

Risk and Protection Profile for Substance Abuse Prevention in **Benton County**

Jan 2021



Aaron Starks, MA, Irina V. Sharkova, PhD David Mancuso, PhD

In conjunction with the Washington State Health Care Authority

Division of Behavioral Health and Recovery
Michael Langer, Deputy Director



Transforming lives

Research and Data Analysis Division

These tables provide a comprehensive update of data published in previous *Profiles*. They are among the timeliest data available to planners for understanding the risks of substance abuse among youth in their counties. Community, family, peer, and school-related factors are presented within the Hawkins and Catalano risk and protective factor framework that is used by many substance abuse prevention planners across the country.

For more information about the data, framework, definitions, and other topics, see the 1997 *Profile on Risk and Protection for Substance Abuse Prevention Planning in Washington State,* (Report 4.15-40). That report and subsequent years' Profiles are available on the RDA website at: https://www.dshs.wa.gov/ffa/rda/core-profile-archive.



Benton County

Table of contents:

Cover page

Introduction

Interpreting Indicator Profiles: Interpreting Annual Trend Charts:

Indicator Comparison Profiles: (A comparison of standardized five-year rates at county

and 'county like us' levels by domain, factor, and indicator)

- 1. Indicator Profile 1
- 2. Indicator Profile 2
- 3. Indicator Profile 3
- 4. Indicator Profile 4

Community:

- 5. Availability of Drugs
- 7. Extreme Economic & Social Deprivation
- 11. Transitions & Mobility
- 14. Antisocial Behavior of Community Adults
- 19. Low Neighborhood Attachment and Community Disorganization

Family:

22. Family Problems

Schools:

- 24. Academic Achievement
- 35. School Climate

Individual/Peer:

38. Early Criminal Justice Involvement

Problem Outcomes:

- 41. Child and Family Health
- 49. Criminal Justice
- 55. Substance Use

Appendices

- 59. Technical Notes
- 71. Populations Subtracted for Police Agencies not Reporting Arrests to UCR
- 72. Police Agencies that did not Report Arrests to UCR

January, 2021 Notes:

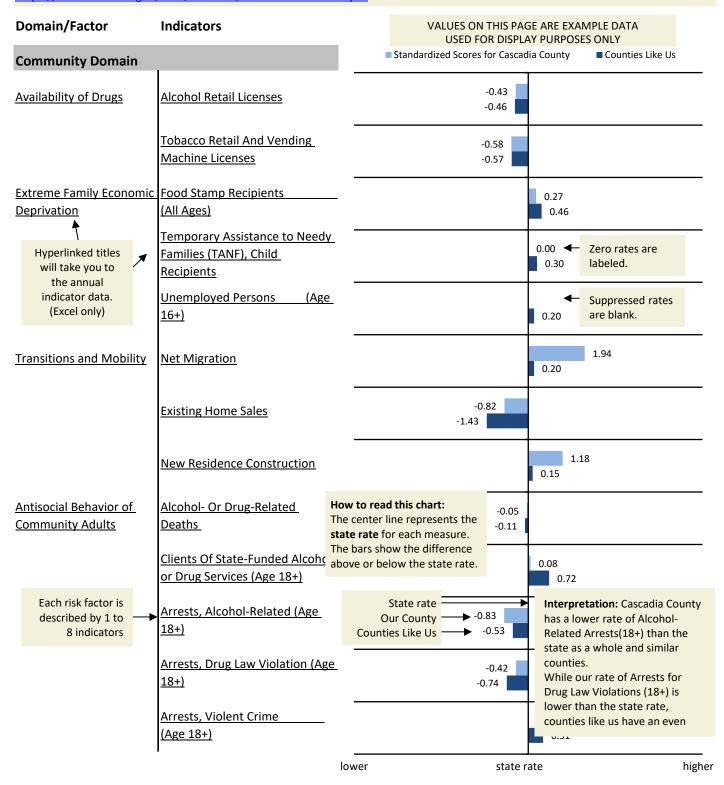
Unexcused Absences is included in this report through 2017 but is no longer being updated.

Regular Attendance replaces Unexcused Absences moving forward. Five years of data are now available.

i

How to Interpret Indicator Profiles

The Indicator Profile compares rates for your County, and Counties Like Us to the state. The Profile displays standardized scores to allow comparison between indicators. See <u>Technical Notes</u> for a definition of a standardized score and of Counties Like Us. To see all 39 counties ranked from the highest to the lowest for each indicator, go to https://www.dshs.wa.gov/data/research/research-4.47-state.pdf



How To Interpret County Trend Charts

Understanding the CORE Trend Charts and Tables

The presentation of risk factor data in the CORE reports is organized by domain (Community, Family, School, and Individual/Peer) and by risk factor within domains. Each risk factor may include one or more indicators.

Knowing that your county has a particular rate for one of the indicators does not help you evaluate the importance of that indicator to your risk profile. You do not know if it is higher or lower than you could reasonably expect. It is more useful to compare your county rate to the state rate, which is the average for the whole state, and to other counties, especially counties that have some characteristics in common with your county. This is especially important when urban rates differ substantially from rural rates. The comparison we present is for a group of counties that are similar in characteristics related to prevention planning: population of young people (aged 10-24), the percentage of deaths in the county that are alcohol and drug-related, and a simple geographic division into Eastern and Western Washington. For each indicator the **Counties Like Us** rate is the average rate across all of the counties in the cluster. For more information on Counties Like Us see the Technical Notes.

Please note these IMPORTANT ISSUES:

If viewing the report as an XLSX, the worksheet tabs are labeled with the name of the risk factor. Each risk factor may in turn include several indicators. Be sure to **scroll down the worksheet page** to review all of the available indicators for a given risk factor. The workbook is designed to print with one indicator on each page.

If viewing the report as a PDF, the risk factor is listed in the page heading. Each indicator is displayed on a seperate page. There may be several pages of indicators for a given risk factor.

Understanding the chart scales:

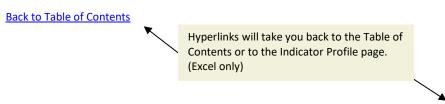
Users should be careful to interpret the chart scales correctly. The chart scales are automatically adjusted to enhance differences between the indicators at each geographic level. Users should consider whether the differences they observe between geographic areas or across years are significant. The unit of measurement is displayed at the left of each chart scale. Often the unit of measurement is a rate expressed as the number of events or a count of individuals per 100 population (or, "percent"), or sometimes per 1,000 or 100,000 population.

Review the example:

On the following page (below, scroll down) is an example indicator for Alcohol Retail Licenses in "Cascadia County". The number of alcohol retail licenses is expressed as a rate per 1,000 population.

How To Interpret County Trend Charts

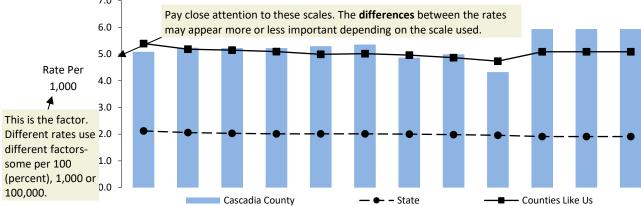
Each risk factor is on its separate page. Each risk factor may include several indicators, so remember to scroll down. For example, the risk factor Availability of Drugs has two indicators: Alcohol Retail Licenses (shown below) and Tobacco Retail And Vending Machine Licenses.



Go To Standardized Five-Year Rate Indicator Comparison Profile

7.0 6.0

Alcohol Retail Licenses

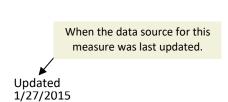


	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
National		Comparable National Data Not Available											
State	2.12	2.06	2.03	2.01	2.01	2.01	2.00	1.98	1.96	1.91	1.91	1.91	
Counties Like Us	3.27	3.12	3.11	3.08	2.98	3.00	2.96	2.88	2.77	3.17	3.17	3.17	
Cascadia County	5.08	5.23	5.22	5.22	5.29	5.35	4.86	4.99	4.32	5.93	5.93	5.93	
Licenses	(32	34	35	36	37	38	35	35	31	43	43	43	
All Persons	6,295	6,497	6,703	6,899	7,000	7,103	7,198	7,012	7,177	7,250	7,250	7,250	

Note: The State and County rate are the annual number of alcohol retail licenses active during the year, per 1,000 persons (all ages). RetaiNicenses include restaurants, grocery stores, and wine shops but do not include state liquor stores and agencies. Retail alcohol facilities on military bases and reservations are not licensed by the State and therefore are not included in these data.

State Source: Washington State Liquor Control Board, Annual Operations Report Population Estimates: Washington State Office of Financial Management, Forecasting Division

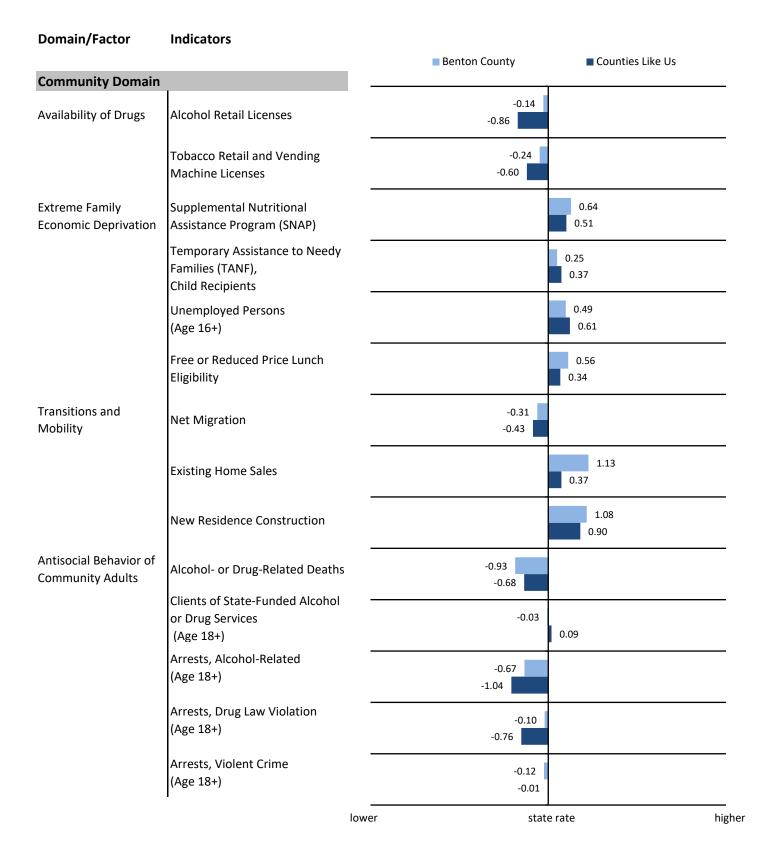
Each indicator graph is followed by data source and rate definitions as well as any special information for the

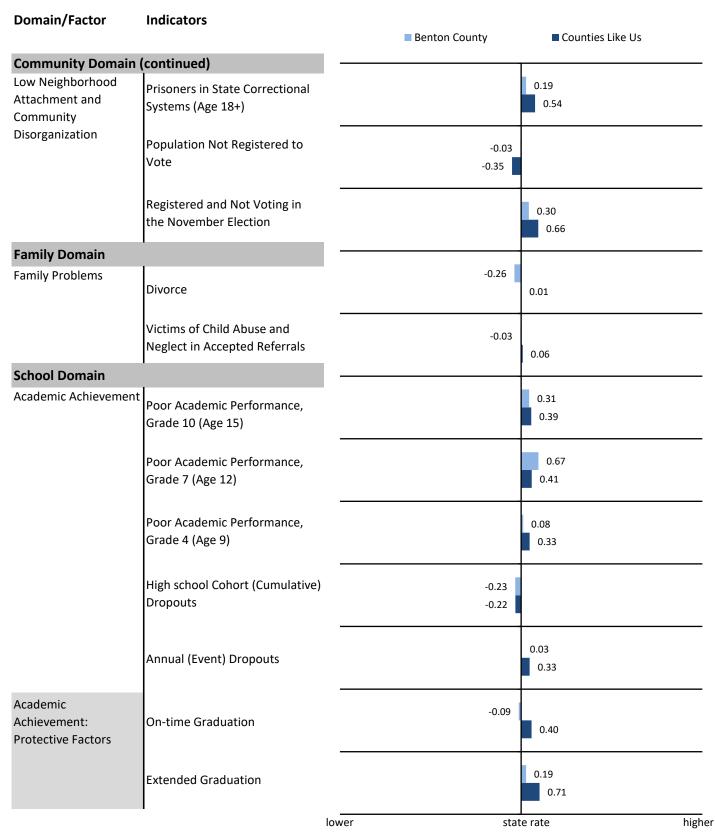


Rate Formula

Rate = (numerator / denominator) x factor Example in 2002: (32 / 6,295) x 1,000 = 5.08 Read the rate as 5.08 licenses per 1,000 people.

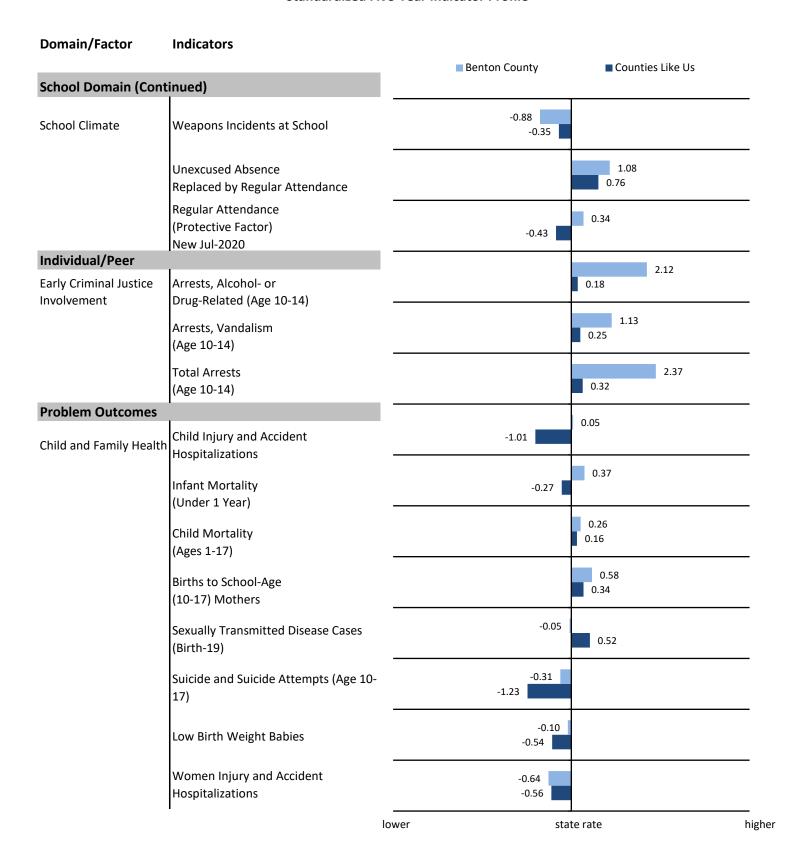
iν

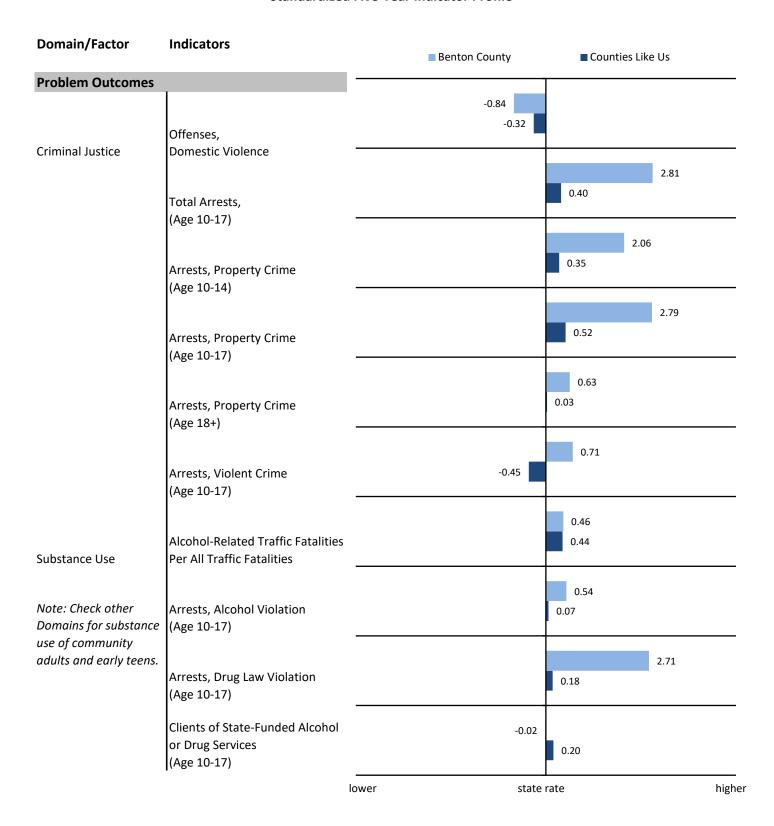




Beginning with the Dec. 2015 report series, On-time and Extended Graduation are shown as protective factors. In previous reports, standardized rates above indicated a negative factor: risk of not graduating (see Technical Notes for details).

