

# Chronic Disease Profile

## Introduction

This report summarizes key health statistics related to chronic disease burden and risk for local populations in Washington State. The Department of Health uses established population and health surveillance systems to describe the current prevalence<sup>i</sup> of important health indicators within specific populations, and also to provide comparisons of the prevalence within specific populations to the state overall.

These data can be used to plan interventions or describe the importance and need for health interventions. Interventions may be directed to specific health conditions, or to factors that impact many aspects of health, such as income, education and housing. Therefore, this report may be useful for community members, leaders or other stakeholders who are working to improve the health status of the community.

## Life Course Approach<sup>ii</sup>

Health and quality of life at all stages in life depend on the cumulative effects of behaviors and exposures earlier in life, and on social, genetic, and epigenetic effects<sup>iii</sup> that span generations. A mother's experiences, even prior to conception, can alter the development of the fetus and child. Choices made by adolescents grow out of the experiences of childhood, and can shape behavior later in adulthood. A lifetime of risky behavior or exposure to toxic or stressful conditions can lead to chronic disease, poor quality of life and early death.

This report is organized based on a life course approach. We begin with data on the demographic, social, and economic context. Next we show data for youth (grade 10), adults (age 18+) and seniors (age 65+).

## Health Risk Indicators

Many pieces of health data can be presented in either a positive or negative manner. For example, we could either talk about reducing obesity, or achieving healthy weight. For other data, only the negative presentation makes sense. For example, it would be awkward to discuss increasing the prevalence of people without diabetes. For consistency and ease of comparison, this document presents all data in terms of risk.

Health data are estimated with some degree of statistical uncertainty. We present the degree of uncertainty by surrounding each estimate in graphs with error bars that represent the 95% confidence interval. See appendix for further detail.

Indicator definitions, explanatory notes, and a glossary of terms are provided in the appendix.

## Defining the Lesbian / Gay / Bisexual (LGB) Population

Only a few health data systems have any information on LGB.

- Behavioral Risk Factor Surveillance System (BRFSS) – This statewide health survey of adults (age 18+) asks the question “Now I’m going to ask you a question about sexual orientation. Do you consider yourself to be...” 1. Heterosexual or straight, 2. Homosexual, gay, or lesbian, 3. Bisexual, or 4. Other. Responses of “Don’t know/not sure” and “Refused” are also possible. In this report, the LGB population is defined as those who consider themselves to be homosexual or bisexual.
- Healthy Youth Survey (HYS) – This school based health survey asks youth in grades 8, 10, and 12 “In the past 30 days, how often were you bullied, harassed, or intimidated at school or on your way to or from school: Because someone thought you were gay, lesbian or bisexual (whether you are or are not)?” Though this question does not identify the actual LGB population, it does provide information about those who experience the effects of homophobic discrimination. In this report, we present data for 10<sup>th</sup> grade youth who report being bullied one or more days due to a perception that they were LGB.

