

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 prevalenceⁱ 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 Approachⁱⁱ

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 effectsⁱⁱⁱ 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 related to birth and early childhood. We follow these in turn by data for youth (grade 10), adults (age 18+) and seniors (age 65+). Lastly, we provide patterns of mortality.

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.

Data sources, explanatory notes, and a glossary of terms are provided in the appendix.

Racial / Ethnic Designations

Race and ethnicity for most indicators are determined based on self-report by survey respondent. For birth and Pregnancy Risk Assessment Monitoring System (PRAMS) data, race and ethnicity are designated based on the mother's reported race / ethnicity. For death data, race / ethnicity is based on the report of next of kin, or in some cases, by the certifying physician. For consistency with other agency reports, Hispanic ethnicity is treated as a separate race. Respondents who identify themselves as Hispanic are classified as Hispanic, regardless of other racial designations. Surveys and data collection systems do not all characterize race and ethnicity in the same way. In some surveys, multiracial respondents are classified as a separate group; in others, multiracial respondents are asked to choose a single preferred race.

- Census Bureau, American Community Survey (ACS): Respondents identify their ethnicity as Hispanic/Latino or not Hispanic/Latino. Respondents then identify their race by choosing any that apply from a detailed list of racial categories. Identification as multiracial is allowed. In this report, Hispanic refers to those who select Hispanic ethnicity regardless of other racial designations.
- Birth certificates / PRAMS Race/Hispanic origin for the mother and father are collected by asking the mother for the data. In this report, we report health indicators according to the mother's race. Mothers choose any that apply from a detailed list of racial and ethnic categories. Identification as multiracial is allowed. In this report, Hispanic refers to those who select non-Hispanic ethnicity, regardless of other racial designations.
- Behavioral Risk Factor Surveillance System (BRFSS): Respondents first identify their ethnicity as Hispanic/Latino or not Hispanic/Latino. Respondents then identify their race by choosing one response from a list of racial categories. Respondents who identify themselves as multiracial are then asked to choose a single preferred racial classification. In this report, Hispanic refers to those who select Hispanic ethnicity, regardless of preferred race.
- Healthy Youth Survey (HYS): Respondents are asked, "How do you describe yourself? (Select one or more responses.)" Response options are: a. American Indian or Alaskan Native; b. Asian or Asian American; c. Black or African-American; d. Hispanic or Latino/Latina; e. Native Hawaiian or other Pacific Islander; f. White or Caucasian; g. Other. Respondents who check more than one option are classified as multiracial. In this report Hispanic refers to those who identify themselves Hispanic only or Hispanic together with other races.
- Death certificates: Reporting of race/Hispanic origin on death certificates is sometimes based on observing the decedent, rather than questioning the next of kin. This procedure causes an underestimate of deaths for certain groups, particularly Native Americans, some of the Asian subgroups, and Hispanics. Identification as multiracial is allowed. In this report, Hispanic refers to those who are identified as Hispanic ethnicity, regardless of other racial designations.