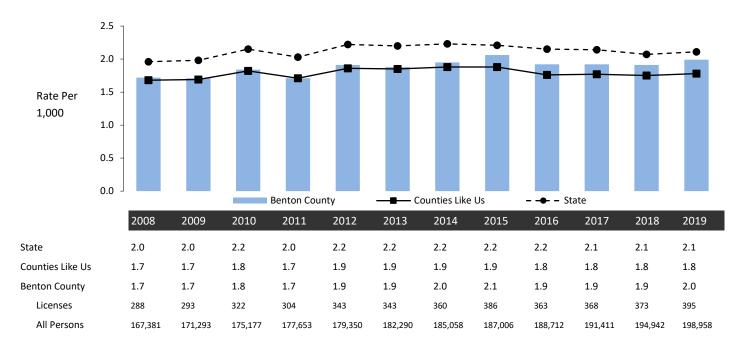
 $\label{thm:condition} \mbox{Washington State Department of Social and Health Services} \\ \mbox{Research and Data Analysis,} \\$





Community Domain: Availability of Drugs

Alcohol Retail Licenses



Note: The alcohol retail licenses active during the year, per 1,000 persons (all ages). Retail licenses include on-premises consumption such as restaurants, taverns, bars and off-premises vendors such as grocery stores, liquor stores and deli marts. Retail locations with multiple privileges, such as a grocery store with both spirits and beer/wine privileges, are only counted once. Retail alcohol facilities on military bases and reservations are not licensed by the State and therefore are not included in these data. Non-retail licensees, such as distributors, distillers, and wineries are not included.

Effective March 1, 2012, Initiative 1183 privatized liquor sales in Washington State. Prior to privatization, the sale of spirits was limited to 330 liquor stores regulated by the LCB, none of which were included in the data. This change may account for minor shifts at smaller geographies as local markets adjusted to those store closures or their conversion to privately-run businesses which were then counted in this report. Adding the sale of spirits to existing licensees who had previously been limited to beer and wine sales would not show up as an increase in the number of licenses.

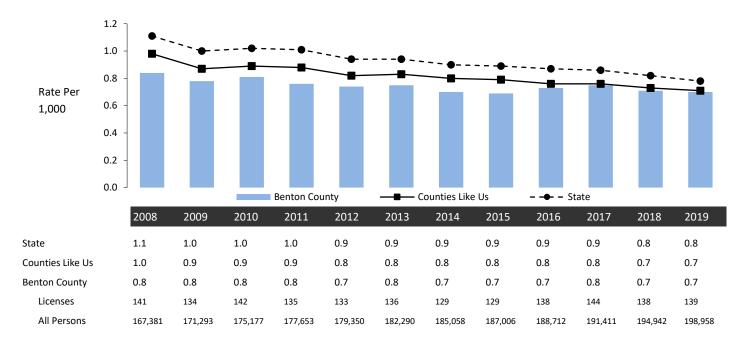
Policies on licensing distributors, taxing the proceeds, and determining who can sell alcohol vary substantially from state to state. Consequently, there is no consistent comparable source for national data.

State Source: Washington State Liquor and Cannabis Board, Annual Operations Report **Population Estimates:** Washington State Office of Financial Management, Forecasting Division

Updated: 02/10/2020

Community Domain: Availability of Drugs

Tobacco Retail and Vending Machine Licenses

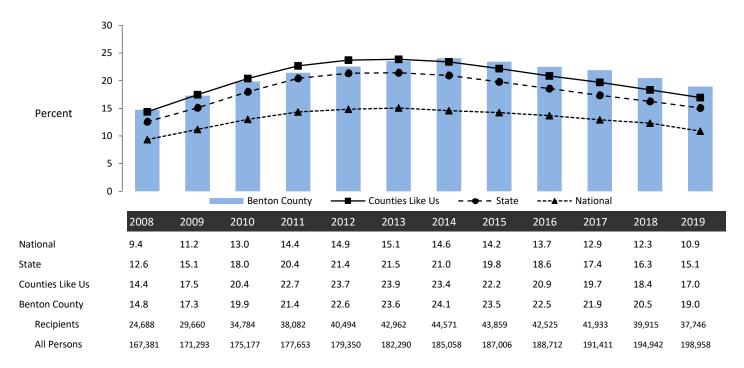


Note: The tobacco retailer and vending machine licenses active during the year, per 1,000 persons (all ages). Tobacco sales licenses include tobacco retailer licenses (stores that sell tobacco products), vapor retailers, and tobacco vending machines. Tobacco retailers on military bases and reservations are not licensed by the State and therefore are not included in these data. Non-retail licensees, such as tobacco and vapor wholesalers and tobacco and vapor product manufacturers are also excluded. No source of comparable national data was obtained.

State Source: Department of Health (from the Department of Licensing), Tobacco Prevention Program, Tobacco Statistics **Population Estimates:** Washington State Office of Financial Management, Forecasting Division

Updated: 02/07/2020

Supplemental Nutritional Assistance Program (SNAP)



Note: The persons (all ages) receiving food stamps in the fiscal year, per 100 persons (all ages). The population used is for the calendar year which ends the fiscal period. National rates use counts of all yearly recipients. Suppression code definitions for yearly rates are explained in Technical Notes.

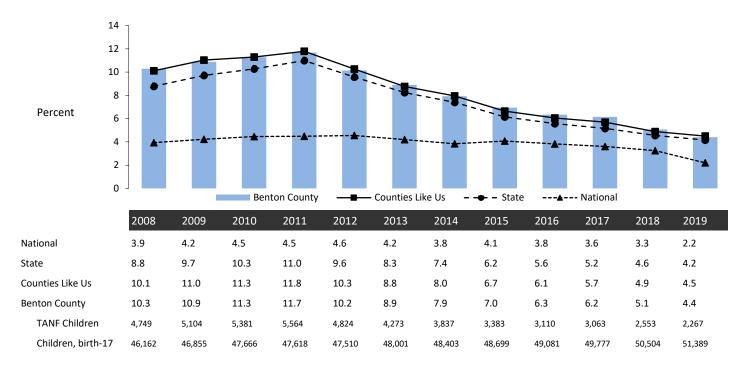
State Source: Department of Social and Health Services, Research and Data Analysis, Automated Client Eligibility System and Warrant Roll.

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Census Bureau, Statistical Abstract of the US; Federal Food Stamp Programs by State

Updated: 09/15/2020

Temporary Assistance to Needy Families (TANF), Child Recipients



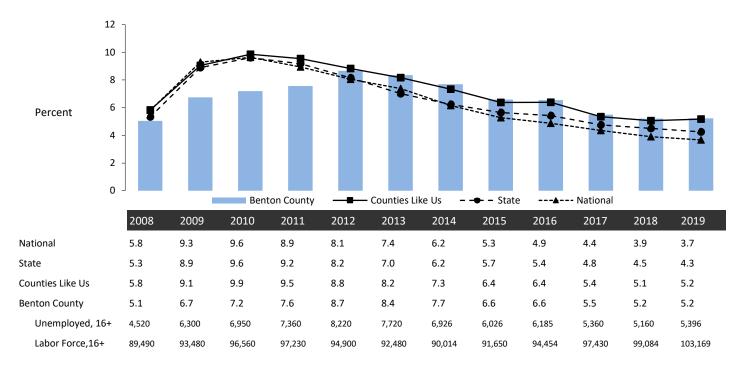
Note: The children (age birth-17) participating in Aid to Families (AFDC/TANF) programs in the fiscal year, per 100 children (age birth-17). The population used is for the calendar year which ends the fiscal period. National TANF child recipients are defined as children 0-19 with almost no children of age 19, therefore national denominators are for children 0-18. Suppression code definitions for yearly rates are explained in Technical Notes.

State Source: Department of Social and Health Services, Research and Data Analysis, Automated Client Eligibility System and Warrant Roll.

Population Estimates: Washington State Office of Financial Management, Forecasting Division **National Source:** U.S. Department of Health & Human Services, Administration for Children and Families, Office of Planning Research and Evaluation: Characteristics and Financial Circumstances of TANF Recipients Table I-29

Updated: 09/15/2020

Unemployed Persons (Age 16+)

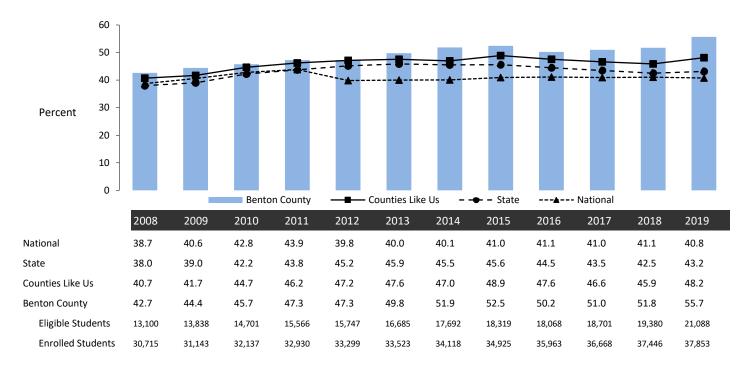


Note: The unemployed persons (age 16 and over) per 100 persons in the civilian labor force. Unemployed persons are individuals who are currently available for work have actively looked for work, and do not have a job. The civilian labor force includes persons who are working or looking for work. The monthly numbers are a snapshot in time done approximately the 12th of each month. A yearly estimate is then produced by averaging the monthly numbers. Historical data has been updated. Data for the latest year should be considered preliminary. Suppression code definitions for yearly rates are explained in Technical Notes.

State Source: Employment Security Department, Labor Market and Economic Analysis, County Unemployment File **National Source:** U.S. Department of Labor Bureau of Labor Statistics Labor Force Statistics from the Current Population Survey

Updated: 06/19/2020

Students Eligible for Free or Reduced Price Lunch



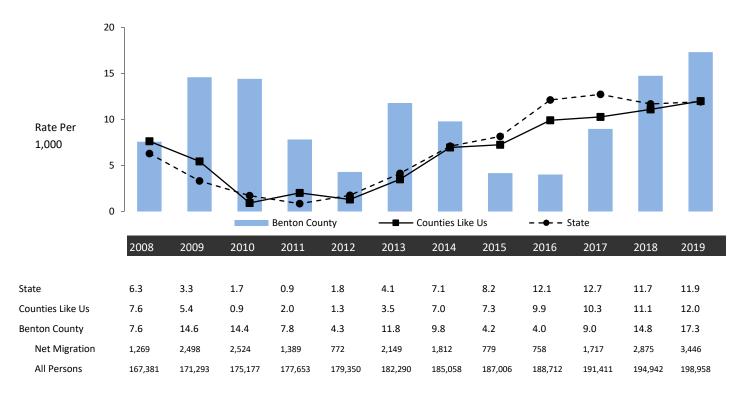
Note: The students eligible for free or reduced price lunch per 100 students enrolled. Eligibility requirements are discussed in Technical Notes.

State Source: Office of Superintendent of Public Instruction, Child Nutrition **National Source:** U.S. Department of Agriculture, Child Nutrition Tables

Updated: 07/07/2020

Community Domain: Transitions and Mobility

Net Migration



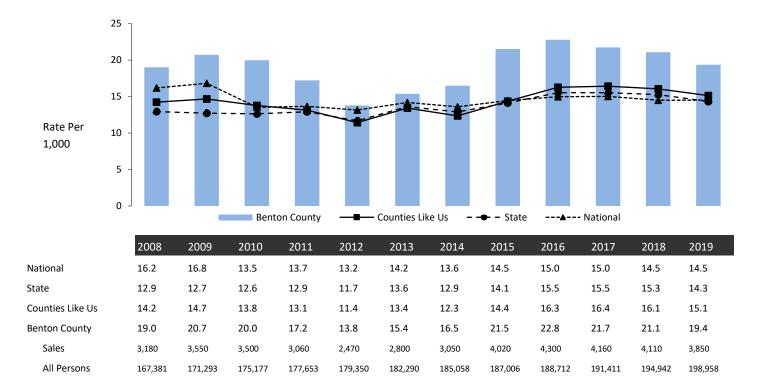
Note: Net migration is the annual number of new residents that moved into an area minus the number of residents that moved out of an area, per 1,000 persons. The Office of Financial Management estimates annual net migration for twelve months ending on March 31st of a given year. For example, annual net migration in 2009 refers to the period from April 1, 2008 through March 31, 2009. Previously Net migration was calculated as a 3-year moving average which smooths changes over time. Now, annual rates, numerators and denominators are based on single-year data.

State Source: Office of Financial Management, Net Migration Data

Updated: 06/22/2020

Community Domain: Transitions and Mobility

Existing Home Sales



Note: The previously-owned homes sold, per 1,000 persons (all ages). Previously-owned homes sold is rounded to the tens. Existing homes sold are estimated based on data from multiple listing services, firms that monitor deeds, and local Realtors associations. Adjustments were made by the data provider to remove refinanced, rather than sold homes from the counts of sales.

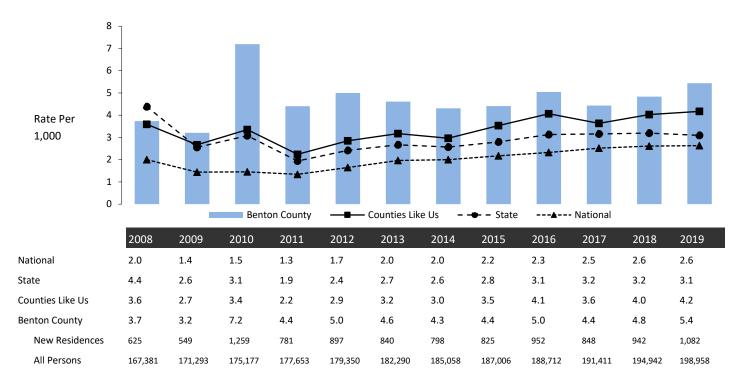
State Source: Washington Center for Real Estate Research, University of Washington. Market Summary Report. Existing Home Sales.

Population Estimates: Washington State Office of Financial Management, Forecasting Division **National Source:** NATIONAL ASSOCIATION OF REALTORS®, Single-Family Existing-Home Sales and Prices.

Updated: 10/01/2020

Community Domain: Transitions and Mobility

New Residence Construction



Note: The new building permits issued for single and multi-family dwellings, per 1,000 persons (all ages). Each unit in a multi-family dwelling (for example, each apartment in a building) has a separate building permit.