## Population

### Youth (Grade 10)

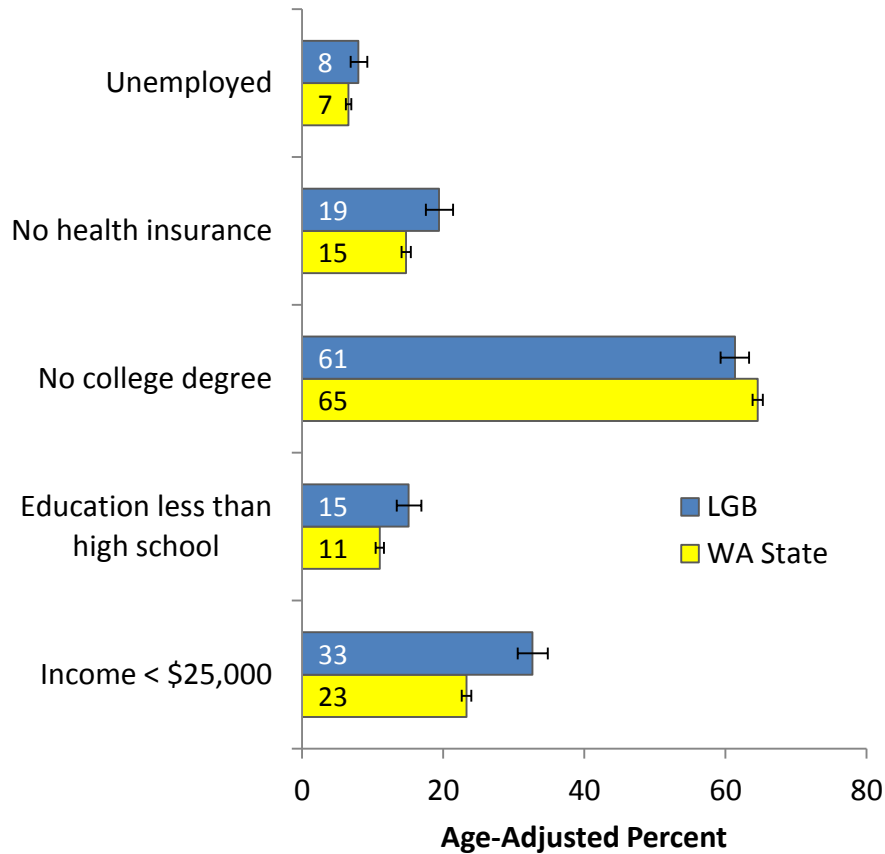
- 9% of 10<sup>th</sup> grade youth report being bullied for being thought to be LBG.
- 8% of 10<sup>th</sup> grade boys report being bullied for being thought to be LBG.
- 9% of 10<sup>th</sup> grade girls report being bullied for being thought to be LBG.

### Adults (Age 18+)

- 4% of adults identify themselves as LGB.
- 4% of adult men identify themselves as LGB.
- 4% of adult women identify themselves as LGB.

**Data Source:** Healthy Youth Survey (HYS) 2016; Behavioral Risk Factor Surveillance System (BRFSS) 2013-2015.

## Social and Economic Risk Factors

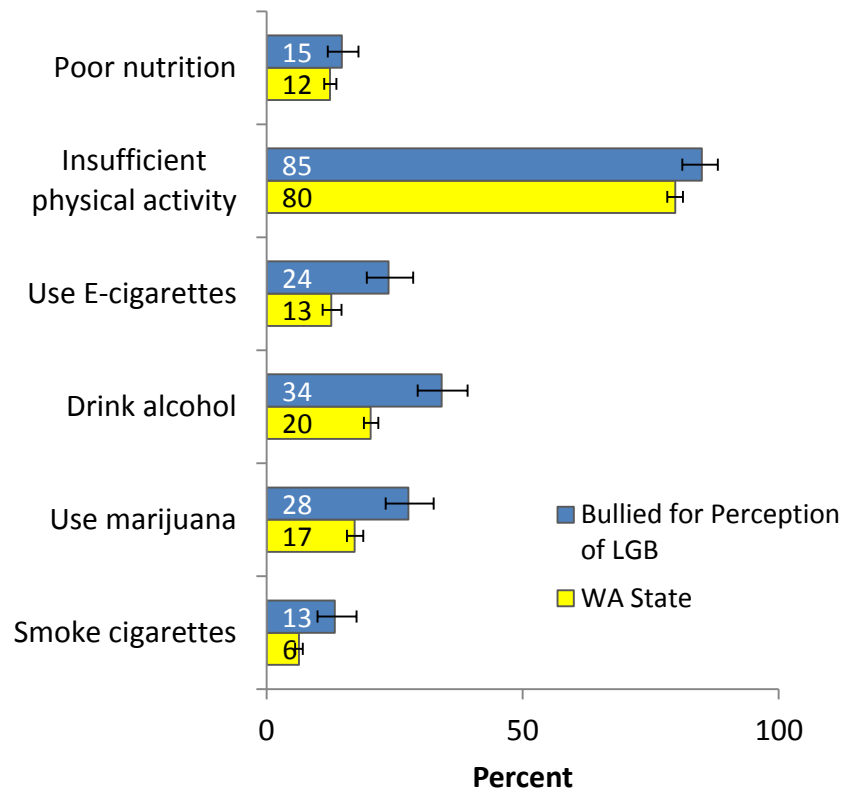


### Indicator Notes

1. Income is based on self-reported household income.
2. Unemployment is based on self-reported employment status.
3. Highest educational attainment is among adults 25 and older.
4. Health Insurance: Did not have any form of health insurance among adults age 18 to 64.

