home	2.4%	2.9%	3.9%

Data Source: 1990, 2000 and 2009 U.S. Census.

### Bicycle & Pedestrian Statistics for Reno-Sparks and Other Comparable Regions

Location	Population <sup>1</sup>	2009 Bicycle to Work Percentage <sup>2</sup>	2009 Walk to Work Percentage <sup>2</sup>
Fresno, California	494,655	0.7%	2.0%
Redding, California	89,861	0.7%	1.7%
Sacramento, California	466,488	2.2%	3.3%
San Francisco, California	805,235	2.8%	10.0%
Boulder, Colorado	97,385	10.8%	9.4%
Denver, Colorado	600,158	1.8%	4.1%
Boise, Idaho	205,671	4.2%	2.6%
Henderson, Nevada	257,729	0.2%	1.4%
Las Vegas, Nevada	583,756	0.4%	2.0%
Reno-Sparks, Nevada	367,693	0.6%	2.8%
Portland, Oregon	583,776	5.5%	5.2%
Austin, Texas	790,390	1.2%	2.0%
Salt Lake City, Utah	186,440	2.2%	5.1%
Spokane, Washington	208,916	1.2%	3.2%

<sup>1</sup> Population based on 2010 U.S. Census.

<sup>2</sup> The U.S. Census Bureau's American Community Survey collects population and housing information every year for a cross-section of the population. The American Community Survey data is provided annually as a single year estimate, 3-year estimate, or a 5-year estimate. For example the current 3-year estimate includes survey data collected 2009, 2008 and 2007. The information is provided at [www.factfinder.census.gov](http://www.factfinder.census.gov) at the American Community Survey link.

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# Policy, Systems, and Environmental Indicators

## Physical Activity

**Access to parks and open spaces:** Studies show that providing adequate access to safe parks increases physical activity. Those that live close to parks or with access to more parks are more likely to use them and be physically active.