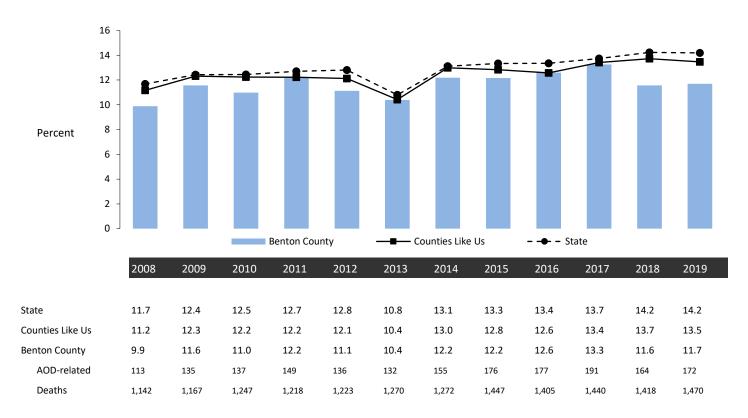
State Source: Washington Center for Real Estate Research, Washington State University, U.S. Department of Commerce, C-40 Reports

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: U.S. Census Bureau, Building Permits Survey

Updated: 10/01/2020

Alcohol- or Drug-Related Deaths

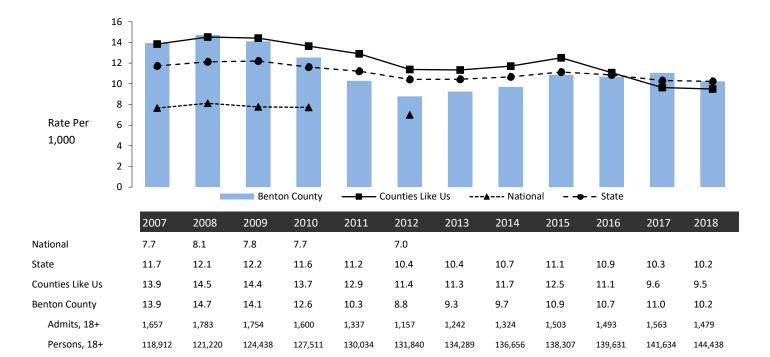


Note: The deaths, with alcohol- or drug-related causes, per 100 deaths. Evaluation is based on all contributory causes of death for direct and indirect associations with alcohol and drug abuse. For a complete explanation of the codes and methods used please see Technical Notes: Counting Alcohol- or Drug-related Deaths. Suppression code definitions for yearly rates are explained in Technical Notes. Rates are not reported when fewer than 100 deaths occurred in an area.

State Source: Department of Health, Center for Health Statistics, Death Certificate Data File

Updated: 09/30/2020

Clients of Publicly-Funded Alcohol or Drug Services (Age 18+)



Note: The adults (age 18 and over) receiving publicly-funded alcohol or drug services, per 1,000 adults. Counts of adults are unduplicated so that those receiving services more than once during the year are only counted once for that year. Client counts are linked to state service records through the Research and Data Analysis Client Services Database. State-funded services include treatment, assessment, and detox. Persons in Department of Corrections treatment programs are not included.

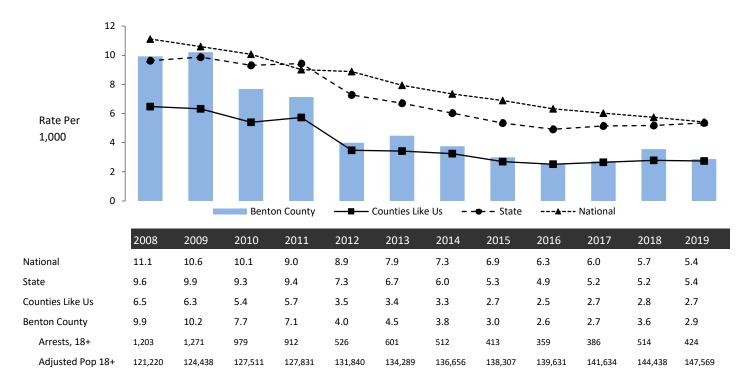
State Source: Department of Social and Health Services, Division of Behavioral Health and Recovery services reported from the Research and Data Analysis Client Services Database (CSDB).

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS)

Updated: 08/02/2019

Arrests (Age 18+), Alcohol-Related



Note: The alcohol violations (age 18+), per 1,000 adults (age 18+). Alcohol violations include all crimes involving driving under the influence, liquor law violations, and drunkenness. DUI arrests by the Washington State Patrol are included in the state trend analysis. However, they are not included in the county rankings since WSP arrests are not assigned to counties. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to WASPC. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix, Non-Reporting Agencies and Population.

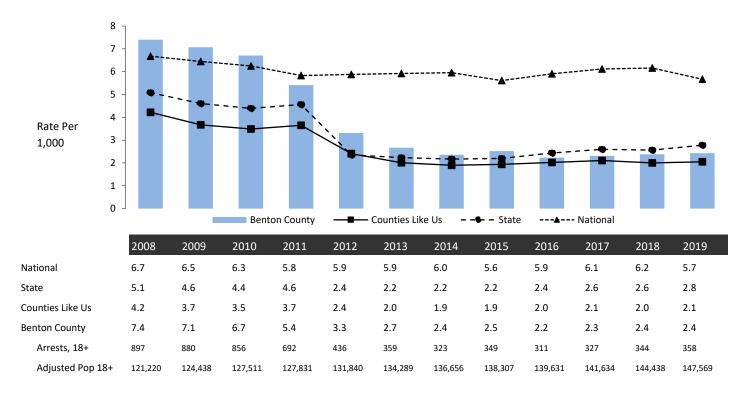
The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Arrests (Age 18+), Drug Law Violation



Note: The arrests of adults (age 18+) for drug law violations, per 1,000 adults (age 18+). Drug law violations include all crimes involving sale, manufacturing, and possession of drugs. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to WASPC. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix, Non-Reporting Agencies and Population.

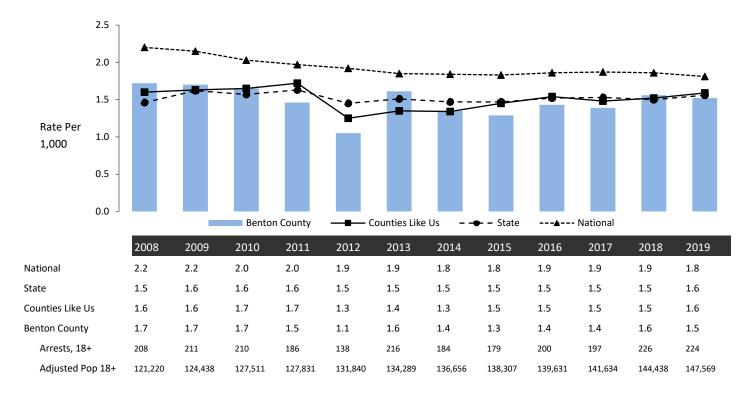
The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Arrests (Age 18+), Violent Crime



Note: The arrests of adults (age 18+) for violent crime per 1,000 adults (age 18+). Violent crimes include all crimes involving criminal homicide, forcible rape, robbery, and aggravated assault. Simple assault is not defined as a violent crime. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to WASPC. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting. see the Technical Notes and the appendix. Non-Reporting Agencies and Population.

The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

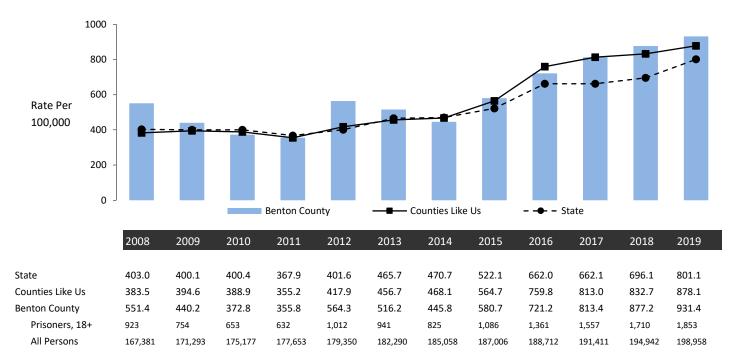
State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Community Domain: Low Neighborhood Attachment and Community Disorganization

Prisoners in State Correctional Systems (Age 18+)



Note: The adult (age 18 and over) admissions to prison, per 100,000 persons (all ages). Admissions include new admissions, readmissions, community custody inmate violations, and parole violations. Counts of admissions are duplicated so that individuals admitted to prison more than once in a year are counted each time they are admitted. The admissions are attributed to the county where the conviction occurred. Prisoners being electronically monitored are included in the data. Suppression code definitions for yearly rates are explained in Technical Notes.

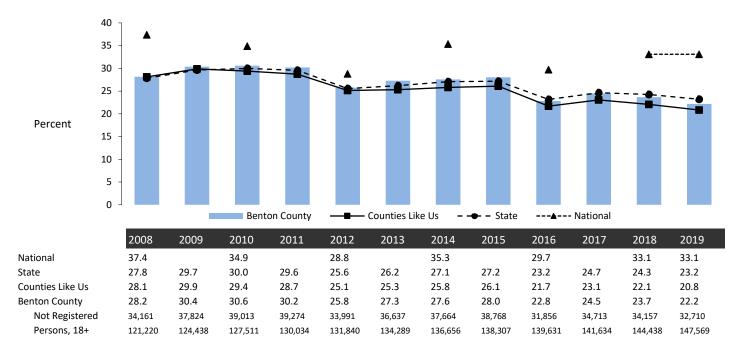
State Source: Department of Corrections, Inmates File.

Population Estimates: Washington State Office of Financial Management, Forecasting Division

Updated: 09/29/2020

Community Domain: Low Neighborhood Attachment and Community Disorganization

Population Not Registered to Vote



Note: The persons not registered to vote in the November elections, per 100 adults (age 18 and over). As part of the November Current Population Survey (the Voting and Registration Supplement), the Bureau of the Census collects data on voting and registration in years with presidential or congressional elections (i.e. every other year).

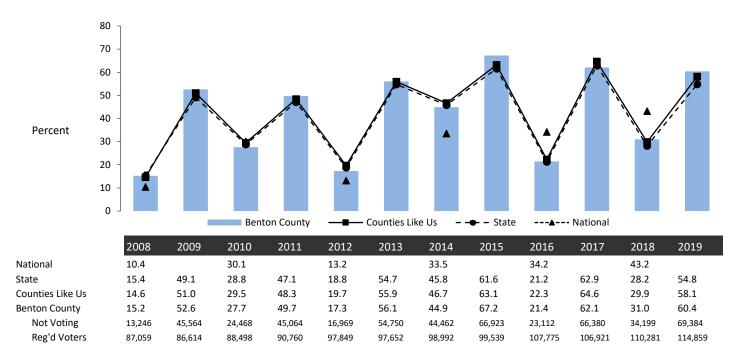
State Source: Office of the Secretary of State, Elections Division, Registered Voters

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: Calculated using data from U.S. Census Bureau, Statistical Abstract of the United States; "Voting-Age Population, Percent Reporting Registered, and Voted"

Community Domain: Low Neighborhood Attachment and Community Disorganization

Registered and Not Voting in the November Election



Note: The persons registered to vote in the November elections but not voting, per 100 adults (age 18 and over) registered to vote. As part of the November Current Population Survey (the Voting and Registration Supplement), the Bureau of the Census collects data on voting and registration in years with presidential or congressional elections (i.e. every other year).

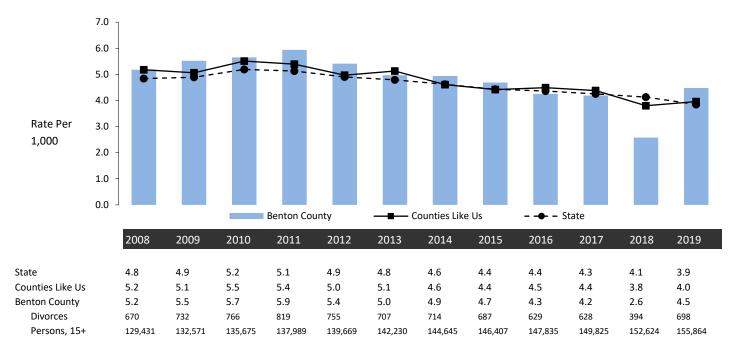
State Source: Office of the Secretary of State, Elections Division, Registered Voters

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: Calculated using data from U.S. Census Bureau, Statistical Abstract of the United States; "Voting-Age Population, Percent Reporting Registered, and Voted"

Family Domain: Family Problems

Divorce



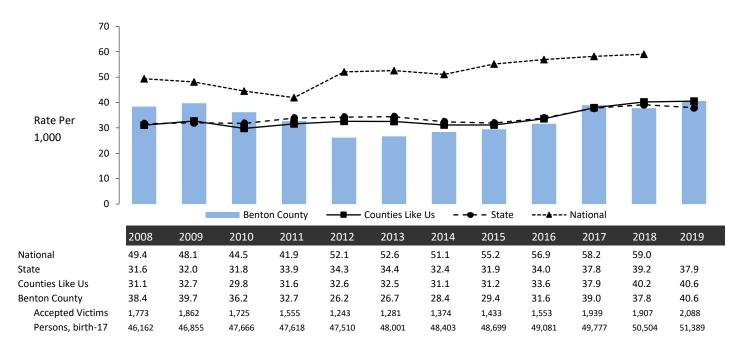
Note: The divorces per 1,000 persons (age 15 and over). Divorce includes dissolutions, annulments, and unknown decree types; it does not include legal separations. Divorce data on this page is reported by Person 1's county of residence at the time of decree. If Person 1 lived outside Washington, then Person 2's county of residence is used. If neither party to the decree has a reported county of residence in Washington State, the event is not assigned to a county, but is included in the state rate. Data prior to 2018 was recorded as "husband" & "wife", with the wife's county of residence used first and the husband's used second if the wife's county of residence was not in Washington State. Suppression code definitions for yearly rates are explained in Technical Notes.

State Source: Department of Health, Center for Health Statistics, Dissolution and Annulment Data. **Population Estimates:** Washington State Office of Financial Management, Forecasting Division

Updated: 10/29/2020

Family Domain: Family Problems

Victims of Child Abuse and Neglect in Accepted Referrals



Note: The children (age birth-17) identified as victims in reports to Child Protective Services that were accepted for further action, per 1,000 children (age birth-17). A "referral" is a report of suspected child abuse which may have multiple listed victims. Mandated reporters, such as doctors, nurses, psychologists, pharmacists, teachers, child care providers, and social service counselors, notify Child Protective Services if they suspect a child is in danger of negligent treatment, physical abuse, sexual abuse, or other maltreatment. In addition, other concerned individuals may report suspected child abuse cases. If the information provided meets the sufficiency screen, the referral is accepted for further action. A referral may have one or more children identified as victims. Children are counted more than once if they are reported as a victim more than once during the year. The data in this report are based on the total number of victims reported in Child Protective Services referrals. Child location is derived from the residence at the time of referral. Suppression code definitions for yearly rates are explained in Technical Notes.

State Source: Department of Social and Health Services, Children's Administration FamLink Data Warehouse.

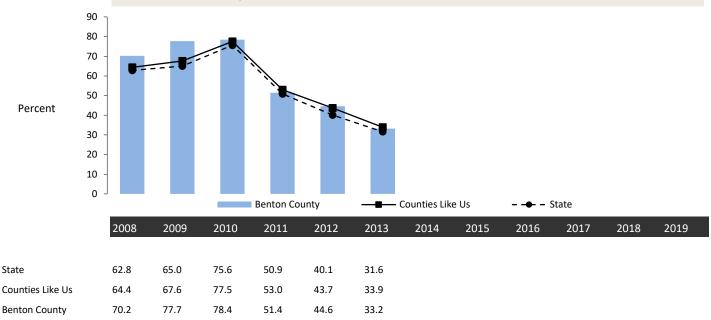
Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Health and Human Services Administration for Children and Families, Voluntary Cooperative Information System (VCIS), and estimates from Adoption, Foster Care Analysis Reporting System (AFCARS)

Updated: 05/11/2020

Poor Academic Performance, Grade 10

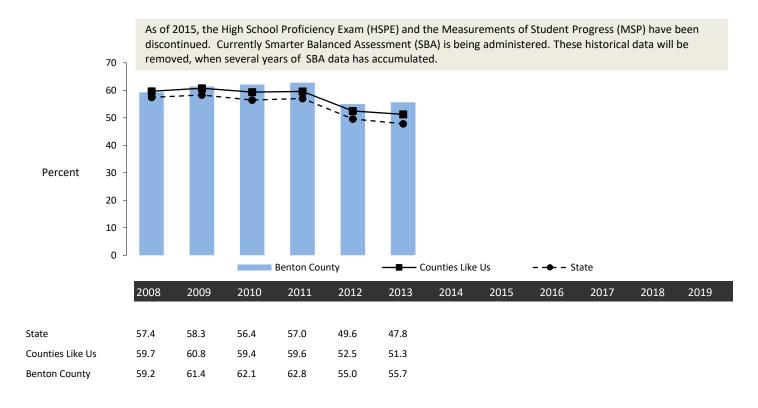
As of 2015, the High School Proficiency Exam (HSPE) and the Measurements of Student Progress (MSP) have been discontinued. Currently Smarter Balanced Assessment (SBA) is being administered. These historical data will be removed, when several years of SBA data has accumulated.



