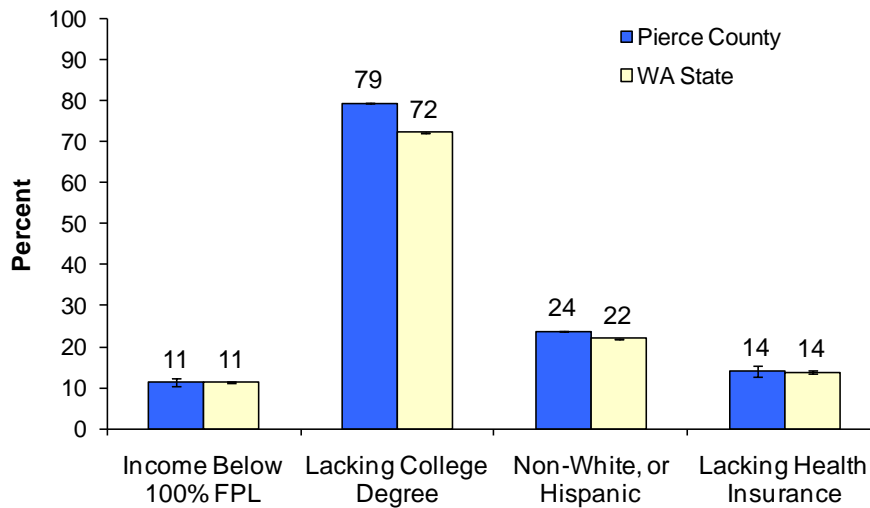


Chronic Disease Profile

Socio-demographic Risk Factors

Pierce County and Washington State Demographic Factors



In Pierce County ...

- One in nine households have income less than the federal poverty level.¹
- Four out of five adults age 25 and older do not have a college degree.
- A fourth of the population is non-white or Hispanic.
- One in seven adults have no medical insurance.

Compared to Washington State ...

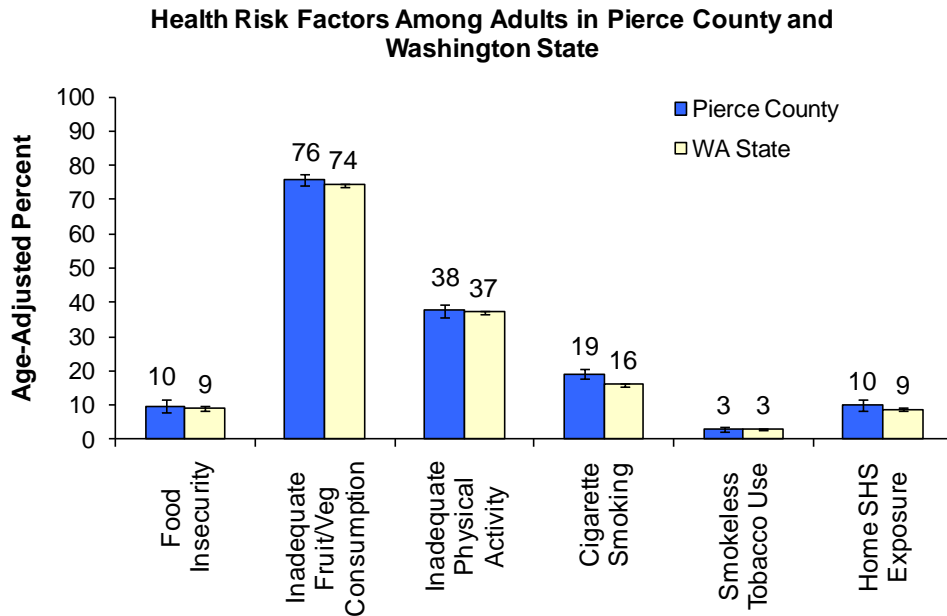
- Pierce County has fewer college graduates than the state average.
- No other differences are statistically detectable.

1. Federal Poverty Level (FPL) is determined based on household income and household size. In 2008, FPL for a family of four was \$21,200.

Error bars show the 95 percent confidence intervals around the estimate. Confidence intervals are not given for census data.

Data Sources: US Census Bureau, 2008 SAIPE (income) 2000 Decennial Census (education, race/ethnicity); WA Behavioral Risk Factor Surveillance System 2006-2008 (health insurance). See Appendix for additional information. See Appendix for additional information.