**Data Source:** Behavioral Risk Factor Surveillance System (BRFSS) 2013-2015

## Youth (10<sup>th</sup> grade) Health Risk Behaviors

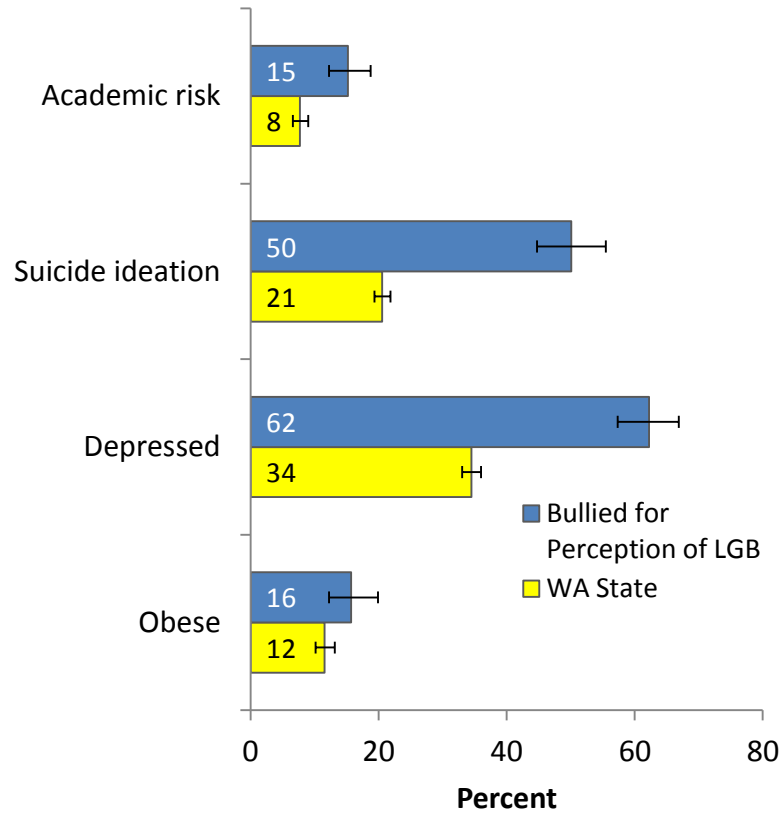


### Indicator Notes

1. Youth smoking, marijuana, alcohol, e-cigarettes: Students are asked “during the past 30 days, how many times did you... Smoke cigarettes; Use marijuana or hashish (grass, hash, pot); Drink a glass, can, or bottle of alcohol (beer, wine, wine coolers, hard liquor); use electronic cigarettes or e-cigs?”
2. The Centers for Disease Control and Prevention (CDC) recommends 60 minutes moderate or vigorous physical activity every day for youths.
3. Poor nutrition is indicated by eating fruits and vegetables less than once a day.