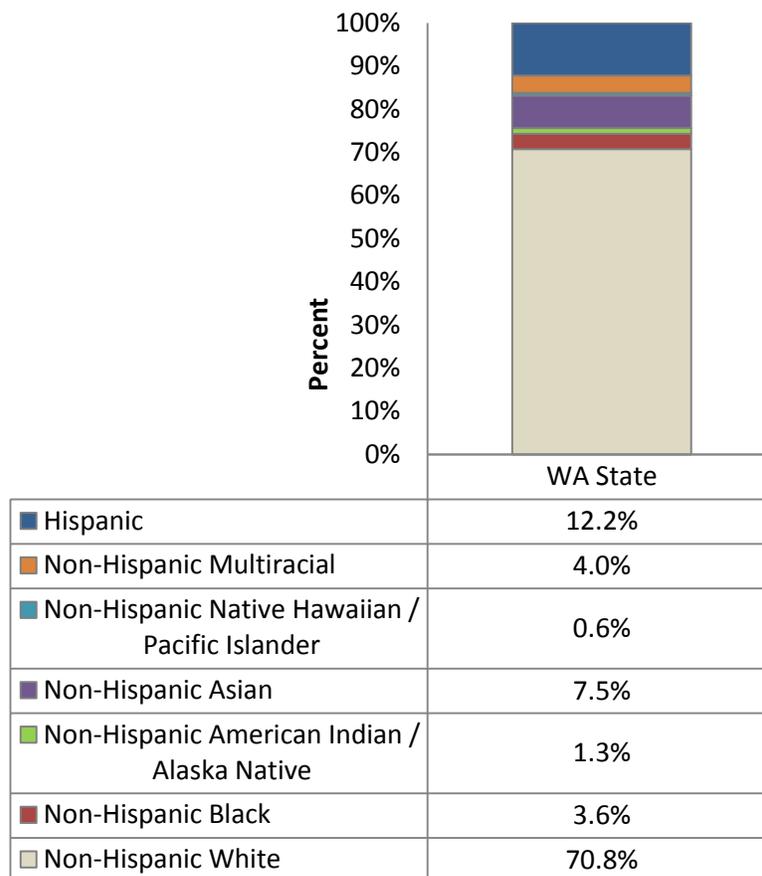
Population

Hispanic Population: 850,275 = 12% of state

Age Distribution

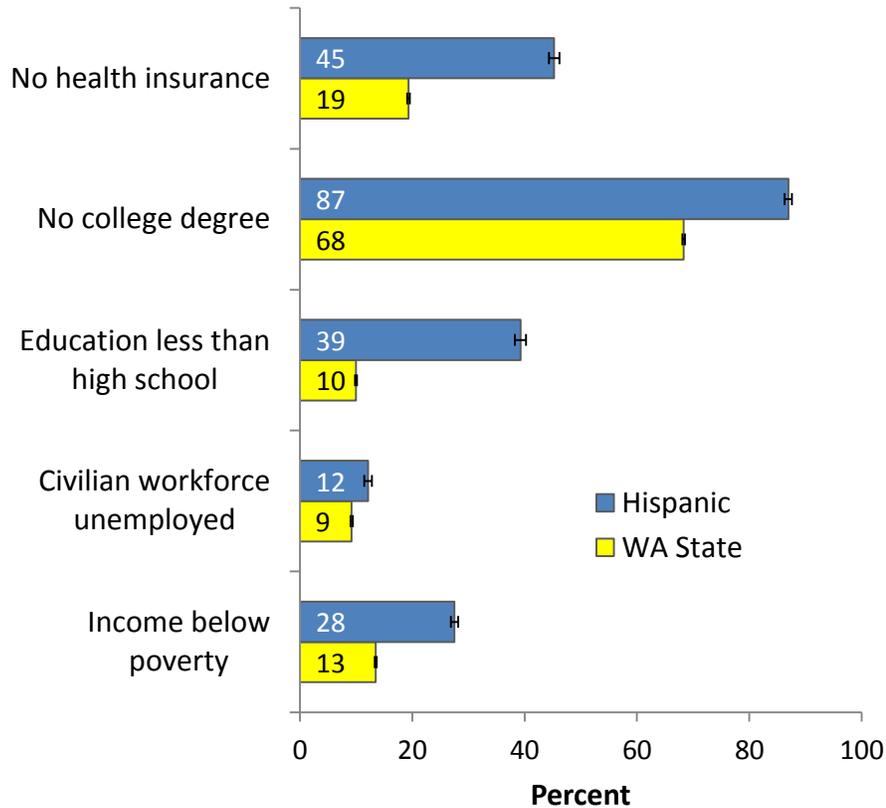
- Washington State: 14% are age 65+; 23% are age < 18
- Hispanic: 4% are age 65+; 39% are age < 18

Population by Race / Ethnicity



Data Source: Washington State Office of Financial Management, Forecasting Division, single year intercensal estimates, 2014

Social and Economic Risk Factors

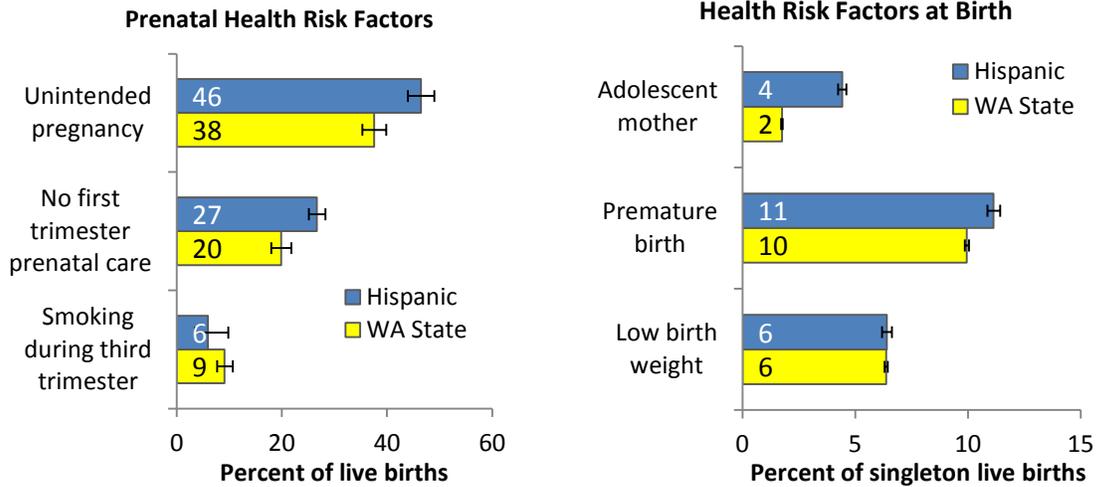


Indicator Notes

1. Federal Poverty Level (FPL) is determined based on household income and household size. In 2012, the federal poverty level household income for a family of four was \$23,050.
2. Unemployment is measured among civilians, age 16 and older, who are in the workforce.
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: US Census Bureau, American Community Survey (ACS) Public Use Microdata Sample, 2009-2013