Note: The students tested who failed one or more content areas as a percent of all students tested at the 10th grade level. Some districts have chosen to test students in both grades 9 and 10 for the 10th grade assessment. All students being tested at the 10th grade level are included in these data regardless of their grade placement. Tests are given in the spring of the year. For example, data for 2016 is for students in the 10th grade during the school year 2015/2016. By contractual agreement with OSPI, any rates above 95% will be listed as >95% or "Greater than 95%", any rates below 5% will be listed as <5% or "Less than 5%", and data is suppressed when less than ten students were tested to avoid individual student identification. In 2009/2010 the 10th grade WASL was replaced by the High School Proficiency Exam (HSPE). This test was built on the same framework as the WASL, but contain fewer questions. It is considered equivalent by OSPI.

State Source: Office of Superintendent of Public Instruction, Instructional Programs, Curriculum and Assessment, Grade 10 Failing in One or More Content Areas.

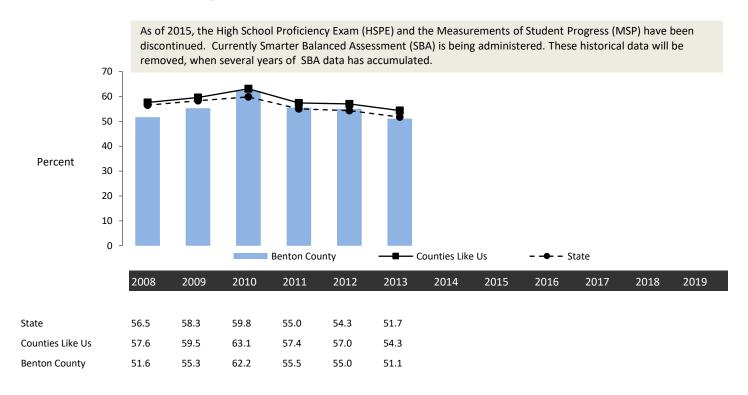
Poor Academic Performance, Grade 7



Note: The students tested who failed one or more content areas as a percent of all students tested at the 7th grade level. Tests are given in the spring of the year. Data for 2016 is for students in the 7th grade during the school year 2015/2016 By contractual agreement with OSPI, any rates above 95% will be listed as >95% or "Greater than 95%", any rates below 5% will be listed as <5% or "Less than 5%", and data is suppressed when less than ten students were tested to avoid individual student identification. In 2009/2010 the 7th grade WASL was replaced by Measurements of Student Progress (MSP). This test was built on the same framework as the WASL, but contain fewer questions. It is considered equivalent by OSPI.

State Source: Office of Superintendent of Public Instruction, Instructional Programs, Curriculum and Assessment, Grade 7 Failing in One or More Content Areas.

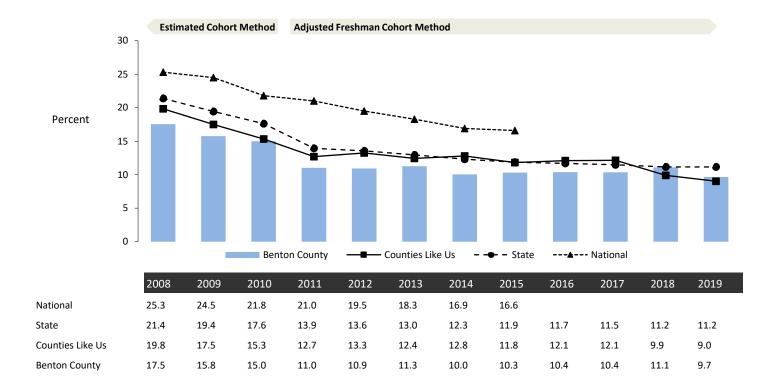
Poor Academic Performance, Grade 4



Note: The students tested who failed one or more content areas as a percent of all students tested at the 4th grade level. Tests are given in the spring of the year. Data for 2016 is for students in the 4th grade during the school year 2015/2016 By contractual agreement with OSPI, any rates above 95% will be listed as >95% or "Greater than 95%", any rates below 5% will be listed as <5% or "Less than 5%", and data is suppressed when less than ten students were tested to avoid individual student identification. In 2009/2010 the 4th grade WASL was replaced by Measurements of Student Progress (MSP). This test was built on the same framework as the WASL, but contain fewer questions. It is considered equivalent by OSPI.

State Source: Office of Superintendent of Public Instruction, Instructional Programs, Curriculum and Assessment, Grade 4 Failing in One or More Content Areas.

High School Cohort (Cumulative) Dropouts

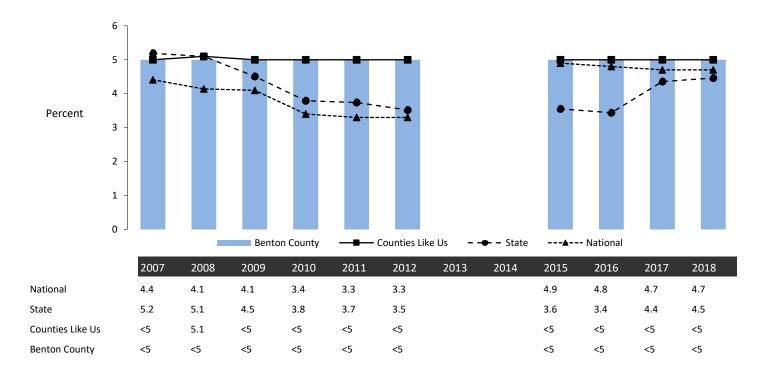


Note: The percent of students dropping out prior to graduation. The High School Cohort Dropout rate (may also be referred to as the longitudinal, cumulative, or freshmen cohort dropout rate) measures what happens to a single group (or cohort) of students over a period of time. This rate is most useful for seeing the long-term impact on the community. The Estimated Cohort (old method) rate formula used data from multiple grades in a single year. The Adjusted Cohort (new method) rate is the number of students in the same freshman cohort dropping out prior to graduation divided by the adjusted freshman class cohort of the graduates. Beginning with the 9-grade cohort due to graduate in the 2010/2011 school year, OSPI has started using the actual cohort of students for their calculations. Differences in rates from 2010 to 2011 are likely to be influenced by the change in computation method. By contractual agreement with OSPI, any rates above 95% will be listed as >95% or "Greater than 95%", any rates below 5% will be listed as <5% or "Less than 5%", and data is suppressed when less than ten students were tested to avoid individual student identification. For more information on the changes in rate computation and cohort methodology, see the Technical Notes.

State Source: Office of Superintendent of Public Instruction, Graduation and Dropout Statistics for Washington. **National Source:** NCES National Center for Education Statistics (adjusted cohort graduation rate (ACGR) for public high schools)

Table 113. Public high school graduates and dropouts, by race/ethnicity and state or jurisdiction

Annual (Event) Dropouts



Note: The Annual Dropout rate measures the proportion of students enrolled in grades 9-12 who drop out in a single year without completing high school as a percentage of all students in grades 9 through 12 that year. When districts try new policies or projects to keep students in school the impact of those actions will be more immediately visible in this rate. This rate is much more time intensive to compute with the new cohort designations for students as it draws information from four separate cohorts. This indicator has a break in data production for 2013/2014 while data collection transitions to using the adjusted cohort for most other calculations. The formula for this indicator has not changed. By contractual agreement with OSPI, any rates above 95% will be listed as >95% or "Greater than 95%", any rates below 5% will be listed as <5% or "Less than 5%", and data is suppressed when less than ten students were tested to avoid individual student identification. For more information on the changes in rate computation and cohort methodology, see the Technical Notes.

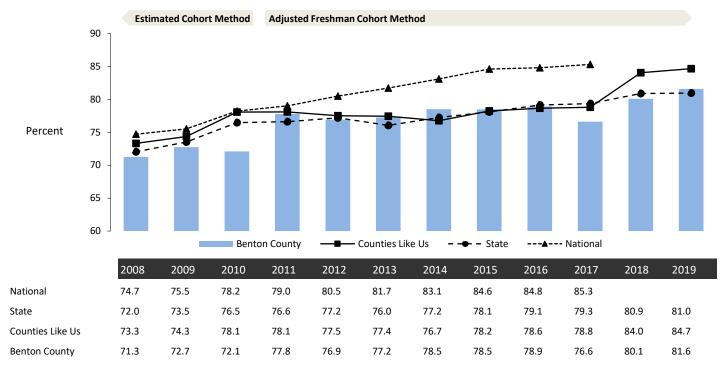
State Source: Office of Superintendent of Public Instruction, Graduation and Dropout Statistics for Washington.

National Source: NCES National Center for Education Statistics (adjusted cohort graduation rate (ACGR) for public high schools)

Table 113. Public high school graduates and dropouts, by race/ethnicity and state or jurisdiction

Updated: 01/10/2019

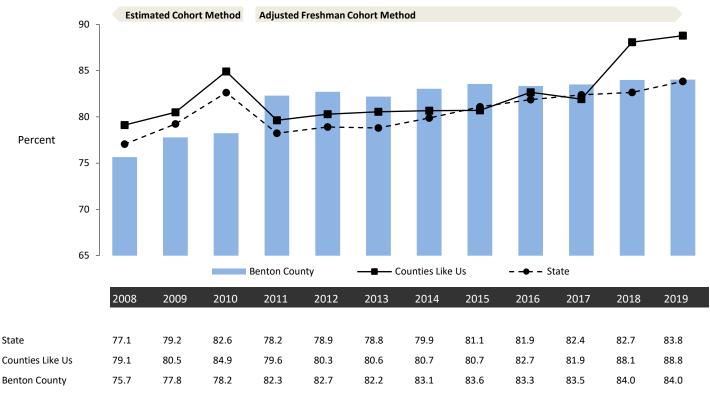
Protective Factor: On-time Graduation



Note: The percent of students who graduate in four years by completion of the graduation requirements. The Adjusted Cohort (new method) rate divides the number of students in the same freshman cohort graduating in their fourth year by the adjusted freshman cohort for those students. In this method there are no adjustments for students in Special Education or English Language Learners who are expected to take longer; additionally, students transferring from out of state or other districts who are credit deficient may not be reclassified into a lower grade. Prior to 2011 the Estimated Cohort method used a complex formula to estimate the graduation rate from data for multiple grades during the graduation year. Differences in rates from 2010 to 2011 are likely to be influenced by the change in computation methods. By contractual agreement with OSPI, any rates above 95% will be listed as >95% or "Greater than 95%", any rates below 5% will be listed as <5% or "Less than 5%", and data is suppressed when less than ten students were tested to avoid individual student identification. For more information on the changes in rate computation and cohort methodology, see the Technical Notes.

State Source: Office of Superintendent of Public Instruction, Graduation and Dropout Statistics for Washington. **National Source:** NCES National Center for Education Statistics (adjusted cohort graduation rate (ACGR) for public high schools) Table 219.10. High school graduates, by sex and control of school: Selected years

Protective Factor: Extended Graduation

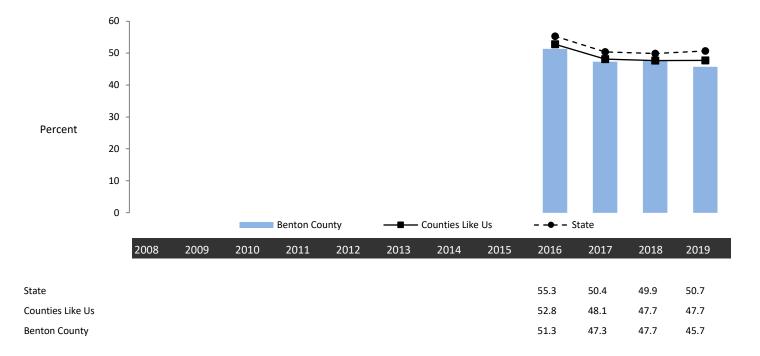


Note: The percent of students who graduate including those students who stay in school and take more than four years to complete their degree. The Estimated Cohort (old method) Extended Graduation rate formula is: (the number of on-time and late graduates in the same year)/(the number of on-time graduates divided by the on-time graduation rate). The Adjusted Cohort (new method) rate is the number of students graduating within five years divided by the adjusted freshman cohort for the graduates. The new method does not include graduates after year 5 in the extended graduation rate. Differences in rates from 2010 to 2011 are likely to be influenced by the change in computation method. By contractual agreement with OSPI, any rates above 95% will be listed as >95% or "Greater than 95%", any rates below 5% will be listed as <5% or "Less than 5%", and data is suppressed when less than ten students were tested to avoid individual student identification. For more information on the changes in rate computation and cohort methodology, see the Technical Notes.

State Source: Office of Superintendent of Public Instruction, Graduation and Dropout Statistics for Washington.

Protective Factor: Successful Academic Performance in Math, Grades 3-5





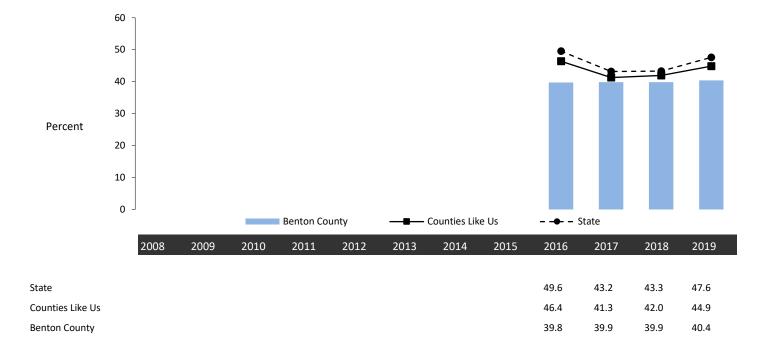
Note: The students tested in grades 3 to 5 who met the Smarter Balanced Assessment (SBA) Math standard as a percent of all students who chose to test in grades 3 to 5. Tests are given in the spring of the year. For example, data for 2016 is for students during the school year 2015/2016. By contractual agreement with OSPI, any rates above 95% will be listed as > 95%, "Greater than 95%", any rates below 5% will be listed as < 5%, and data is suppressed when less than ten students were tested to avoid individual student identification. OSPI does not consider the Smarter Balanced Assessment (SBA) and Measurements of Student Progress (MSP) equivalent and advises against directly comparing the results of the two tests.

State Source: Office of Superintendent of Public Instruction, Instructional Programs, Curriculum and Assessment, Grades 3-5 Meeting Math Standard, Smarter Balanced Assessment.

Updated: 02/05/2020

Protective Factor: Successful Academic Performance in Math, Grades 6-8

Five year rates not available



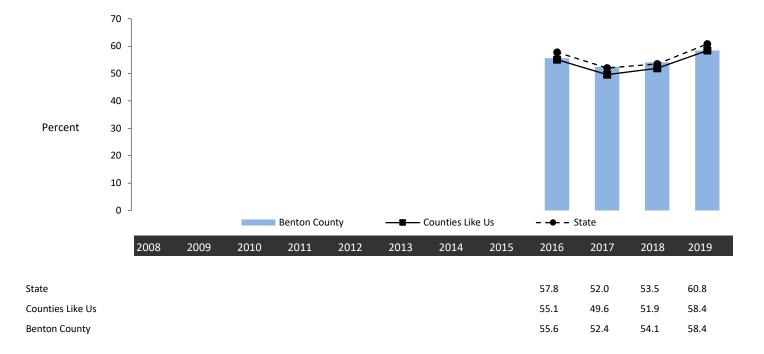
Note: The students tested in grades 6 to 8 who met the Smarter Balanced Assessment (SBA) Math standard as a percent of all students who chose to test in grades 6 to 8. Tests are given in the spring of the year. For example, data for 2016 is for students during the school year 2015/2016. By contractual agreement with OSPI, any rates above 95% will be listed as > 95%, "Greater than 95%", any rates below 5% will be listed as < 5%, and data is suppressed when less than ten students were tested to avoid individual student identification. OSPI does not consider the Smarter Balanced Assessment (SBA) and Measurements of Student Progress (MSP) equivalent and advises against directly comparing the results of the two tests.