Adult Health Risk Factors



In Pierce County ...

- One out of 10 households experience food insecurity.¹
- Three fourths of adults do not eat enough fruits and vegetables.²
- Over a third of adults do not get adequate physical activity.³
- One out of five adults currently smoke cigarettes.⁴
- Three percent of adults use smokeless tobacco.⁵
- One out of 10 adults are exposed to secondhand smoke in the home.⁶

Compared to Washington State ...

- More Pierce County adults smoke than the state average.
- No other differences are statistically detectable.

1. Food Insecurity occurs when people run out of food, eat less, skip meals, or go hungry, or when they subsist on a nutrient poor diet, because they cannot afford to buy food.

2. CDC recommends eating five servings of fruits and vegetables per day.

3. CDC recommends 30 min of moderate physical activity five times a week, or 20 minutes of vigorous physical activity three times a week for adults.

4. An adult is classified as a "current smoker" if (s)he reported having smoked more than 5 packs (100 cigarettes) in his/her lifetime, and also reported currently using tobacco "every day" or "some days".

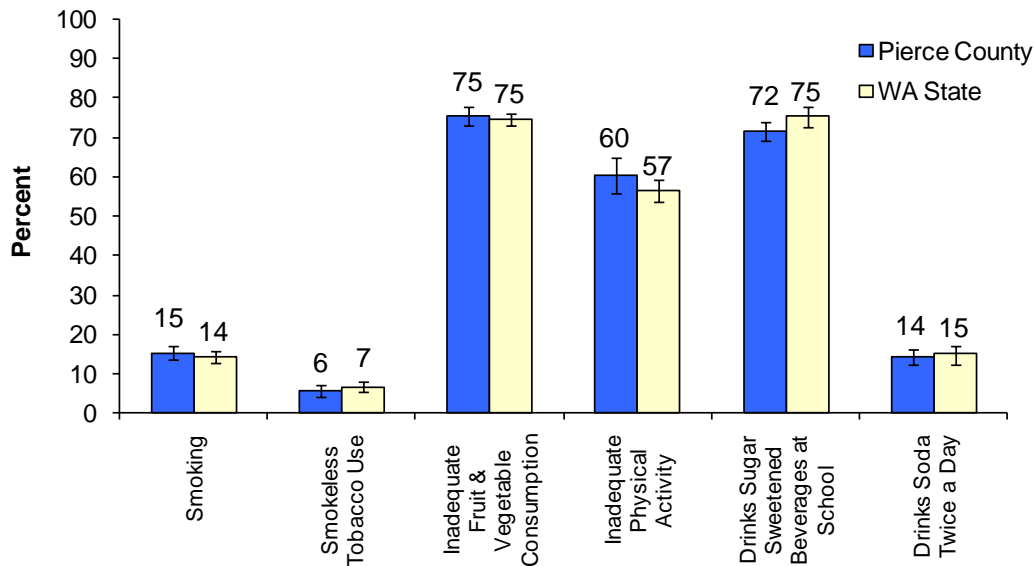
5. An adult is classified as a "current smokeless tobacco user" if (s)he reported having ever tried smokeless tobacco and has used smokeless tobacco products in the past 30 days.

6. Home secondhand smoke exposure measured by respondents reporting any smoking in the home in the past 30 days.

Data Source: WA Behavioral Risk Factor Surveillance System, 2007 (food insecurity), 2005&2007 (nutrition, physical activity), 2006-2008 (smoking). See Appendix for additional information.

Youth (10th grade) Health Risk Factors

Health Risk Factors Among 10th Grade Youth in Pierce County and Washington State



Pierce County 10th graders ...

- One out of seven smoke.¹
- One out of 16 use smokeless tobacco products.¹
- Three fourths do not eat enough fruits and vegetables.²
- Three out of five do not get enough physical activity.³
- Almost three fourths drink sugar sweetened beverages at school.⁴
- One out of seven drink soda two times or more times a day.

Compared to Washington State 10th graders ...

- There are no statistically detectable differences between Pierce County and Washington State.

1. A youth is classified as a “current smoker” or “current smokeless tobacco user” if he or she reported using tobacco on one or more days within the past 30 days.