Prenatal and Birth Health Risk Factors



Birth Rate

- Washington State: 64 births per 1000 reproductive age women (age 15-44)
- Hispanic: 81 births per 1000 reproductive age women (age 15-44)

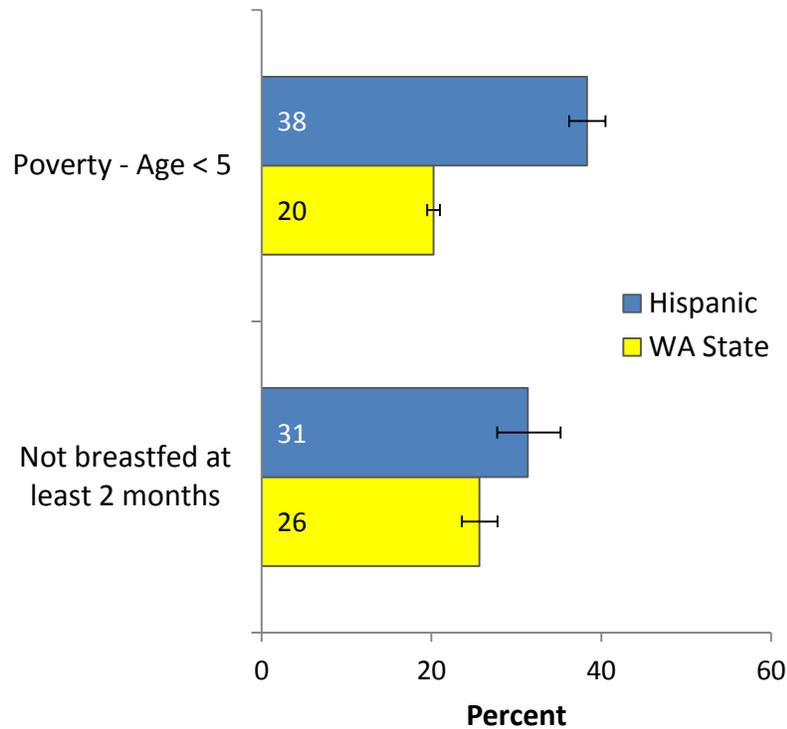
Indicator Notes

1. Third trimester smoking: Smoked one or more cigarettes on an average day during the last three months of pregnancy.
2. Prenatal care includes visits to a doctor, nurse, or other healthcare worker before the baby was born to get checkups and advice about pregnancy.
3. Unintended pregnancy: When asked “Thinking back to just before you got pregnant with your new baby, how did you feel about becoming pregnant?” responded “I wanted to become pregnant later” or “I didn’t want to be pregnant then, or in the future”
4. Low birth weight is defined as a birth under 2,500g but no lighter than 227g. Infants born less than 227g are considered pre-viable.
5. Premature delivery is defined as gestation < 37 weeks.
6. Adolescent mother is defined as age 15-17.

Data Sources:

- Prenatal: Washington State Department of Health, Pregnancy Risk Assessment Monitoring System (PRAMS), 2009-2011.
- Birth outcomes: Washington State Department of Health, Center for Health Statistics (CHS), Birth Certificate Data, 2009-2013.
- Birth rate: Washington State Department of Health, Center for Health Statistics (CHS), Birth Certificate Data, 2013.