State Source: Office of Superintendent of Public Instruction, Instructional Programs, Curriculum and Assessment, Grades 6-8 Meeting Math Standard, Smarter Balanced Assessment.

Updated: 02/05/2020

Protective Factor: Successful Academic Performance in English Language Arts, Grades 3-5

Five year rates not available



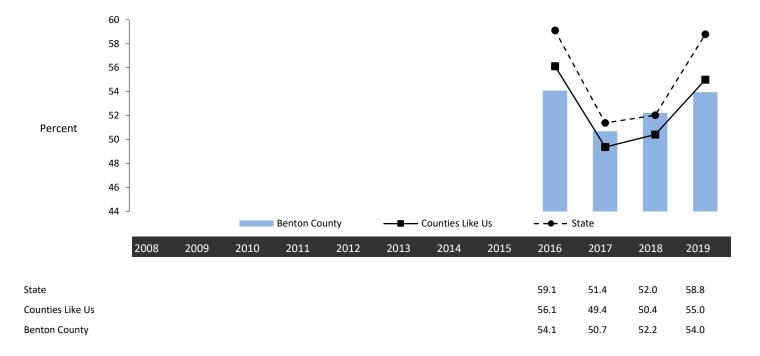
Note: The students tested in grades 3 to 5 who met the Smarter Balanced Assessment (SBA) English Language Arts (ELA) standard as a percent of all students who chose to test in grades 3 to 5. Tests are given in the spring of the year. For example, data for 2016 is for students during the school year 2015/2016. By contractual agreement with OSPI, any rates above 95% will be listed as > 95%, "Greater than 95%", any rates below 5% will be listed as < 5%, and data is suppressed when less than ten students were tested to avoid individual student identification. OSPI does not consider the Smarter Balanced Assessment (SBA) and Measurements of Student Progress (MSP) equivalent and advises against directly comparing the results of the two tests.

State Source: Office of Superintendent of Public Instruction, Instructional Programs, Curriculum and Assessment, Grades 3-5 Meeting English Language Arts (ELA) Standard, Smarter Balanced Assessment.

Updated: 02/05/2020

Protective Factor: Successful Academic Performance in English Language Arts, Grades 6-8

Five year rates not available



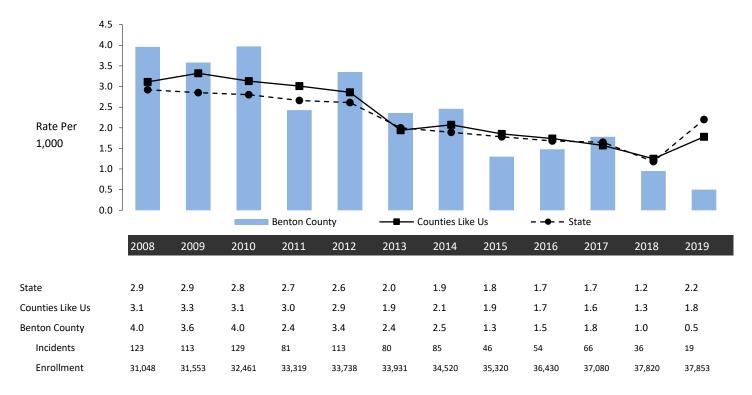
Note: The students tested in grades 6 to 8 who met the Smarter Balanced Assessment (SBA) English Language Arts (ELA) standard as a percent of all students who chose to test in grades 6 to 8. Tests are given in the spring of the year. For example, data for 2016 is for students during the school year 2015/2016. By contractual agreement with OSPI, any rates above 95% will be listed as > 95%, "Greater than 95%", any rates below 5% will be listed as < 5%, and data is suppressed when less than ten students were tested to avoid individual student identification. OSPI does not consider the Smarter Balanced Assessment (SBA) and Measurements of Student Progress (MSP) equivalent and advises against directly comparing the results of the two tests.

State Source: Office of Superintendent of Public Instruction, Instructional Programs, Curriculum and Assessment, Grades 6-8 Meeting English Language Arts (ELA) Standard, Smarter Balanced Assessment.

Updated: 02/05/2020

Problem Outcomes: School Climate

Weapons Incidents in School



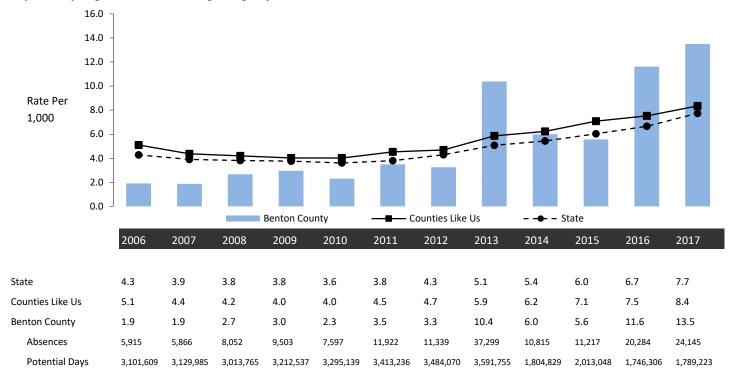
Note: The reported incidents involving guns and other weapons at any grade level per 1000 students enrolled in October of all grades.

State Source: Office of Superintendent of Public Instruction, Information Services, Safe and Drug-free Schools: Report to the Legislature on Weapons in Schools RCW 28A.320.130

Updated: 07/09/2020

Unexcused Absences for Students in Grades 1 to 8

Replaced by Regular Attendance beginning July, 2020.



Note: The unexcused absences for students in grades 1-8 per thousand potential school days. Potential school days are the number of days students were taught from the first day of school through May 31 in each school building multiplied by the net served students in grades 1-8 in that building. The definition of an unexcused absence is a local decision, so the definition differs among schools and districts. In general, a student who has an unexcused absence has not attended a majority of hours or periods in a school day, or has not complied with a more restrictive district policy, and has not met the conditions for an excused absence (see RCW 28A.225.020).

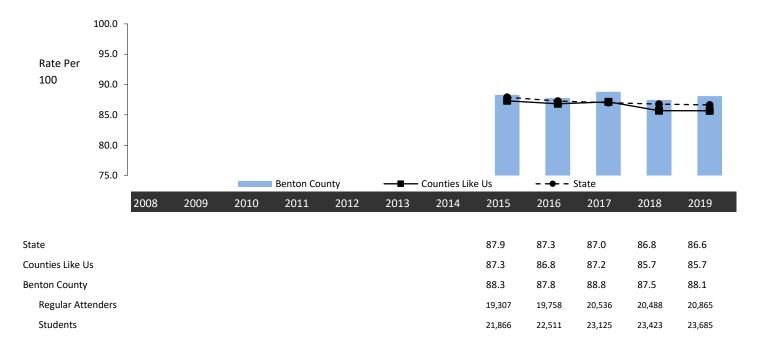
State Source: Office of Superintendent of Public Instruction, Washington State Report Card, Unexcused Absence Files.

Updated: 06/19/2018

Problem Outcomes: School Climate

Regular Attendance (Protective Factor)

Added to this report in the July, 2020 issue.



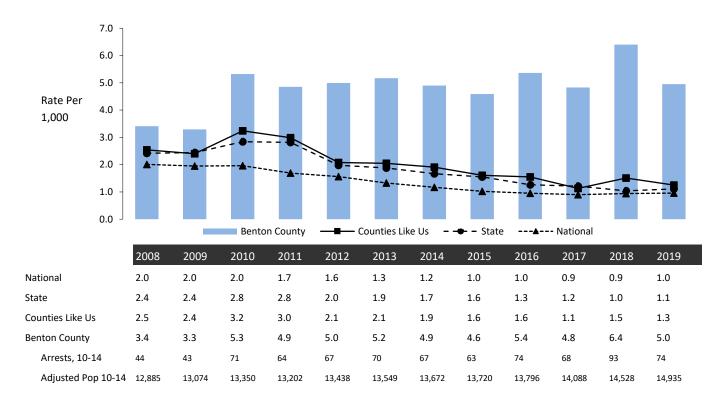
Note: The percentage of students who regularly attend school. Regular attendance is defined as having, on average, less than two absences per month. It doesn't matter if the absences are excused or unexcused. An absence is defined as missing more than half the school day. This measure includes students that were enrolled for at least 90 days at any given school. Unlike risk indicators, a higher value on this protective factor is preferable.

Regular Attendance replaces Unexcused Absences as a School Climate indicator in this report beginning July, 2020. For additional information about Regular Attendance refer to the OSPI web site, www.k12.wa.us. See also RCW 28A.225.

State Source: Washington State Office of the Superintendant of Public Instruction.

Individual/Peer Domain: Early Criminal Justice Involvement

Arrests (Age 10-14), Alcohol- or Drug-Related



Note: The arrests of younger adolescents (age 10-14) for alcohol and drug law violations, per 1,000 adolescents (age 10-14). Alcohol violations include all crimes involving driving under the influence, liquor law violations, and drunkenness. For children, arrests for liquor law violations are usually arrests for minor in possession. Drug law violations include all crimes involving sale, manufacturing, and possession of drugs.

- 1) Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR/NIBRS. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix, Non-Reporting Agencies and Population.
- 2) The DUI portion of this measure is likely understated, because arrests made by the State Patrol are not attributable to counties. State Patrol arrests are included in the state rates.

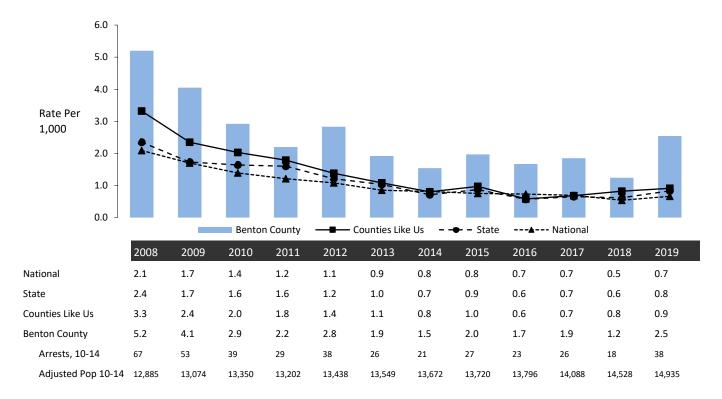
The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division **National Source:** US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Individual/Peer Domain: Early Criminal Justice Involvement

Arrests (Age 10-14), Vandalism



Note: The arrests of younger adolescents (age 10-14) for vandalism (including residence, non-residence, vehicles, venerated objects, police cars, or other) per 1,000 adolescents (age 10-14). Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR/NIBRS. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix, Non-Reporting Agencies and Population.

The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

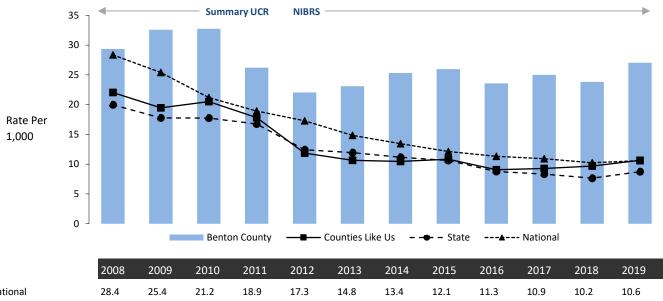
State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Individual/Peer Domain: Early Criminal Justice Involvement

Total Arrests of Adolescents (Age 10-14)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
National	28.4	25.4	21.2	18.9	17.3	14.8	13.4	12.1	11.3	10.9	10.2	10.6
State	20.0	17.8	17.8	16.8	12.4	11.9	11.2	10.6	8.8	8.4	7.7	8.7
Counties Like Us	22.0	19.5	20.5	17.8	11.9	10.6	10.5	10.8	9.1	9.3	9.7	10.7
Benton County	29.3	32.6	32.7	26.2	22.0	23.1	25.3	26.0	23.6	25.0	23.8	27.1
Arrests, 10-14	378	426	437	346	296	313	346	356	325	352	346	404
Adjusted Pop 10-14	12,885	13,074	13,350	13,202	13,438	13,549	13,672	13,720	13,796	14,088	14,528	14,935

Note: The arrests of adolescents (age 10-14) for any crime, per 1,000 adolescents (age 10-14).

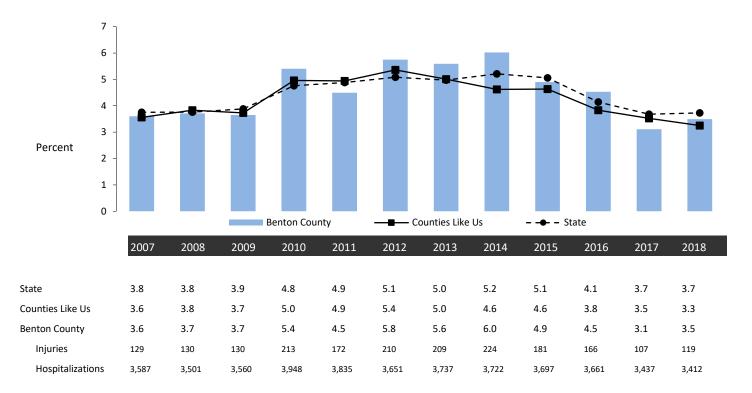
Washington State has transitioned from Summary UCR to the NIBRS system for reporting. Summary UCR collects eight (8) Part One Crime offenses: criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft and arson. NIBRS collects information on twenty-three (23) different offenses, all Part One Crimes plus others including forcible and non-forcible sex offenses, fraud, kidnapping, and drug violations. Care must be taken when interpreting the yearly trend of "total arrest" rates for an area. In areas where large amounts of arrests are likely for crimes not previously reported, an increase in total arrests could occur in 2012 data.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Injury or Accident Hospitalizations for Children



Note: The child injury or accident hospitalizations as a percent of all hospitalizations for children (age birth-17). Due to contractual agreement data may not be displayed for areas with less than 100 hospitalizations. Beginning on October 1, 2015 diagnosis transitioned to International Classification of Diseases, Tenth Revision (ICD-10). Data from 2008 forward was revised to include observation and standard hospital stays, as well as supplemental diagnosis and external cause codes. More information on these changes is available in Technical Notes.

State Source: Department of Health, Office of Hospital and Patient Data Systems, Comprehensive Hospital Abstract Reporting System (CHARS)

Updated: 09/05/2019

Infant Mortality (Under 1 Year)



Note: The deaths, of infants under one year of age, per 100,000 population of infants under one year of age. Suppression code definitions for yearly rates are explained in Technical Notes. Rates are not reported when fewer than 100 deaths occurred in an area.

State Source: Department of Health, Center for Health Statistics, Death Certificate Data File

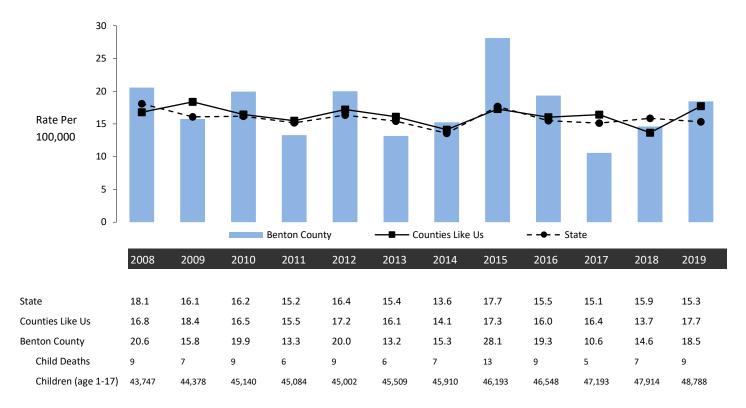
Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: U.S. Department of Health and Human Services, Centers for Disease Control and Health Statistics

National Center for Health Statistics, Division of Health Services, National Vital Statistics Reports

Updated: 09/30/2020

Child Mortality (Ages 1-17)

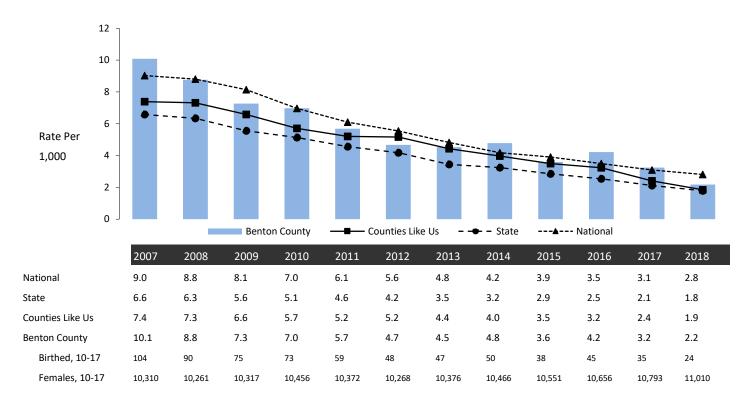


Note: The deaths, of children 1 to 17 years of age, per 100,000 population of children 1 to 17 years of age. Suppression code definitions for yearly rates are explained in Technical Notes. Rates are not reported when fewer than 100 deaths occurred in an area.