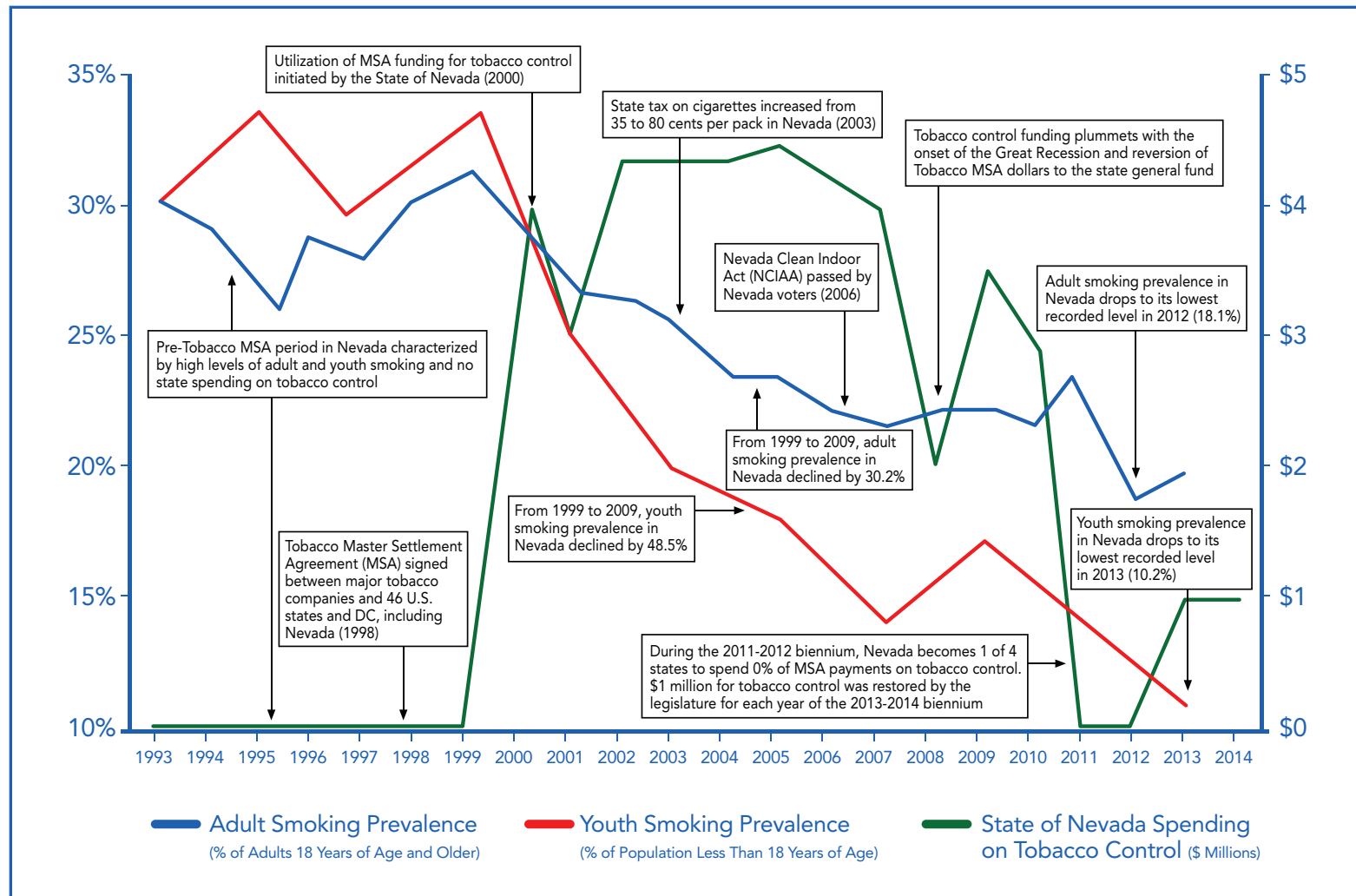
## Tobacco

**Tobacco Use and Exposure:** Most of Nevada's workplaces and indoor public places are required to be 100% smoke-free by state law, including schools, day care centers, restaurants, and bars serving food. Stand-alone bars and gaming areas of casinos are exempt. The state law was passed by voter initiative in November 2006 and took effect on December 8, 2006. To date, an average 96.5% of permitted facilities are in compliance with the requirements set forth in the Nevada Clean Indoor Air Act (NCIAA) during routine Environmental Health Services permit inspections.

The graph below shows the youth and adult tobacco use rates compared with factors in the environment such as implementation of the NCIAA and changes in funding for tobacco prevention, use, and control.



## Tobacco Use and Tobacco Control Policy in Nevada



Prepared by John Packham, PhD, Director of Health Policy Research, University of Nevada School of Medicine (June 2014).

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## Technical Notes

Birth rates in this report are per 1,000 population.

Crude mortality rates in this report are per 100,000 population.

Age-adjusted rates in this report are adjusted to the 2000 U.S. standard population and are per 100,000 population.

Years of potential life lost (YPLL) rate is the total number of years of potential life lost per 100,000 population.

Washoe County and Nevada population used to calculate rates were provided by the Nevada Division of Public and Behavioral Health. The 2008-2011 estimates and 2012 projections were provided by the State Demographer in May, 2013.

The Behavioral Risk Factor Surveillance System (BRFSS) is the largest telephone health survey conducted annually in the U.S. In Nevada, the BRFSS survey is conducted among adults aged 18 years or older. There are limitations to BRFSS data in terms of the representations of all regions in the state and all population groups. BRFSS is mostly used to calculate state-level estimates by using weights that reflect the state's overall population characteristics. However, county level estimates are calculated using SMART BRFSS where weights reflect the county population characteristics. Washoe County estimates were calculated using BRFSS as SMART BRFSS was not yet available through the Centers for Disease Control and Prevention.

Starting in 2011, BRFSS changed the sampling methodology to include cell phone users and changed the weighting methodology from post stratification to ranking. As a result of these changes, 2011 data cannot be compared to data from previous years. CDC recommends 2011 data to be used as baseline data. In this report, trend data is presented with a space between 2010 and 2011 data as a reminder that data between these years cannot be compared.

Take caution in interpreting hospitalization data as one single hospitalization has many diagnoses and cannot be attributed to one single cause. Also, take caution in interpreting costs, as the total cost for each hospitalization is not solely due to procedures relating to a specific health condition.

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## Data Sources

Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, **2008-2012**.

Office of Public Health Informatics and Epidemiology. Division of Public and Behavioral Health. *2013 Nevada Youth Risk Behavior Survey*. Carson City, Nevada. February 2014.

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Nevada Division of Public and Behavioral Health. *Nevada Central Cancer Registry Data*. Carson City, Nevada: Nevada Department of Health and Human Services, Nevada State Health Division, **2006-2010**.

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U.S. Census Bureau. *American Community Survey, 2011*. U.S. Census Bureau's American Community Survey Office, 2013. Web. 2 May 2013.

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## Acknowledgements

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For more information about local chronic disease prevention and healthy living visit:

[www.GetHealthyWashoe.com](http://www.GetHealthyWashoe.com)