Early Childhood Health Risk Factors



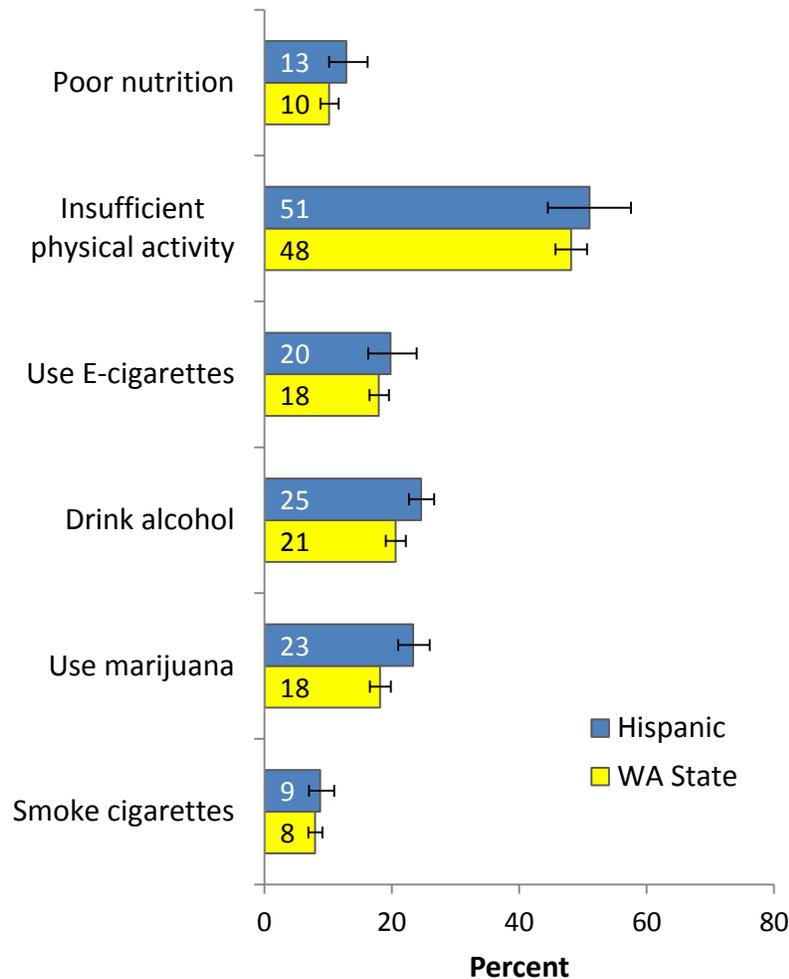
Indicator Notes

1. Breastfeeding: did not breastfeed baby, or breastfed for less than 8 weeks.
2. Child poverty: Age 0-4, living in a household with income less than FPL.

Data Sources:

- Child poverty: American Community Survey 2009-2013
- Breastfeeding: Pregnancy Risk Assessment Monitoring System 2009-2011

Youth (10th grade) Health Risk Behaviors

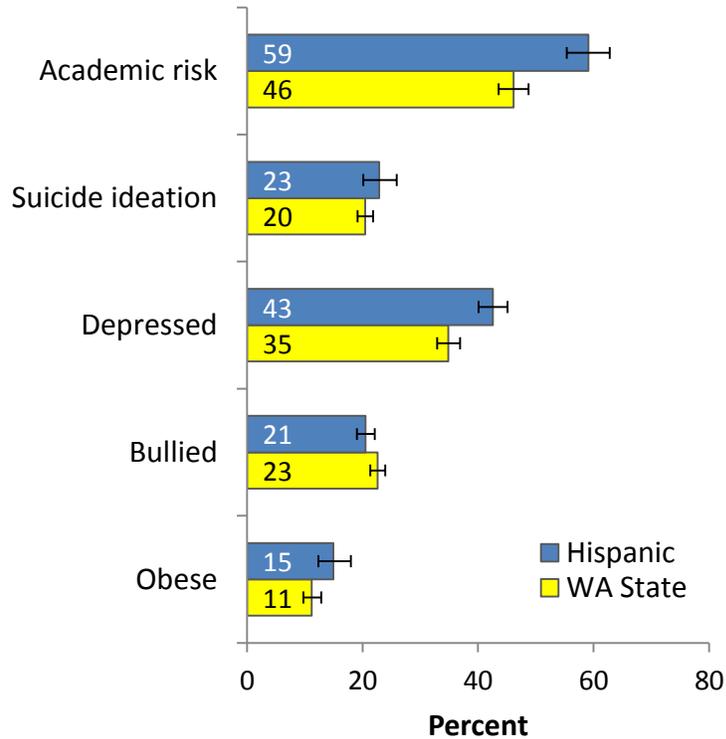


Indicator Notes

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 2014.