State Source: Department of Health, Center for Health Statistics, Death Certificate Data File **Population Estimates:** Washington State Office of Financial Management, Forecasting Division

Updated: 09/30/2020

Births to School-Age (10-17) Mothers

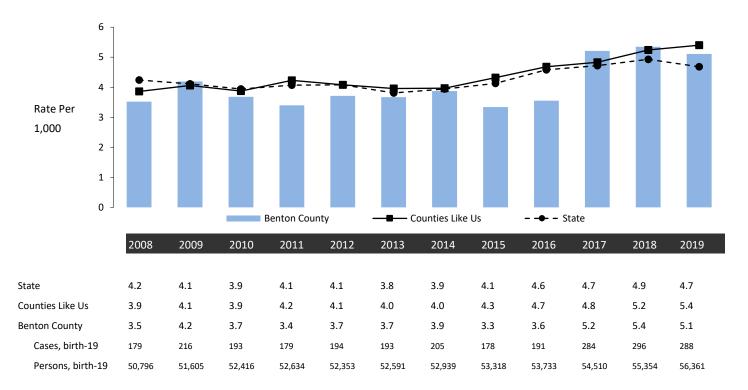


Note: The live births to adolescents (age 10-17) per 1,000 females (age 10-17). Rate changes in data result from on-going updates to birth records. Suppression code definitions for yearly rates are explained in Technical Notes. Due to contractual agreement data may not be displayed for areas with less than 100 births.

State Source: Department of Health, Center for Health Statistics, Birth Certificate Data File.
 Population Estimates: Washington State Office of Financial Management, Forecasting Division
 National Source: U.S. Department of Health and Human Services, Centers for Disease Control and Health Statistics
 National Center for Health Statistics, Division of Health Services, National Vital Statistics Reports

Updated: 11/13/2019

Sexually Transmitted Disease Cases (Birth-19)

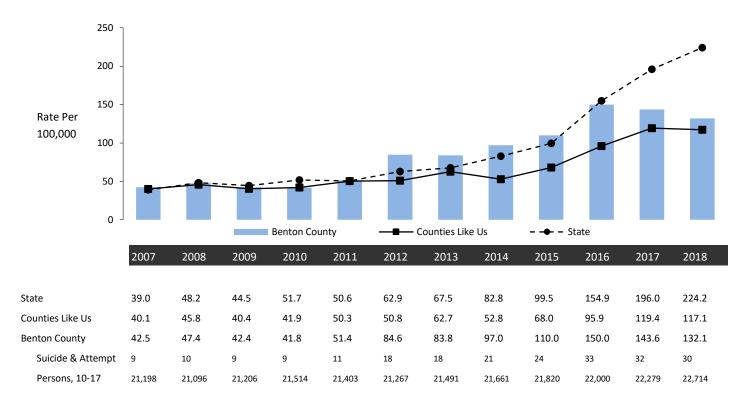


Note: The reported cases of gonorrhea, syphilis, or chlamydia in children (age birth-19) per 1,000 adolescents (age birth-19). Suppression code definitions for yearly rates are explained in Technical Notes. Due to contractual agreement data may not be displayed for populations less than 100.

State Source: Department of Health, Sexually Transmitted Disease (STD) Services, Sexually Transmitted Disease Reported Cases **Population Estimates:** Washington State Office of Financial Management, Forecasting Division

Updated: 07/07/2020

Suicide and Suicide Attempts (Age 10-17)



Note: The adolescents (age 10-17) who committed suicide or were admitted to the hospital for suicide attempts, per 100,000 adolescents (age 10-17). Suicides are based on death certificate information. Suicide attempts are based on hospital admissions, but do not include admissions to federal hospitals. Suppression code definitions for yearly rates are explained in Technical Notes. Due to contractual agreement data may not be displayed for locations with adolescent populations less than 100.

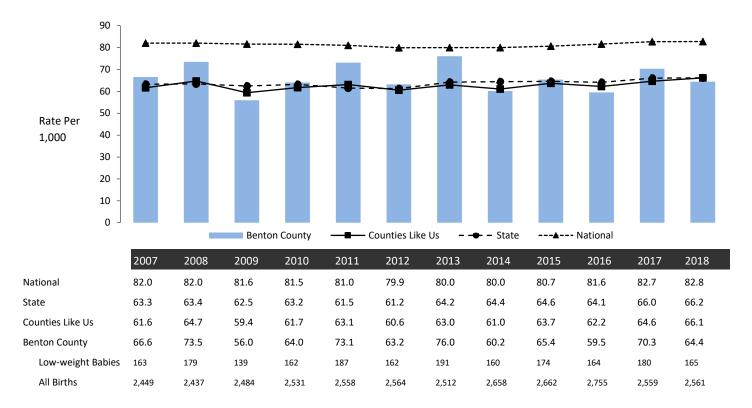
Data from 2008 forward was revised to include observation and standard hospital stays, as well as supplemental diagnosis and external cause codes. More information on these changes is available in Technical Notes.

The coding of intent for injuries and poisonings in hospital admissions data underwent a transition from ICD-9 to ICD-10 codes in the fall of 2015. It has affected the 2015 and 2016 data on suicide attempts reported here. Researchers have concluded that "marked changes... almost certainly represent artifacts of coding changes rather than true changes in suicidal behavior." It appears some cases previously coded as undetermined intent are now being coded as self-harm. For additional information, see: Christine Stewart, Phillip M. Crawford, and Gregory E. Simon (2017). "Changes in Coding of Suicide Attempts or Self-Harm With Transition From ICD-9 to ICD-10." Psychiatric Services, 68(3), p. 215; online at https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201600450

State Source: Department of Health, Office of Hospital and Patient Data Systems, Comprehensive Hospital Abstract Reporting System (CHARS) and Department of Health, Center for Health Statistics Death Certificate Data. **Population Estimates:** Washington State Office of Financial Management, Forecasting Division

Updated: 09/30/2020

Low Birthweight Babies



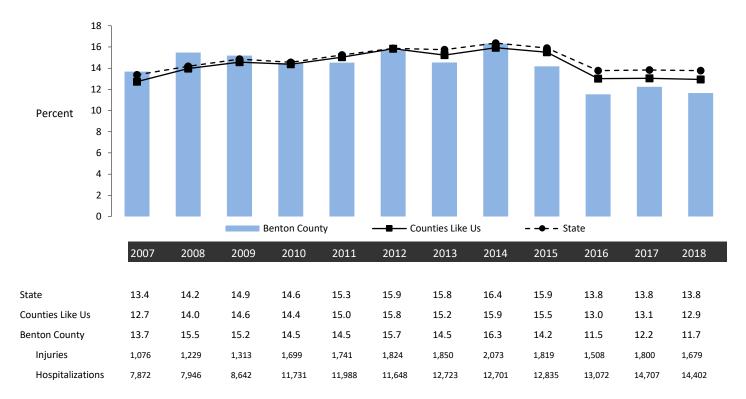
Note: The babies born with low birthweight, per 1,000 live births. Low birthweight is less than 2,500 grams. Rate changes in data may result from on-going updates to birth records. No rate is given when the number of live births is less than 100 in the geographic area. Suppression code definitions for yearly rates are explained in Technical Notes.

State Source: Department of Health, Center for Health Statistics, Birth Certificate Data File

National Source: U.S. Department of Health and Human Services, Centers for Disease Control and Health Statistics National Center for Health Statistics, Division of Health Services, WONDER Data System

Updated: 11/13/2019

Injury or Accident Hospitalizations for Women

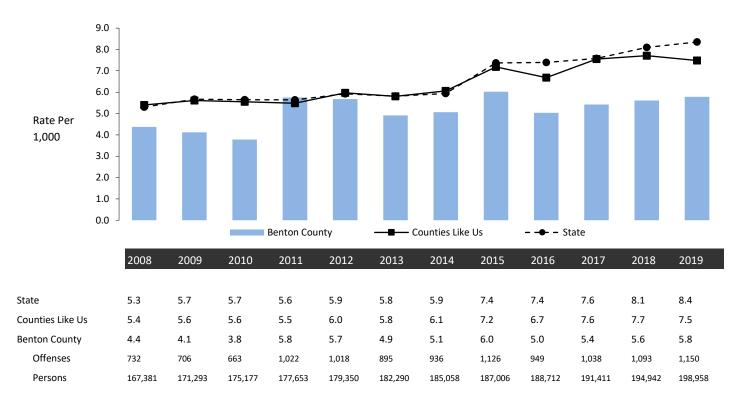


Note: The injury or accident hospitalizations for women as a percent of all hospitalizations for women (age 18+). Suppression code definitions for yearly rates are explained in Technical Notes. Due to contractual agreement data may not be displayed for areas with less than 100 hospitalizations. Beginning on October 1, 2015 diagnosis transitioned to International Classification of Diseases, Tenth Revision (ICD-10). Data from 2008 forward was revised to include observation and standard hospital stays, as well as supplemental diagnosis and external cause codes. More information on these changes is available in Technical Notes.

State Source: Department of Health, Office of Hospital and Patient Data Systems, Comprehensive Hospital Abstract Reporting System (CHARS)

Updated: 09/05/2019

Offenses, Domestic Violence



Note: The domestic violence-related offenses, per 1,000 persons. Domestic violence includes any violence of one family member against another family member. Family can include spouses, former spouses, parents who have children in common regardless of marital status, adults who live in the same household, as well as parents and their children. Offenses are incidence reporting. When more than one victim is involved an offence is filed for each victim. Multiple property violations performed at the same incident are counted as one offence. However when both types of events happen, only the victim incidents are reported as offenses. Offenses focus on the nature of the crime, while arrests focus on the apprehended accused perpetrator. Many offenses occur without arresting perpetrators.

Denominators are adjusted by subtracting the population of police agencies that did not report offenses For suppression code definitions, percent subtracted and the agencies not reporting, see the appendix, Non-Reporting Agencies and Population.

The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

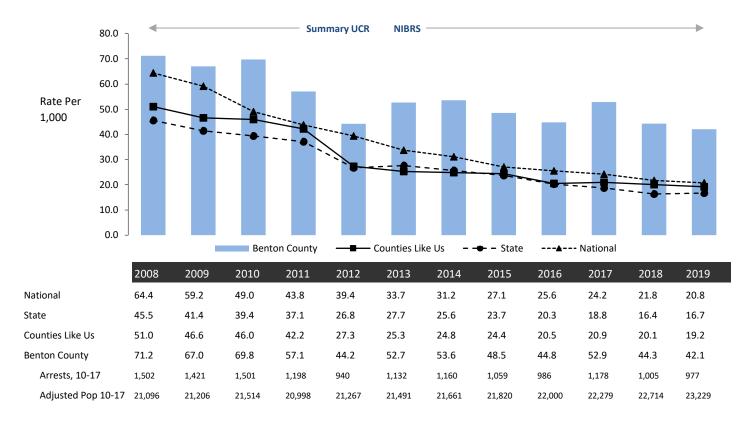
State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Updated: 10/06/2020

Total Arrests of Adolescents (Age 10-17)



Note: The arrests of adolescents (age 10-17) for any crime, per 1,000 adolescents (age 10-17).

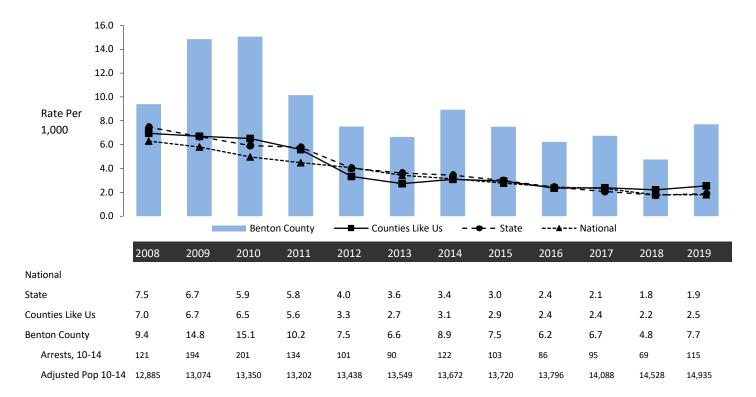
Washington State has transitioned from Summary UCR to the NIBRS system for reporting. Summary UCR collects eight (8) Part One Crime offenses: criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft and arson. NIBRS collects information on twenty-three (23) different offenses, all Part One Crimes plus others including forcible and non-forcible sex offenses, fraud, kidnapping, and drug violations. Care must be taken when interpreting the yearly trend of "total arrest" rates for an area. In areas where large amounts of arrests are likely for crimes not previously reported, an increase in total arrests could occur in 2012 data.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Arrests (Age 10-14), Property Crime



Note: The arrests of younger adolescents (age 10-14) for property crimes, per 1,000 adolescents (age 10-14). Property crimes include all crimes involving burglary, larceny-theft, motor vehicle theft, and arson. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR/NIBRS. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

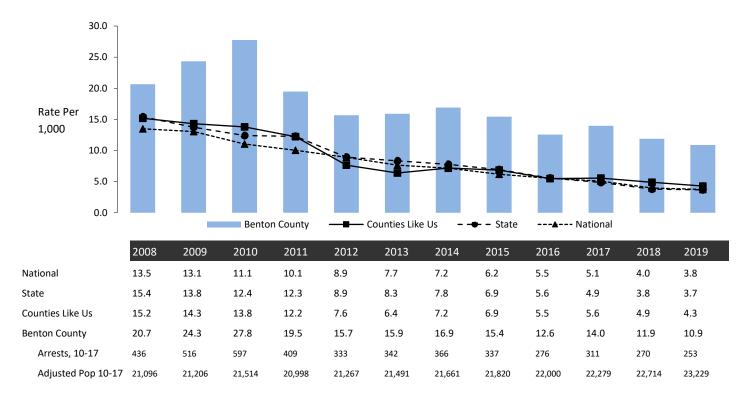
The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Arrests (Age 10-17), Property Crime



Note: The arrests of adolescents (age 10-17) for property crimes, per 1,000 adolescents (age 10-17). Property crimes include all crimes involving burglary, larceny-theft, motor vehicle theft, and arson. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR/NIBRS. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

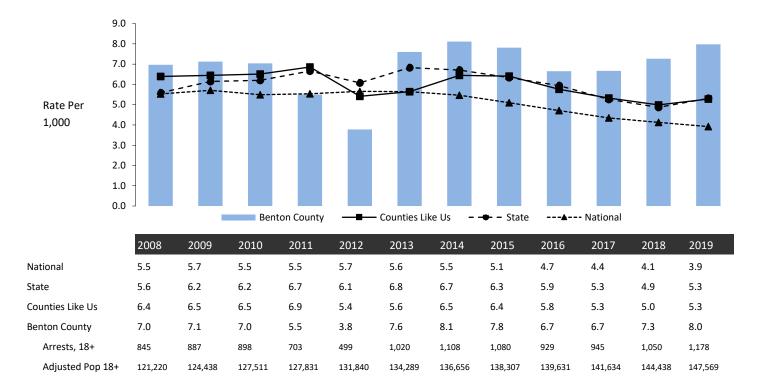
The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Arrests (Age 18+), Property Crime



Note: The arrests of adults (age 18+) for property crimes, per 1,000 adults (age 18+). Property crimes include all crimes involving burglary, larceny-theft, motor vehicle theft, and arson. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR/NIBRS. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

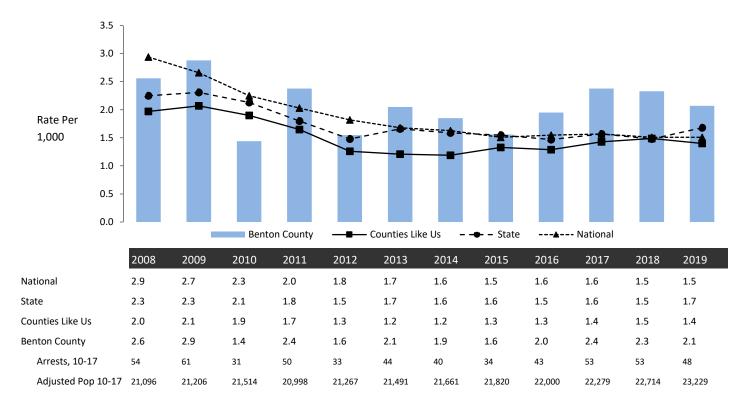
The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Arrests (Age 10-17), Violent Crime



Note: The arrests of adolescents (age 10-17) for violent crime per 1,000 adolescents (age 10-17). Violent crimes include all crimes involving criminal homicide, forcible rape, robbery, and aggravated assault. Simple assault is not defined as a violent crime. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to WASPC. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix. Non-Reporting Agencies and Population.