**Data Source:** Washington State Healthy Youth Survey 2016.

## Youth (10<sup>th</sup> grade) Health Risk Conditions

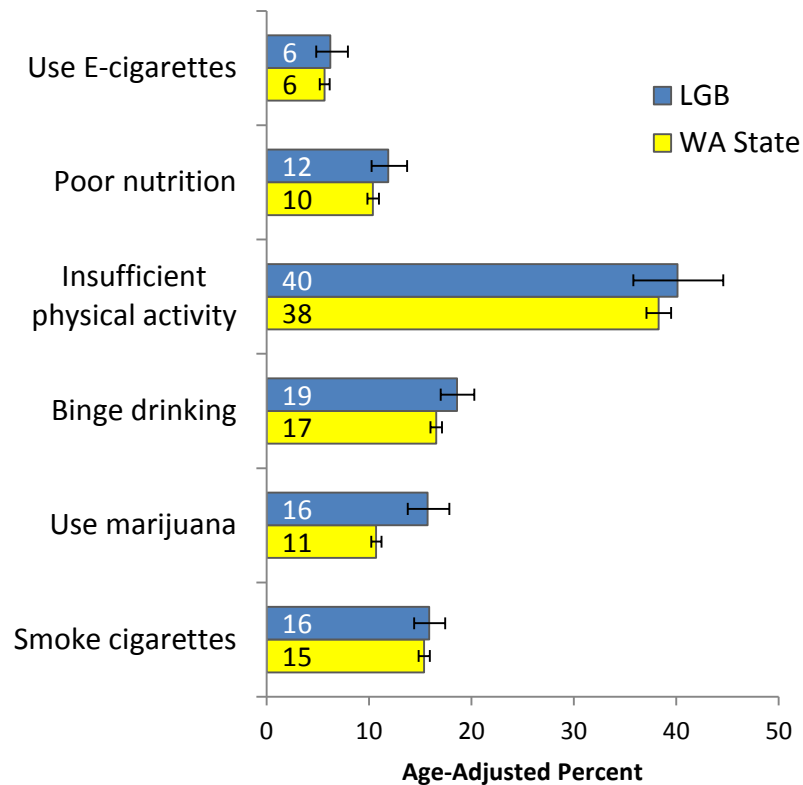


### Indicator Notes

1. Youth obesity: Youth are classified as obese if they are in the 95<sup>th</sup> percentile for body mass index by age and sex based on growth charts developed by the CDC (2000).
2. Depression: Students were asked “During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?”
3. Suicide ideation: Students were asked “During the past 12 months, did you ever seriously consider attempting suicide?”
4. Academic risk: Risk of academic failure including usually getting low grades and grades worse than others, and low commitment to school including school not meaningful or important for future, and cut school.