Youth (10th grade) Health Risk Conditions

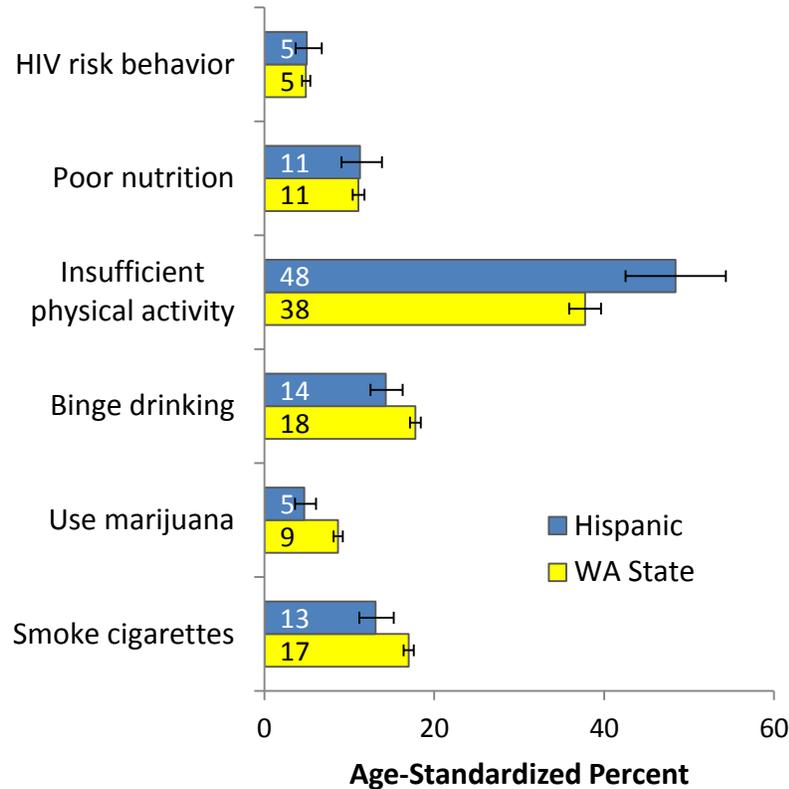


Indicator Notes

1. Youth obesity: Youth are classified as obese if they are in the 95th percentile for body mass index by age and sex based on growth charts developed by the CDC (2000).
2. Bullied: Students are asked “A student is being bullied when another student, or group of students, say or do nasty or unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she doesn’t like. It is NOT bullying when two students of about the same strength argue or fight. In the last 30 days, how often have you been bullied?”
3. 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?”
4. Suicide ideation: Students were asked “During the past 12 months, did you ever seriously consider attempting suicide?”
5. 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 2014.

Adult (Age 18+) Health Risk Behaviors

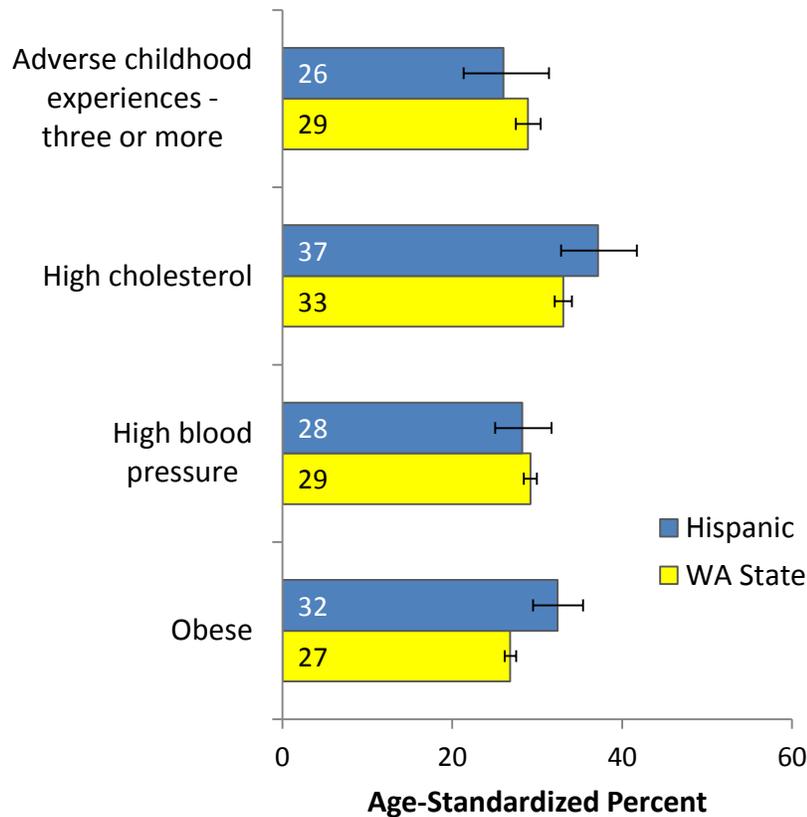


Indicator Notes

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. Heavy alcohol consumption: Adult men having two or more drinks per day and adult women having one or more drinks per day.
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 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. HIV risk - Respondents were asked if any of the following situations apply to them: You have used intravenous drugs in the past year; You have been treated for a sexually transmitted or venereal disease in the past year; You have given or received money or drugs in exchange for sex in the past year; You had anal sex without a condom in the past year