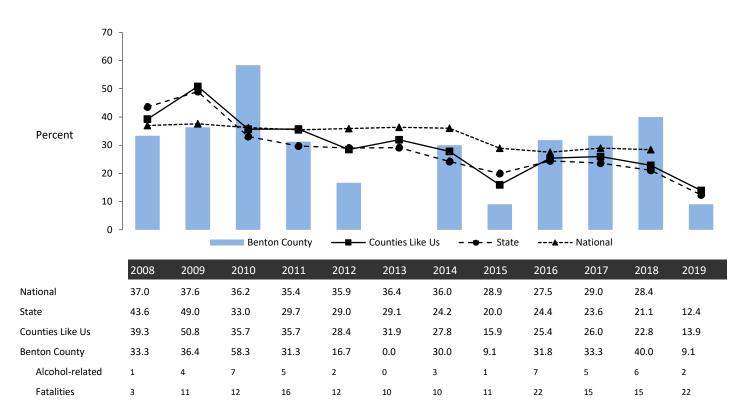
The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Alcohol-Related Traffic Fatalities Per All Traffic Fatalities

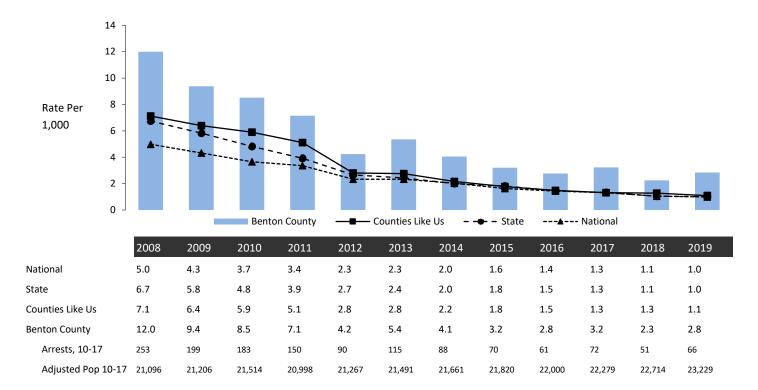


Note: The alcohol-related traffic fatalities, per 100 traffic fatalities. "Alcohol-related" means that the officer on the scene determined that at least one driver involved in the accident "had been drinking." Thus, "Alcohol-related" includes but is not limited to the legal definition of driving under the influence. Care should be taken since small numbers of events can cause unreliable rates in some counties.

State Source: Washington State Patrol, Records Section, Traffic Collisions in Washington State, Accident Records Database **National Source:** National Center for Statistics and Analysis, Fatal Accident Reporting System (FARS)

Updated: 10/01/2020

Arrests (Age 10-17), Alcohol Violation



Note: The arrests of adolescents (age 10-17) for alcohol violations, per 1,000 adolescents (age 10-17). Alcohol violations include all crimes involving driving under the influence, liquor law violations, and drunkenness. For children, arrests for liquor law violations are usually arrests for minor in possession. DUI arrests by the Washington State Patrol are included in the state trend analysis. However, they are not included in the county rankings since WSP arrests are not assigned to counties. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to WASPC. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix, Non-Reporting Agencies and Population.

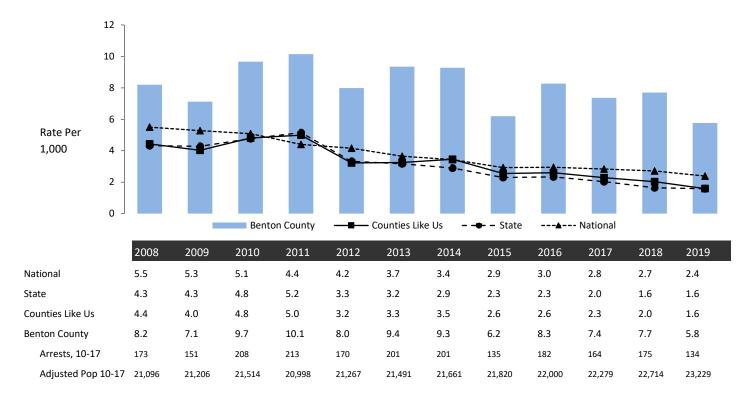
The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Arrests (Age 10-17), Drug Law Violation



Note: The arrests of adolescents (age 10-17) for drug law violations, per 1,000 adolescents (age 10-17). Drug law violations include all crimes involving sale, manufacturing, and possession of drugs. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to WASPC. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix, Non-Reporting Agencies and Population.

The types of crimes used within this rate are represented in both Summary UCR and NIBRS systems and are not likely to be substantially impacted by the system change.

State Source: Washington Association of Sheriffs and Police Chiefs (WASPC): Uniform Crime Report (UCR), National Incident-Based Reporting System (NIBRS)

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Clients of Publicly-Funded Alcohol or Drug Services (Age 10-17)



Note: The adolescents (age 10-17) receiving publicly-funded alcohol or drug services, per 1,000 adolescents 10-17. Counts of adults are unduplicated so that those receiving services more than once during the year are only counted once for that year. Client counts are linked to state service records through the Research and Data Analysis Client Services Database. State-funded services include treatment, assessment, and detox. Persons in Department of Corrections treatment programs are not included.

State Source: Department of Social and Health Services, Division of Behavioral Health and Recovery services reported from the Research and Data Analysis Client Services Database (CSDB).

Population Estimates: Washington State Office of Financial Management, Forecasting Division

National Source: Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS)

Updated: 08/02/2019

Topics:

Population Denominators Used in This Report
Counting Alcohol- or Drug-related Deaths
Counties Like Us
Duplicated and Unduplicated Counts
Transition Summary UCR to National Incident-Based Reporting System (NIBRS)
Uniform Crime Report - Non-Reporting Police Jurisdictions
CORE Conversion Process and Weighted Reliability Index

Rates – Why is Raw Data Converted to Rates? Standardization of CORE Indicators Graduation and Dropout Data Methodology Changes Where are the roadblocks to learning? Suppression Codes Changes in Hospitalization Data

Population Denominators Used in This Report

Population is updated as the data becomes available. If events for the numerator are available, but the population is not yet available the population for the year previous is used for calculating rates. Those data years are marked with an asterisk, like this: 2011*. The asterisk is removed when the population, and the rate are updated.

Counting Alcohol- or Drug-related Deaths

AOD deaths are identified by matching all the contributory causes of death from death certificate records to a list of causes that are considered AOD-related. The deaths identified as AOD-related then may be summed to provide area totals. Dividing the total AOD-related deaths by all deaths in an area gives the percent of all deaths that are alcohol and drug related. Lists of underlying causes of death that are AOD-related have been developed in several studies. Citations for these studies are listed prior to the AOD attribution tables. AOD-related deaths used in this report are determined using a comprehensive assembly of disease, accident, and injury codes identified in those studies. The codes are based upon the International Classification of Diseases, Ninth Revision (ICD-9) from 1990 to 1998 or International Classification of Diseases. Tenth Revision (ICD-10) after 1998.

The identified AOD-related causes of death may be either fully attributable or sometimes attributable to alcohol or drugs. Some contributory causes of death are explicit in their mention of alcohol or drugs. Examples include alcoholic cirrhosis of the liver (ICD-9 code 571.2), alcohol and drug dependence syndromes (ICD-9 codes 303 and 304, respectively), and drug poisonings (ICD-9 codes E850 through E859). All deaths of this sort are fully, or 100%, attributable to alcohol or drug abuse and are considered direct AOD-related deaths.

Other contributory causes of death are related only sometimes to alcohol or drugs. For example, epidemiological studies have shown that, among persons over 35 years of age, 60% of deaths due to chronic pancreatitis (ICD-9 code 577.1) and 75% of malignant neoplasms of the esophagus (ICD-9 code 150) are alcohol-related. For persons of all ages, 42% of motor vehicle traffic and nontraffic deaths (ICD-9 codes E810 through E825) are alcohol-related. The appropriate percentage of such indirectly attributable deaths are also counted toward totals for AOD-related deaths.

The tables on the following pages characterize the different diseases, injuries, and accidents by: name, ICD-9 or ICD-10 code, percent attributable to alcohol or drugs, age of inclusion. Information sources are listed below.

- **1.** Schultz J, Rice D, & Parker D. 1990. Alcohol-related mortality and years of potential life lost United States, 1987. Morbidity and Mortality Weekly Report, 39, 173-178.
- **2.** Rice D, et al. 1990. The Economic Costs of Alcohol and Drug Abuse and Mental Illness: 1985. Report submitted to the Office of Financing and Coverage Policy of the Alcohol, Drug Abuse, and mental health Administration, U.S. Department of Health and Human Services. San Francisco, CA: Institute for Health and Aging, University of California.
- **3.** Fox K, Merrill J, Chang H, & Califano J. 1995. Estimating the Costs of Substance Abuse to the Medicaid Hospital Care Program. American Journal of Public Health, 85(1), 48-54.
- **4.** Seattle-King County HIV/AIDS Epidemiology Unit and Washington State Office of HIV/AIDS Epidemiology and Evaluation. 1994. Washington State/Seattle-King County HIV/AIDS Epidemiology Report (2nd Quarter, 1994), p. 4.

Disease Category	ICD-10 Code	ICD-9 Code	Attrib	Age
Diseases Directly Attributable to Alcohol				
Alcoholic psychoses	F10, F10.3-F10.9	291	100%	>=15
Alcohol dependence syndrome	F10.2	303	100%	>=15
Alcoholic polyneuropathy	G62.1	357.5	100%	>=15
Alcoholic cardiomyopathy	142.6	425.5	100%	>=15
Alcoholic gastritis	K29.2	535.3	100%	>=15
Alcoholic fatty liver	K70.0	571.0	100%	>=15
Acute alcoholic hepatitis	K70.1, K70.4	571.1	100%	>=15
Alcoholic cirrhosis of the liver	K70.3	571.2	100%	>=15
Alcoholic liver damage, other	K70.2, K70.9, K70	571.3	100%	>=15
Excessive blood level of alcohol, toxic effect of	R78.0, T51	790.3. 980	100%	>=0
alcohol				
Accidental poisoning by alcohol	X45, Y15	E860	100%	>=0
Nondependent abuse of Alcohol	F10.1	305.0	100%	>=0
Alcohol-induced pseudo-Cushing's syndrome	E24.4	Not Available in ICD-9	100%	>=15
Degeneration of nervous system due to alcohol	G31.2	Not Available in ICD-9	100%	>=15
Alcoholic myopathy	G72.1	Not Available in ICD-9	100%	>=15
Maternal care for (suspected) damage to fetus from		Not Available in ICD-9	100%	>=15
alcohol	000.1	Not / Namable III Teb 3	10070	, 13
Newborn affected by maternal use of alcohol	P04.3	Not Available in ICD-9	100%	>=0
Fetal alcohol syndrome (dysmorphic)	Q86.0	Not Available in ICD-9	100%	>=0
Suicide attributable to alcohol	X65	Not Available in ICD-9	100%	>=0
Alcoholic Pellagra	E52	265.2	100%	>=0
Diseases Indirectly Attributable to Alcohol				
Neoplasms				
Breast	C50, D05	174.0-174.9, 233.0	13%F	>=35
Esophagus	C15, D00.1	150.1-150.9, 230.1	75%	>=35
Larynx	C32 , D02.0	161.0161.9, 231.0	50%M, 409	%F >=35
· , ····	322,232.5			
Lip, oral cavity, pharynx	C00-C14, D00.0	140.1-141.9, 143.0-149.9, 230.0	50%M, 409	%F >=35
Liver	C22, D01.5	155.0-155.2, 230.8	29%	>=35
Cardiovascular	011, 001.0	10010 10011, 10010	2575	
Cardiomyopathy	142.0 - 142.2, 142.5, 142.7- 142.9	425.1, 425.4, 425.9	40%M	>=35
Hypertension	110-113, 010-014, 016	401.0-404.9, 642.0, 642.2, 642.9	11%	>=35
Digestive System	110 113, 010 011, 010	10110 10113, 012.0, 012.2, 012.3	11/0	
Cirrhosis	K71.7, K74.5-K74.6	571.5	74%	>=35
Duodenal Ulcers	K26	532.0-532.9	10%	>=35
Pancreatitis, acute	K85	577.0	47%	>=35
Pancreatitis, chronic	K86.1- K86.3, K86.9	577.1, 577.2, 577.9	72%	>=35
Other Diseases or Conditions	NOU.1 NOU.5, NOU.5	377.1, 377.2, 377.3	7270	
Epilepsy	G40.3,G40.4,G40.6,G40.9	345.1, 345.3, 345.9	30%	>=15
Seizures	R56	780.3	41%	>=15
Tuberculosis	A16-A19	011-013, 017, 018	25%	>=15
Accident or Injury Causes : Motor vehicle traffic and	V02–V04, V09.0, V09.2, V12–V14,	E810-E825	42%	>=0
non-traffic accidents	V19.0-V19.2, V19.4-V19.6,	2010 2023	74/U	/-0
non traine accidents	· · · · · · · · · · · · · · · · · · ·			
	V20–V79, V80.3– V80.5,			
	V81.0–V81.1, V82.0–V82.1,			
	V83–V86, V87.0–V87.8,			
	V88.0–V88.8, V89.0, V89.2			

	i echnicai Notes			
Disease Category	ICD-10 Code	ICD-9 Code	Attrib	Age
Diseases Indirectly Attributable to Alcohol (con	tinued)			
Pedal cycle and other road vehicle accidents	V01, V05–V06, V09.1, V09.3–V09.9,	E826-E829	20%	>=0
	V10-V11, V15-V18, V19.3,			
	V19.8-V19.9, V80.0-V80.2,			
	V80.6-V80.9, V82.2-V82.9, V87.9,			
	V88.9, V89.1, V89.3, V89.9			
Water transport accidents	V90-V94	E830-E838	20%	>=0
Air & space transport accidents	V95-V97	E840-E845	16%	>=0
Accidental falls	W00-W19	E880-E888	35%	>=15
Accidents caused by fire	X00-X09	E890-E899	45%	>=0
Accidental drowning and submersion	W65-W74	E910	38%	>=0
Suicides due to alcohol or drugs are now considered d compliance with NCHS definitions.	irect AOD-related deaths, other suicid	es are not apportioned. This brings our defi	nitions into	
Homicide & other purposely inflicted injury	X86–Y09, Y87.1	E960-E962, E962.1-E969	46%	>=15
Other	X31, W79, W50-W52, W20- W34, Y15-Y19	E901, E911, E917-E920, E922	25%	>=15
Other category includes: Excessive cold, Choking on fo	ood in airway; Striking against or struc	k accidentally by objects or persons; Caught	accidentall	y in or
between objects; Accidents caused by machinery; Accidents	idents caused by cutting and piercing	instruments.		
Diseases Directly Attributable to Drugs				
Drug psychoses	F11-F16, F18-F19	292	100%	>=0
Drug dependence syndrome	F11-F16, F18-F19	304	100%	>=0
Polyneuropathy due to drugs	G62.0	357.6	100%	>=15
Drug dependence during pregnancy	F11-F16, F18-F19	648.3	100%	>=0
Suspected damage to fetus from drugs	O35.5,	655.5	100%	>=0
Noxious influences affecting fetus	P04.4	760.7	100%	>=0
Drug reactions, intox., withdrawal specific to	P96.1	779.4, 779.5	100%	>=0
newborn				
Selected drug poisonings	R78,R78.1-R78.6, T38; excludes Y40- 59.9 (therapeutic use)	962, 965, 967-971, 977 excludes E930-949	100%	>=0
Selected accidental drug poisonings	X40-X44	E850-E858	100%	>=0
Accidental Poisonings (magic mushrooms, huffing	X46-X49	E861-E869	100%	>=0
and other drug use)				
Nondependent abuse of drugs	F11-F16, F18-F19	305.2-305.9	100%	>=0
Assault by poisoning using drugs and medicaments	x85	E962.0	100%	>=0
Drug induced myopathy	G72.0	Not Available in ICD-9	100%	
Poisoning by drugs, accidentally or purposely inflicted	Y10-Y14	E980.0-E980.5	100%	>=0
Suicides attributable to drugs	x60-64	E950.0-E950.5	100%	>=0
Diseases Indirectly Attributable to Drugs				
AIDS (from IV drug use exposure)	B20-B24	042.0-044.9	5%	>=15
Cardiovascular				
Endocarditis	133.0, 133.9	421.0, 421.9	75%	>=15
Other		•		
Hepatitis A	B15.9	70.1	12%	>=15
Hepatitis B	B16-B16.9	70.2, 70.3	36%	>=15
Honatitis C	P17 P10 0	70.5.70.0	10%	_1E