**Data Source:** Washington State Healthy Youth Survey 2016.

## Adult (Age 18+) Health Risk Behaviors

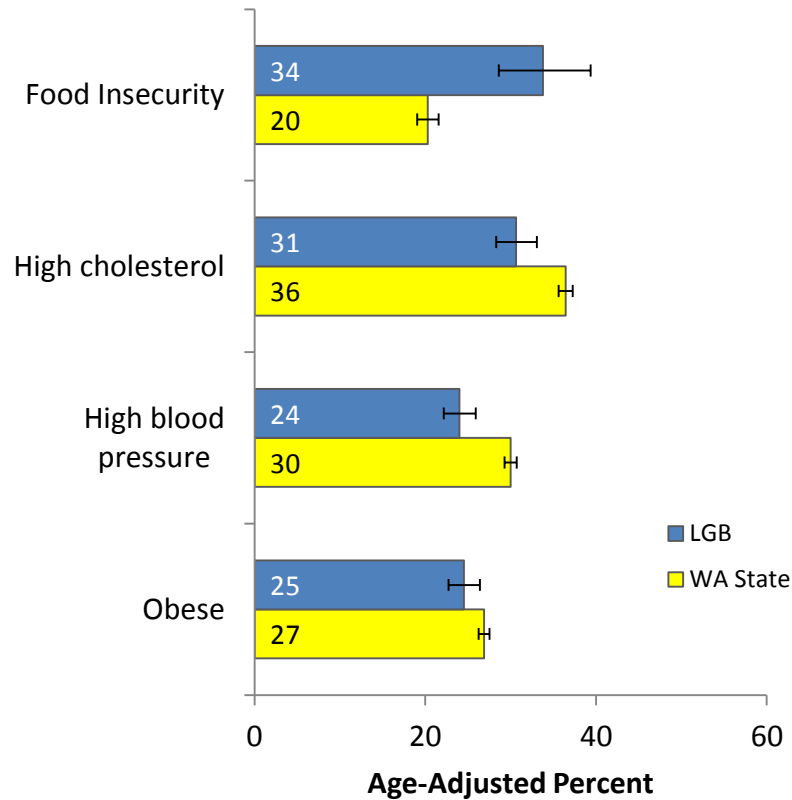


### Indicator Notes

1. Adult smoking: Respondents are asked “Have you smoked at least 100 cigarettes in your lifetime?” and “Do you still smoke?”
2. Adult marijuana: Respondents were asked “During the past 30 days, on how many days did you use marijuana or hashish?”
3. Binge drinking: Past 30 days, adult men having five or more drinks or adult women having four or more drinks on one occasion.
4. CDC recommends 150 minutes of moderate aerobic physical activity or 75 minutes of vigorous aerobic physical activity a week, combined with some form of muscle strengthening activity three times a week. People whose work involves mostly walking or heavy labor meet the aerobic recommendation. People whose work involves heavy labor meet both the strength and aerobic recommendations.
5. Nutrition: Respondents are asked a series of questions about fruits and vegetables eaten in the past month. CDC recommends three servings of vegetables and two servings of fruit a day. Very poor nutrition is defined here as eating fruits and vegetables less than once a day.
6. E-Cigarettes: Respondent is asked “During the past 30 days, on how many days did you use electronic cigarettes, also called E-cigarettes or vape pens?”

**Data Source:** Washington Behavioral Risk Factor Surveillance System 2013-2015.

## Adult (Age 18+) Health Risk Conditions

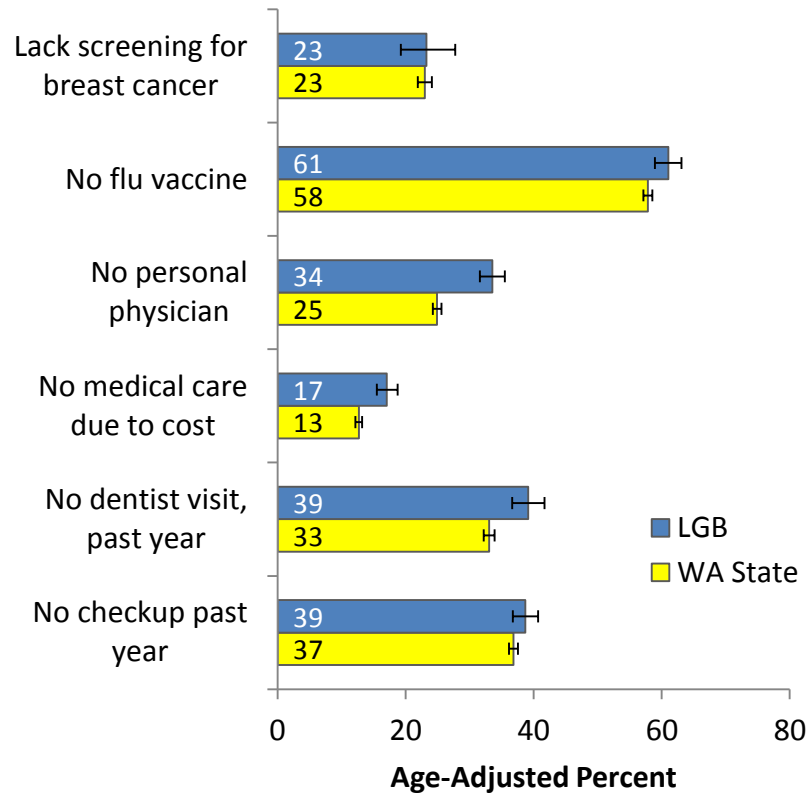


### Indicator Notes

1. Obesity in adults is defined as body mass index  $\geq 30 \text{ kg/m}^2$  based on self reported height and weight.
2. Self reported lifetime prevalence – Survey respondent answered “yes” to “have you ever been told by a healthcare professional that you have high blood pressure / high cholesterol?”
3. Food Insecurity: Respondents were asked “How often in the past 12 months would you say you were worried or stressed about having enough money to buy nutritious meals?” Responses of “sometimes”, “usually”, or “always” were considered to be food insecure.