2. CDC recommends five servings of fruits and vegetables a day.

3. CDC recommends 60 minutes moderate or vigorous physical activity every day for youths.

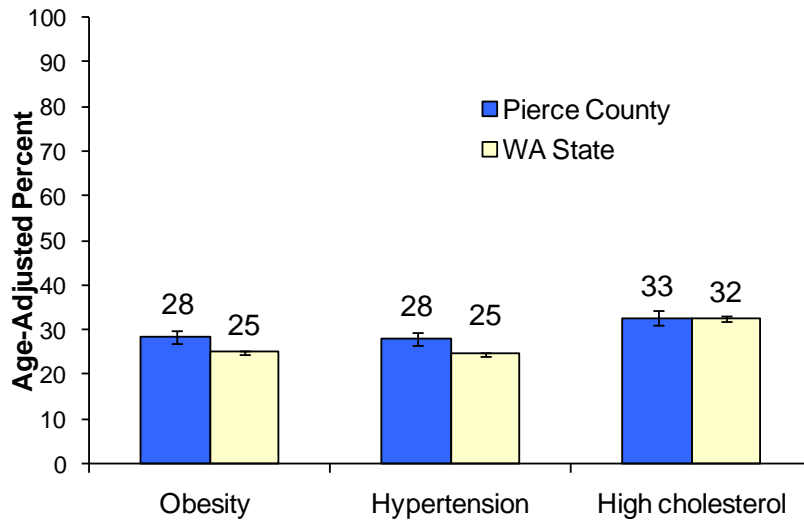
4. Includes soda, fruit juice, sports drinks, kool-aid, etc.

Error bars show the 95percent confidence intervals around the estimate.

Data Source: WA Healthy Youth Survey, 2008. See Appendix for additional information.

Adult Health Risk Conditions

Health Risk Conditions Among Adults in Pierce County and Washington State



In Pierce County ...

- Over a fourth of adults are obese.¹
- Over a fourth of adults have high blood pressure.²
- A third of adults have high cholesterol.²

Compared to Washington State ...

- More Pierce County adults are obese and more have high blood pressure than the state average.
- No other differences are statistically detectable.

1. Obesity in adults is defined as body mass index > 30 kg / m².

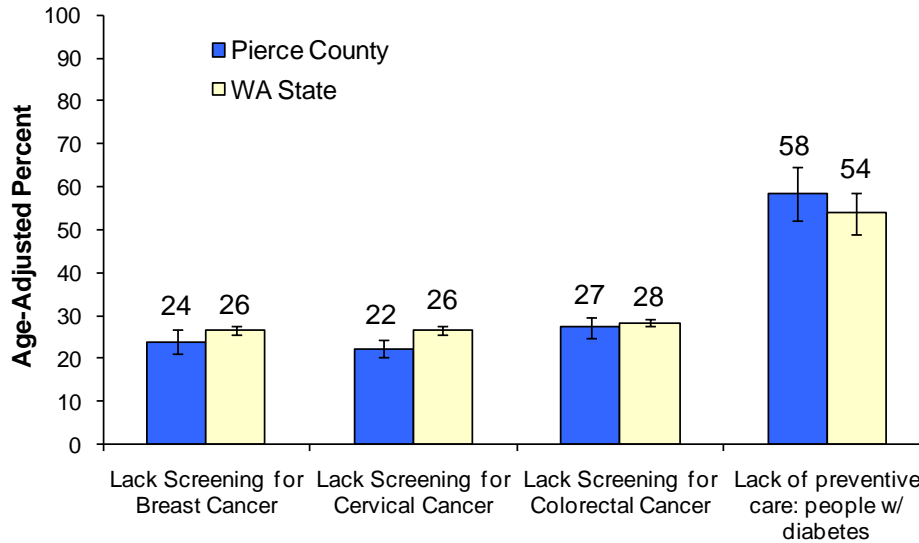
2. Self reported lifetime prevalence – Survey respondent answered “yes” to “have you ever been told by a health care professional that you have high blood pressure (or high cholesterol).”

Error bars show the 95 percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2006-2008 (Obesity), 2005&2007 (hypertension, cholesterol). See Appendix for additional information.

Adult Preventive Care

Preventive Care Among Adults in Pierce County and Washington State



In Pierce County ...