Data Source: Washington Behavioral Risk Factor Surveillance System 2011-2013

Adult (Age 18+) Health Risk Conditions

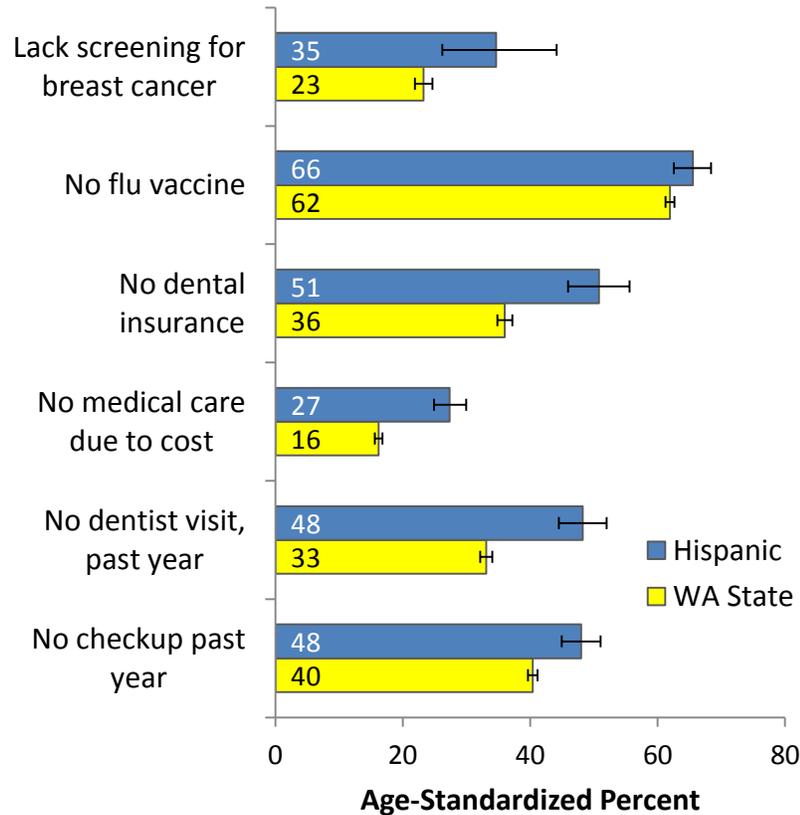


Indicator Notes

1. Obesity in adults is defined as body mass index ≥ 30 kg /m² 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. Adverse childhood experiences: Respondent reported three or more of the following traumatic experiences during childhood: Living with someone who is depressed, mentally ill, or suicidal; Living with an alcoholic or drug abuser; Family member in prison; Parents divorced or separated; Physical, verbal, or sexual abuse; Witnessing domestic violence.

Data Source: Washington Behavioral Risk Factor Surveillance System 2011-2013

Adult (Age 18+) Preventive Care

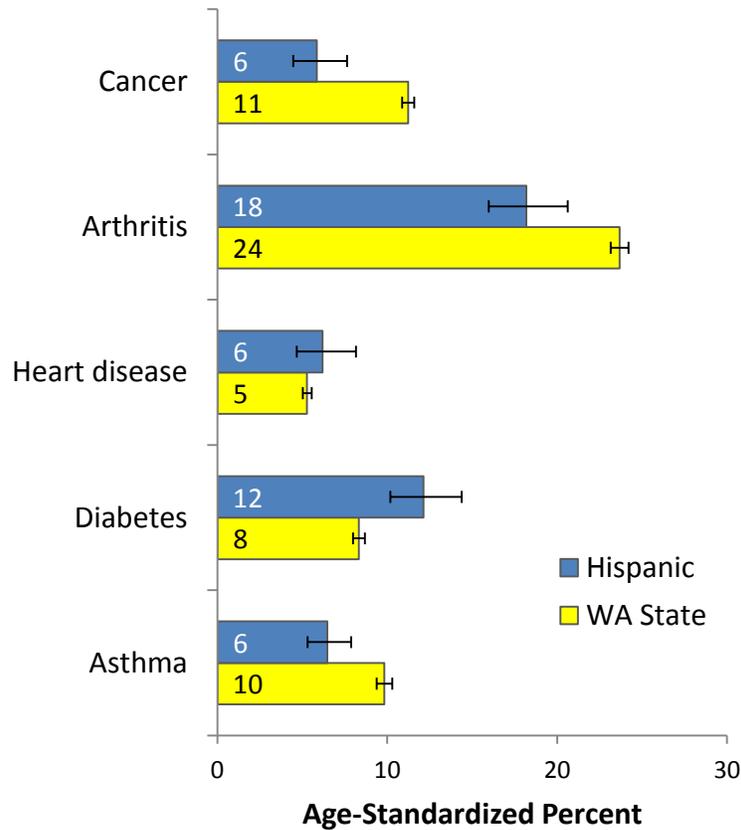


Indicator Notes

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. Dental insurance. Respondent reports not having dental insurance.
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 2011-2013