**Data Source:** Washington Behavioral Risk Factor Surveillance System 2013-2015.

## Adult (Age 18+) Preventive Care



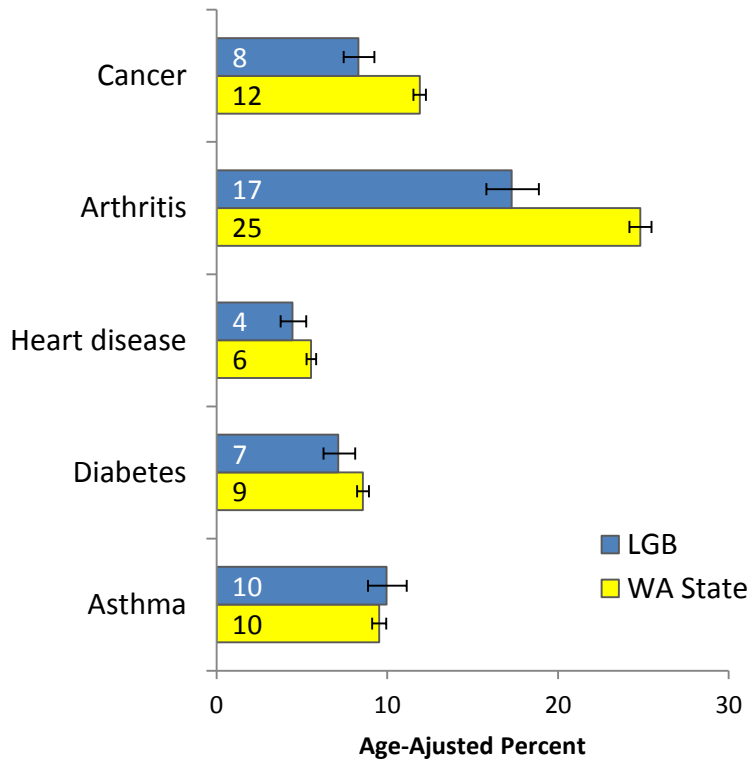
### Indicator Notes

1. The Department of Health recommends women age 50 or older should have a mammogram every two years.
2. Flu vaccine: Respondent has not had a flu vaccine in the past year.
3. Personal physician: Respondent is asked: “Do you have one person you think of as your personal doctor or health care provider?”
4. Respondent reports needing to see a doctor, but could not due to cost in the past year.
5. No dental visit: Respondent reports it has been more than a year since they visited a dentist for any reason.
6. No checkup: Respondent reports it has been more than a year since they had a routine medical checkup.