- A fourth of women age 40 and over have not been screened for breast cancer.¹
- Almost a fourth of women age 18 and over have not been screened for cervical cancer.¹
- Over a fourth of men and women age 50 and over have not been screened for colorectal cancer.¹
- Over half of people with diabetes have not received recommended preventive care.²

Compared to Washington State ...

- More Pierce County women get screened for cervical cancer than the state average.
- No other differences are statistically detectable.

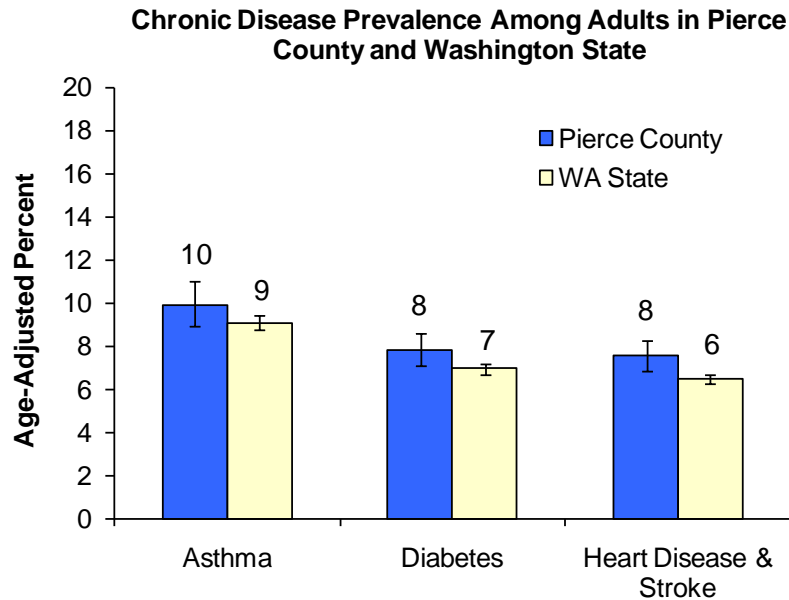
1. CDC recommends women aged 40+ should have a mammogram every two years, women 18+ should have a PAP test every three years, and men and women aged 50+ should have either a sigmoid colonoscopy or a fecal occult blood test every two years.

2. For people with diabetes, recommended preventive care includes annual foot exam, annual eye exam, and bi-annual hemoglobin A1c test.

Error bars show the 95 percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2006-2008. See Appendix for additional information.

Adult Chronic Disease Rates



In Pierce County ...

- One in 10 adults have asthma.¹
- One in 12 adults have diabetes.¹
- One in 12 adults have had a heart attack, coronary heart disease, angina, or stroke.¹

Compared to Washington State ...

- More adults in Pierce County have diabetes and more have had heart disease or stroke than the state average.
- No other differences are statistically detectable.

Data on cancer-related disease burden will be available in the near future.

1. Self reported lifetime prevalence – Survey respondent answered “yes” to “have you ever been told by a health care professional that you have asthma (or diabetes, stroke, etc).

Error bars show the 95 percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2006-2008. See Appendix for additional information.

Appendix: Data Sources & Definitions

The following provides a brief description of each data system and definitions of technical terms used in this report. Data represented in this profile were obtained from a variety of sources. Analyses for this report were completed using Intercooled Stata 10.0. Some estimates were obtained from previously published reports.

DATA SYSTEMS:

Population Data

Population data were taken from U.S. Census Bureau. The primary purpose of the census is the apportionment of congressional seats. The full 2000 census collects basic demographic information by age, sex, and race/ethnicity from the entire US population. The Census Bureau also serves as a source of data about the nation's people and economy. The 2000 census included a random sample of respondents who were given a longer questionnaire with questions regarding education, income, employment, and other socioeconomic factors. The Small Area Income and Poverty Estimate (SAIPE) is conducted annually to provide up-to-date information on the distribution of income and poverty.