Adult (Age 18+) Chronic Disease

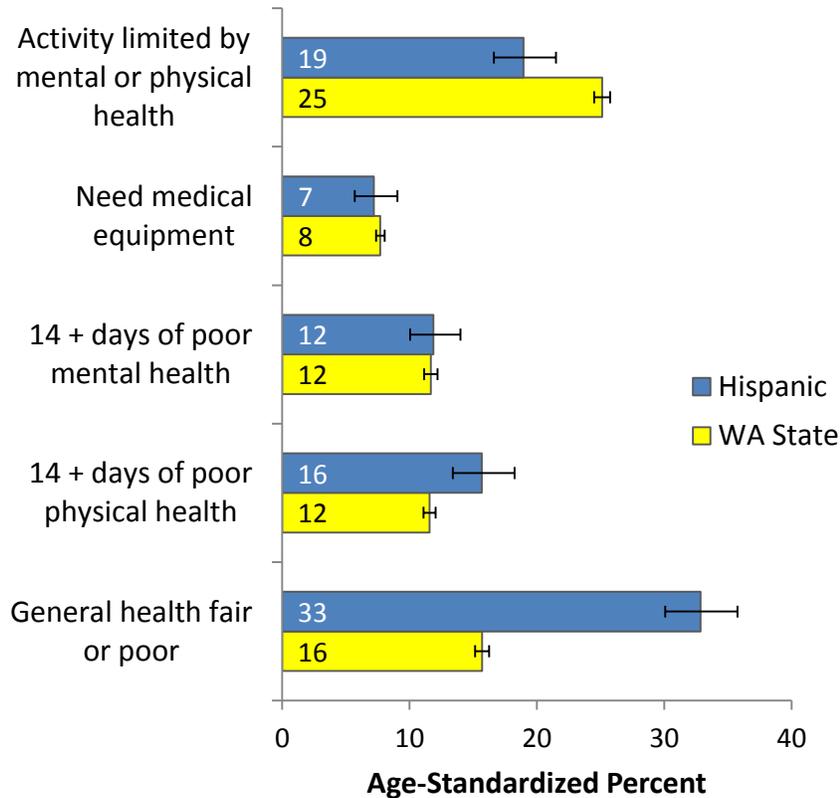


Indicator Notes

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 2011-2013

Adult (Age 18+) Quality of Life

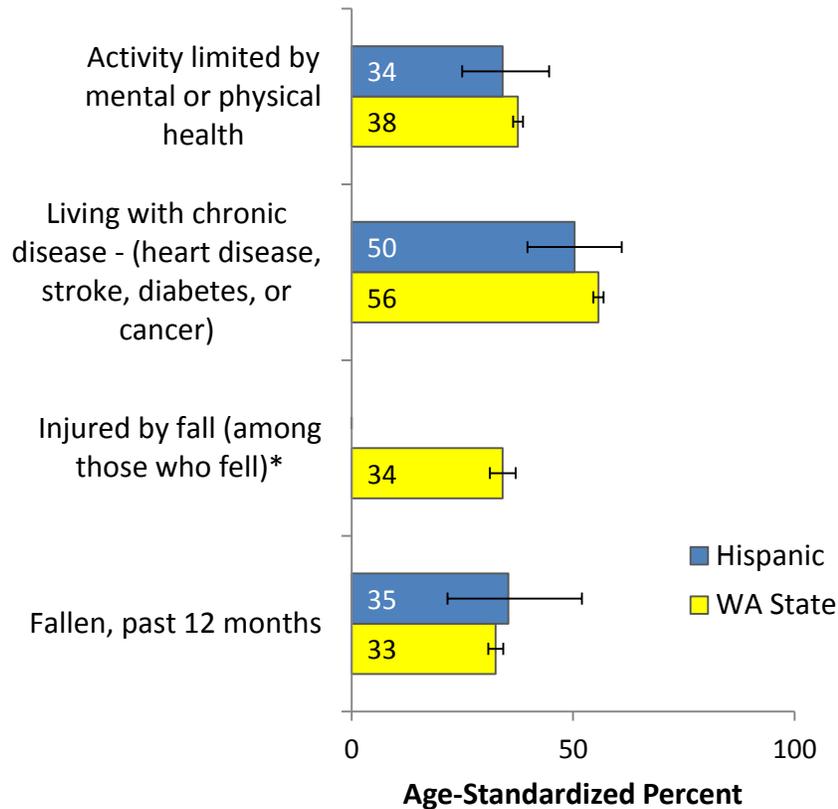


Indicator Notes

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 2011-2013

Senior (Age 65+) Health Risks



*Insufficient data for Hispanics.

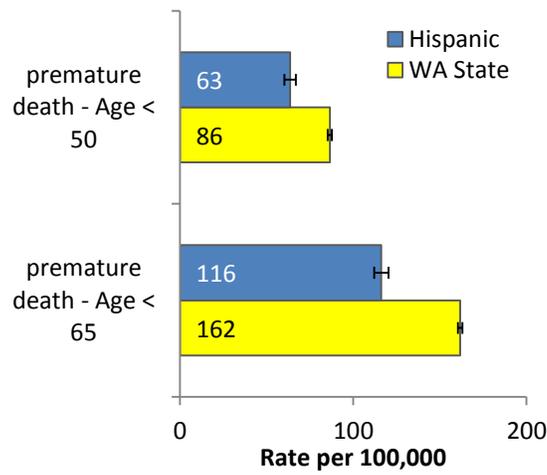
Indicator Notes

1. Activity limitation and chronic disease indicators defined above.
2. Fallen / injured by fall: Respondent is asked, "in the past 3 months, how many times have you fallen?" and "Did this fall cause an injury?"