**Data Source:** Washington Behavioral Risk Factor Surveillance System 2013-2015.



## Adult (Age 18+) Chronic Disease

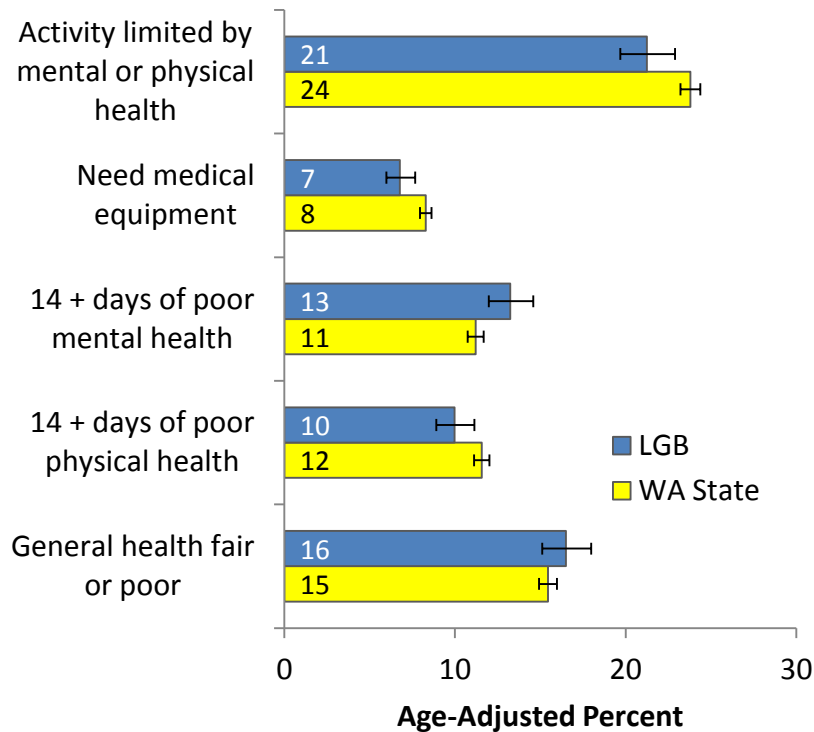


### Indicator Notes

1. Self reported lifetime prevalence – Survey respondent answered “yes” to “have you ever been told by a healthcare professional that you have asthma / diabetes / heart attack, coronary heart disease, or angina / arthritis / cancer?”

**Data Source:** Washington Behavioral Risk Factor Surveillance System 2013-2015

## Adult (Age 18+) Quality of Life

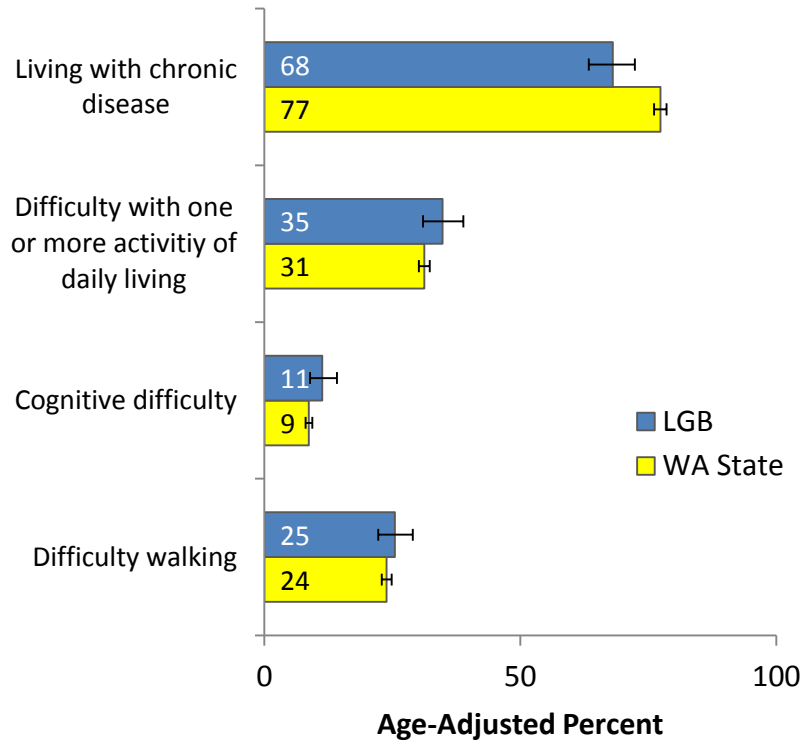


### Indicator Notes

1. General health: respondent reports, in general, health is fair or poor.
2. Poor physical health: Respondent reports that on 14 or more of the past 30 days, their physical health was not good.
3. Poor mental health: Respondent reports that on 14 or more of the past 30 days, their mental health was not good.
4. Need medical equipment: Respondents are asked “Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?”
5. Activity limitation: Respondent is asked “Are you limited in any way in any activities because of physical, mental, or emotional problems?”

**Data Source:** Washington Behavioral Risk Factor Surveillance System 2013-2015.

## Senior (Age 65+) Health Risks



### Indicator notes

1. Living with chronic disease: Respondent is asked have you ever been told by a doctor or health care professional that you have ... arthritis / asthma / COPD / cancer / diabetes, heart disease / stroke / kidney disease.
2. Activities of daily living: Respondent is asked if they have serious difficulty ...seeing even with glasses / concentrating remembering or making decisions / walking or climbing stairs / dressing or bathing / doing errands alone such as visiting a doctor or shopping

**Data Source:** Washington Behavioral Risk Factor Surveillance System 2013-2015.

## Appendix: Data Source & Definitions

The following provides references for more information on each data system and definitions of technical terms used in this report. Analyses for this report were completed using Stata/IC 13.0. Some estimates were obtained from previously published reports.