- Data related to income were obtained from the 2008 US Census Bureau Small Area Income and Poverty Estimate (SAIPE). For more information on the SAIPE go to: <http://www.census.gov>
- Data related to education were obtained from the 2000 Decennial Census, (long questionnaire). For more information on the 2000 Decennial Census, go to: <http://www.census.gov>
- Data related to race/ethnicity were obtained from the Washington State Office of Financial Management (OFM). Washington State OFM produces intercensal county population estimates by age, sex, and race / ethnicity. For more information go to the OFM Population web site: <http://www.ofm.wa.gov/pop/default.asp>

Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey that provides indicators of health risk behavior, preventive practices, attitudes, health care use and access, and prevalence of selected diseases in Washington. BRFSS was first implemented in Washington State in 1987, and is supported in part by the national Centers for Disease Control and Prevention. The survey includes a sample of English or Spanish (since 2003) speaking adults age 18 years and older in households with landline telephones. Interviews are conducted in English or Spanish, by a survey firm under contract to the Department of Health (DOH), following survey administration protocols established by Centers for Disease Control and Prevention (CDC).

The data are weighted to represent all adults. The data may underestimate some health behaviors associated with populations speaking neither English nor Spanish, transient populations, institutionalized persons, and military personnel in military housing. Due to

the nature of self-reported data, there may be some underestimation of risk factors that are seen as socially unacceptable.

- For more information on Washington State BRFSS, go to: http://www.doh.wa.gov/EHSPHL/CHS/CHS-Data/brfss/brfss_homepage.htm
- For technical notes on the Washington State BRFSS, go to: http://www.doh.wa.gov/EHSPHL/CHS/CHS-Data/brfss/brfss_keypoints.htm
- For more information on national BRFSS, go to: <http://www.cdc.gov/brfss>

Healthy Youth Survey Data

The Washington State Healthy Youth Survey (HYS) is a school-based survey of students in grades 6th, 8th, 10th and 12th in a random sample of public schools in Washington State. It is administered every other year during class time and contains questions about behaviors that result in unintentional and intentional injury (e.g., seat belt use, fighting and weapon carrying); physical activity and dietary behaviors (e.g., fruit and vegetable consumption); alcohol, tobacco, and other drug use; and related risk and protective factors. The survey includes items from the CDC-sponsored Youth Risk Behavior Survey (YRBS) and Youth Tobacco Survey, the National Institute on Drug Abuse-sponsored Monitoring the Future survey, and the Social Development Research Group's Risk and Protective Factor Assessment instrument.

In 2008, 32,531 students participated in the Healthy Youth Survey and contributed to the statewide results. In addition, 165,781 students participated and contributed to local level results for counties, educational service districts, school districts and school buildings.

- For more information on the HYS, go to: <http://www.doh.wa.gov/healthyyouth/default.htm>
- For technical notes on the HYS, go to: <http://www.doh.wa.gov/healthyyouth/technical/>

School-based surveys may underestimate risk behaviors associated with youth who drop out of school or do not attend school. Due to the self-reported nature of the data, certain behaviors may be under-reported.

DEFINITIONS

Hispanic Origin: Persons of Hispanic Origin used by the Census Bureau refers to “the ancestry, nationality group, lineage, or country of birth of the person or the person’s parents or ancestors before their arrival in the United States.” Persons of Hispanic Origin have their origins in a Hispanic or Spanish-speaking country such as Mexico, Cuba, Puerto Rico, or the Spanish-speaking countries of Central or South America, regardless of race. The Behavioral Risk Factor Surveillance System (BRFSS) and the Healthy Youth Survey (HYS) treats Hispanic as an ethnic group. For additional Washington State guidelines for using racial and ethnic groups in data analysis, go to: http://www.doh.wa.gov/data/guidelines/REGL2010_1.htm

95% Confidence intervals: Sometimes called the “margin of error.” Commonly used with survey data to account for the differences in estimates that are due to random factors or chance. Confidence intervals are typically expressed as a range between an upper and lower value which will contain the population or "true" prevalence 95% of the time.

Statistically detectable: Also known as “Statistically significant”. An observed difference between two populations is determined to be statically detectable (significant) if it is unlikely to have occurred randomly or by chance. If there is more than about a 5% probability that the differences we see are just due to chance, we say that there is no statistically detectable (or significant) difference.

Age-Adjusted: Age-adjustment allows for comparisons between two or more populations that differ in their age distribution. This is particularly important for age-related diseases like diabetes. Age adjustment calculates what the percentages would be if both populations had the same age distribution.

Insufficient Data: In our reporting of county-level data we suppressed rates and frequencies that fell below certain criteria to protect confidentiality of individuals, and reduce problems with data reliability. If 10 or fewer respondents reported a condition, or if there were 50 or fewer total respondents, we report “insufficient data.”