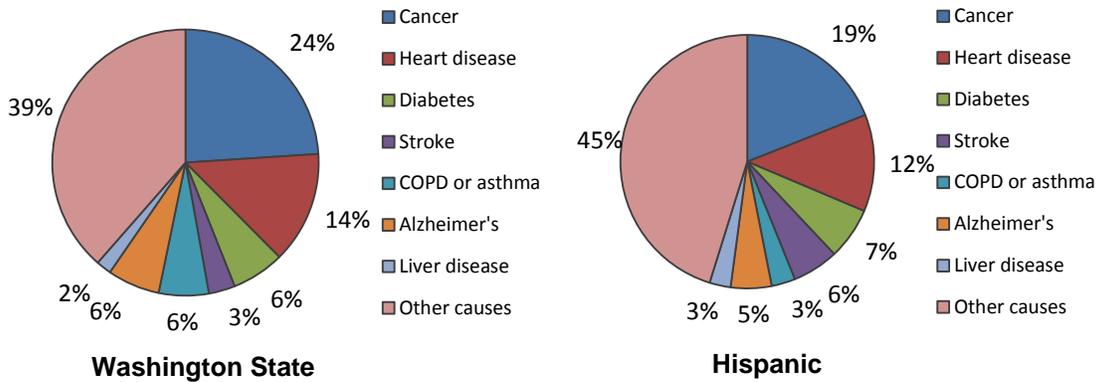
Data Source: Washington Behavioral Risk Factor Surveillance System 2011-2013

Mortality

Premature Mortality (Age < 65)



**Cause of Death in Washington State and among Hispanics
Age standardized percent of all deaths.**



Data Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 2009-2013.

Appendix: Data Sources & 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:

Office of Financial Management (OFM) Population Estimates

- For more information on OFM intercensal population estimates, go to:
<http://www.ofm.wa.gov/pop/default.asp>

American Community Survey (ACS) and Public Use Microdata Sample (PUMS)

- For more information on the American Community Survey, go to:
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>
- For more information on Public Use Microdata Sample go to:
http://www.census.gov/acs/www/data_documentation/public_use_microdata_sample/

Pregnancy Risk Assessment Monitoring Survey (PRAMS)

- For more information on PRAMS, go to:
<http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/PregnancyRiskAssessmentMonitoringSystem.aspx>

Washington Birth Certificate Data

- For more information on birth data, go to:
<http://www.doh.wa.gov/DataandStatisticalReports/VitalStatisticsData/BirthData.aspx>

Washington State Department of Health, Office of Immunization and Child Profile

- For more information on immunization data, go to:
<http://www.doh.wa.gov/DataandStatisticalReports/SchoolImmunization.aspx>

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>.

Washington State Death Certificate Data

- For more information on death records, go to:
<http://www.doh.wa.gov/DataandStatisticalReports/VitalStatisticsData/DeathData.aspx>

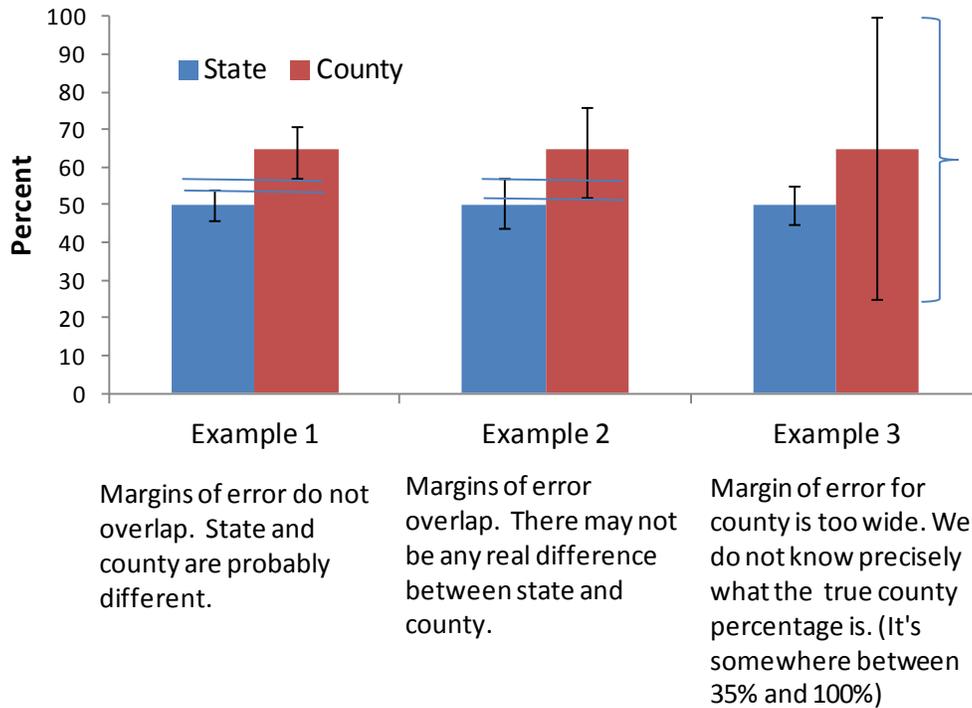
Washington State Cancer Registry (WSCR)

- For more information on WSCR, go to: <https://fortress.wa.gov/doh/wscr/WSCR/>

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



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.

GLOSSARY:

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

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

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