### **DATA SYSTEMS:**

#### **Washington State Healthy Youth Survey (HYS)**

- For more information on the HYS, go to:  
<http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/HealthyYouthSurvey.aspx> or <http://www.askhys.net/>
- For technical notes on the HYS, go to:  
<http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/HealthyYouthSurvey/TechnicalNotes.aspx>

#### **Behavioral Risk Factor Surveillance System (BRFSS)**

- For more information on Washington State BRFSS, go to:  
<http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/BehavioralRiskFactorSurveillanceSystemBRFSS.aspx>
- For more information on national BRFSS, go to: <http://www.cdc.gov/brfss>.

### **UNRELIABLE DATA:**

Estimates based on too few respondents are considered to be unreliable, and may constitute a breach of confidentiality in some circumstances. In this report data with a numerator < 10, or a denominator < 50, or a relative standard error > 30% are not reported.

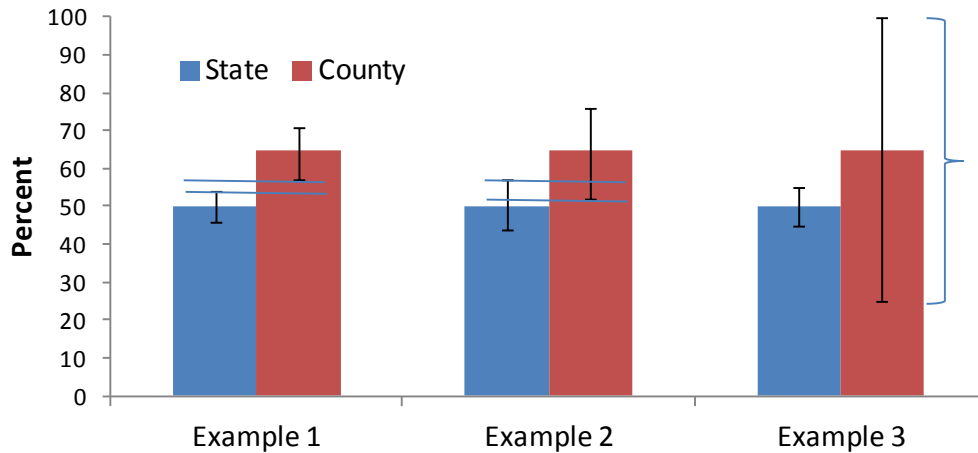
### **AGE-ADJUSTED PERCENT:**

Percentages that have been adjusted to control for differences in age when comparing two demographic groups. Respondents are weighted to match the US Census 2000 standard population.

**CONFIDENCE INTERVALS:**

Most of the estimates provided in this report come with some intrinsic level of uncertainty due to the random nature of the data. Statistical uncertainty can be summarized by a 95% confidence interval, also called the margin of error. 95% confidence means that, if the survey were repeated in exactly the same way with a different random sample of people, the new estimate would fall within the confidence interval 95% of the time. Confidence intervals are represented on graphs by whisker bars above and below the estimate.

**Interpreting Margin of Error**



Margins of error do not overlap. State and county are probably different.

Margins of error overlap. There may not be any real difference between state and county.

Margin of error for county is too wide. We do not know precisely what the true county percentage is. (It's somewhere between 35% and 100%)

**GLOSSARY:**

<sup>i</sup> Prevalence: The fraction of the population with a condition at a particular point in time, typically expressed as a percent.

<sup>ii</sup> Life course approach: A philosophy of public health that recognizes the importance of promoting health at all life stages.

<sup>iii</sup> Epigenetic: Conditions in the mother prior to conception can affect how certain genes are expressed in the child.