70.5, 70.9

B17-B19.9

Hepatitis C

>=15

10%

Counties Like Us

Knowing that your county has a particular rate for one of the indicators does not help you evaluate the importance of that indicator to your risk profile. You do not know if it is higher or lower than you could reasonably expect. It is more useful to compare your county rate to the state rate, which is the average for the whole state, and to other counties, especially counties that have some characteristics in common with your county. This is especially important when urban rates differ substantially from rural rates. The comparison we present is for a group of counties that are similar in characteristics related to prevention planning: population of young people (aged 10-24), the percentage of deaths in the county that are alcohol and drug-related, and a simple geographic division into Eastern and Western Washington. For each indicator the Counties Like Us rate is the average rate across all of the counties in the cluster.

The groupings for "Counties Like Us" are as follows:

Urban A* – King County

Urban B* – Pierce, Snohomish, and Spokane

Urban C – Benton, Clark, Kitsap, Thurston, Whatcom, and Yakima

Rural A - Ferry, Franklin, Grant, Klickitat, Okanogan, Pend Oreille, and Skamania

Rural B – Adams, Asotin, Chelan, Columbia, Douglas, Garfield, Kittitas, Lincoln, Stevens, Walla, and Whitman

Rural C – Clallam, Cowlitz, Grays Harbor, Island, Jefferson, Lewis, Mason, Pacific, San Juan, Skagit, and Wahkiakum

* For comparison, King County is compared to Urban B, but average scores for the indicators in Urban B do not include King County.

Duplicated and Unduplicated Counts

In an unduplicated person count, each person is counted only once in a year for the specified activity or service type, even if they receive that service multiple times during the year. Examples include Temporary Assistance to Needy Families (TANF) Child Recipients, Food Stamp Recipients, and alcohol or drug treatment. Duplicated counts are made of events such as prison admissions, child victims in accepted referrals, or admission to a hospital for attempted suicide. For instance, for each identified child victim in an accepted referral, that "event" is counted. Therefore, a child identified as a victim in more than one referral during the year is included more than once. Additionally more than one victim can be identified in a single accepted referral. Both the victims and the referrals are duplicated.

Transitioning from Uniform Crime Reporting (UCR) to National Incident-Based Reporting System (NIBRS)

Over 80 years ago, standards were established for the Uniform Crime Reporting (UCR) Program so agencies could report their crime and arrest information in the same format and at the same level of detail and accuracy. Under the traditional UCR system agencies report monthly of the eight (8) "Part One" offenses and values of property stolen, as well as counts of arrests. The FBI Crime Index reports only designated Part One Crimes. These are criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft and arson. This is now referred to as Summary UCR. Most law enforcement agencies report arrest and offense data to the Washington Association of Sheriffs and Police Chiefs (WASPC), which in turn provides data to the FBI's Uniform Crime Reporting Program (UCR).

In 1989, the FBI instituted a new crime-reporting system called the National Incident-Based Reporting System (NIBRS) to provide a more detailed and comprehensive view of crime in the United States. While Summary UCR collects only counts on eight (8) offense types, NIBRS collects information on twenty-three (23) different offenses. Some of the additional offenses in NIBRS are forcible and non-forcible sex offenses, fraud, kidnapping, and drug violations.

Washington State has transitioned to the NIBRS system for reporting. This was a costly staged process which was particularly difficult for smaller communities. Washington State became certified to begin submitting NIBRS data to the FBI in December 2006. Summary reporting was phased out and all reporting agencies began submitting NIBRS data by January 1, 2012. The rates for Part One offenses we previously reported should show no impact of the system change. However, the rates for *total arrests* by age group include all arrests for offenses reported which now cover the twenty-three offense categories rather than the previous eight categories. Care must be taken when interpreting the yearly trend of "total arrest" rates for an area. In areas where large amounts of arrests are likely for crimes not previously reported, a substantial increase in total arrests could to be expected starting with the 2012 data.

Uniform Crime Report - Non-Reporting Police Jurisdictions

Most law enforcement agencies report arrest and offence data to the Washington Association of Sheriffs and Police Chiefs (WASPC), which in turn provides data to the FBI's Uniform Crime Reporting Program. This is the source of our data. Some jurisdictions do not report all arrests and offenses, some report partial years, and some withhold certain categories of arrests or offenses. Reporting is voluntary for arrests and offenses. Offenses are more likely to be reported since some funding is associated with reporting. Offenses are incidence reporting. When more than one victim is involved an offence is filed for each victim. Multiple property violations performed at the same incident are counted as one offence.

However when both types of events happen, only the victim incidents are reported as offenses. Offenses focus on the nature of the crime, while arrests focus on the apprehended accused perpetrator. Many offenses occur without arresting perpetrators. Sometimes charges are dropped and sometimes no perpetrator is ever found. No perpetrator age can be assigned to offence data so the entire age range of population is used as the denominator. Prior to 2012 data reported to WASPC in NIBRS format, which was not yet compatible with UCR output reports, was only included in their reports to the FBI. We listed those jurisdictions as non-reporting in UCR although WASPC considered them to have reported. Only part one offenses are reported in the Uniform Crime Report, some agencies have no part one crimes to report. Those agencies are listed with zero events, not as non-reporting.

Information on the Non-reporting Population and Non-reporting Agencies are available only in the individual county, district, and locale level reports. Each area report shows how and when that area's police jurisdictions reported data to the Washington Association of Sheriff's and Police Chiefs. If your area is one with jurisdictions having a significant amount of incomplete data, be very careful that you adjust your risk assessment to reflect this. In other words, the reported arrest rates may not adequately reflect the entire area. This will be true especially in those cases where the non-reporting police jurisdictions have either very high or very low arrest rates, compared to the rest of the area.

In order to compensate for missing police reports, we have adjusted the denominator in the rate calculation so that it reflects only the proportion of the area for which we do have data. For instance, say area A, with a population of 40,000, has eight police districts. Now, if one of the police districts in the area did not report their arrests, the number of arrests would not be representative of the whole area. Therefore, we would not want to use the population of the whole area in the denominator because that would make the rate lower than it should be. The solution used in this report is to subtract the population of that missing police district from the area population. We follow the same procedure for police districts that report partial years: if they report only six months, we use only half of the population to calculate the rate.

Due to the uneven geographic distribution of crime, missing police data can cause spikes or dips in the trend data comparison of multiple consecutive years. We do not run into this problem in the state report because the county rates there (as opposed to the individual county reports) only report 5-year averages. However for individual county reports and reports for smaller areas like locales or districts the trend data can become unstable due to non-reporting. Alternately, the conversion of data from certain police jurisdictions to other areas like locales may not apportion directly causing too much of the data to be apportioned based on population rather than clearly assigned to one area. We use a weighted reliability index (WRI) to determine when the conversion is no longer reliable. An explanation of that process follows. We have tried to compensate for these and other issues by suppressing data which is likely to be affected.

CORE Conversion Process and Weighted Reliability Index

CORE obtains data from many government agency sources. The data are represented as events (e.g. # of teen births, # of crimes, # of clients) occurring within a given geographic unit. This geographic unit is generally the smallest that can be obtained from the agency source. For example, data may be available by school district, by zip code, by census tract or by police jurisdictions. CORE calls these geographic units the "source geography."

CORE data is usually reported at the geographic level of county or community – called in the rest of this report the "destination geography." Therefore, data usually needs to be converted from the "source geographies" to the "destination geography."

The conversion is based on an overlay process, in which the events occurring in small source geographies that are totally contained within the destination are combined with synthetic estimates of events occurring in source geographies that are partly within and partly outside the destination geography. The synthetic estimation is weighted by the population distribution between the source and destination areas. Therefore, it requires a small-scale count of the population underlying both source and destination geographies. This process is explained below through examples.

Data being converted from a smaller geography (source geography) like school district to a larger geography (like a county) is usually fairly reliable because most of the smaller pieces fit neatly and wholly into the new geography. (See example 1).

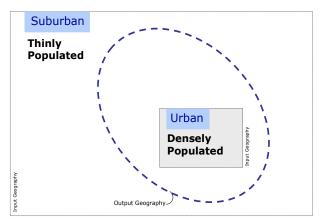
The rectangles represent two possible data source geographies (one densely populated school district – Urban School District -- and one thinly populated school district – Suburban School District -- surrounding it). The large oval represents a report's destination geography such as county, locale or network.

Example 1

The following statements refer to the first example:

All of the events occurring in the urban school district can be attributed entirely to the destination geography.

The events occurring in the split source geography (suburban school district, in this example) are distributed to the destination geography in the same proportion as the underlying population is distributed. If 40% of the suburban school district population lies within the destination geography, then 40% of its events are attributed to the destination geography.

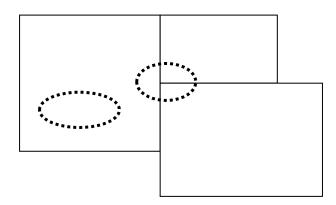


These events are split by age, race and gender subgroups whenever possible, as are the populations. So the synthetic estimation is broken down that way also. If 40% of the young White population of the suburban school district lives in the destination geography, then 40% of the events occurring to young White people are attributed there. If, on the other hand, only 10% of the young American Indian population of the suburban school district lives in the destination geography, then only 10% of the events occurring to young American Indian people are attributed there.

While we can develop an algorithm to distribute all source geography populations to all destination geography populations, that distribution will not always be reliable.

For example, see the situation depicted in Example 2 below. Here we are trying to estimate the number of events contained in two very small destination geographies (the ovals). Could this synthetic estimate be reliable? Perhaps, if the small area within the ovals really is representative of the whole area -- but more likely not.

Example 2



A statistic is needed to assist researchers in determining when a destination geography's events cannot be reliably estimated using these processes. For CORE, that statistic is the Weighted Reliability Index (WRI).

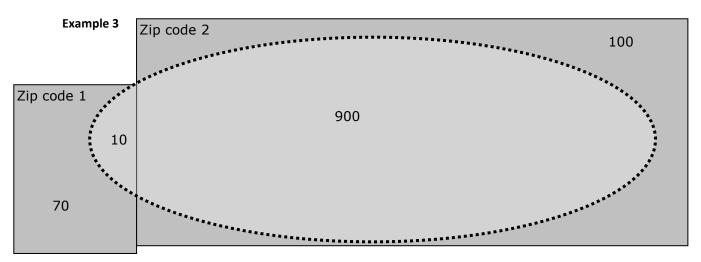
The amount of overlap between source and destination populations can vary from less than 1% to 99% -- only a little of a source population can live in a destination, or almost all of the source population can live in a destination.

The key underlying assumption behind the CORE Weighted Reliability Index is as follows:

When most of the population for the source geography is also in the destination geography, we can be more certain of the reliability of the estimation process.

Therefore, the weighting process lets us calculate, for each source-geography/destination-geography combination, the reliability of each destination geography's estimate.

In the figure for Example 3, for zip code 2 the source area population is mostly in the destination oval (encased in the dashed line), but the majority population from the other contributing source area is not.



The oval represents the destination geography boundary -- the edge of a destination city. The rectangles represent the source geography boundaries for two zip codes. The numbers are population of people living in each place: 10 people live both in Destination City and in the first source (Zip code 1), and 900 people live both in Destination City and in the second source (Zipcode2).

The formula for **Weighted Reliability Index** for a single destination is the total weighted destination population as a percent of total population. To understand this formula, see the calculations below.

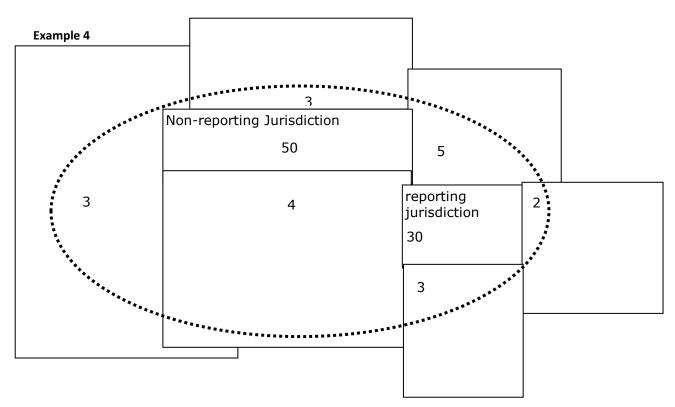
zip code z	Total for Destination	910	811.25
zip code 2	900/1000 = 90%	* 900	810.00
zip code 1	10/80 = 12.5%	* 10	1.25
	attributed to destination	attributed to the destination	destination
	Percent of source population	Multiplied by the population	Amount of

In the above example, the **Weighted Reliability Index** for Destination City is **811.25 / 910 = 89%**. **Basically, 89% of the event locations were directly attributed to the area they occurred.** Along with the WRI a cut point for reliable reporting is needed. When half or more of the events have been imputed to the destination geography, rather than directly attributed from the source geography, the data is considered unreliable and rates are suppressed.

WRI for Areas with Non-Reporting of Data

There is a second way that data may become unreliable. Some police jurisdictions do not report data to the state sources, use a reporting method which cannot be included in our files, fail to report for either adults or juveniles, or report for only part of a year. This is particularly true for court data – arrests or offenses. In order to accurately evaluate the reliability of data conversions for destination geographies containing those jurisdictions, non-reporting jurisdiction populations were excluded from the calculations for WRI and the non-reporting jurisdiction issue is evaluated separately.

Partial Reporting, part of a year or part of a population, is also taken into consideration when computing the percentage of non-reporting in a destination geography. Adult and juvenile rates are evaluated separately. Some areas may pass for one, but not for the other due to their reporting habits. For partial year reporting the percentage of the year with data reported is used to evaluate each category.



The second test of reliability is to determine whether the population for the rate is adequately represented. In this example, allow the numbers inside the oval to represent a population of 100 allocated to the destination geography. Two source jurisdictions are entirely located in the destination geography represented by the oval. Their events when reported would be directly attributed. The non-reporting jurisdiction would have its population of 50 excluded from the calculation for WRI, while the reporting jurisdiction would have its population included in the calculation. In this case the completely contained reporting jurisdiction would represent 30 of the remaining 50 population (60%) in the destination oval. The imputed portion is 40% allowing the destination geography to pass the first test for WRI.

CORE also requires that the excluded non-reporting jurisdiction population (50 of 100) are less than 50% of the total population for the destination geography. With an exclusion rate of 50%, this destination geography would fail the reliability criteria.

The reliability of arrest rates is calculated each year based on non-reporting. For five year rates, three out of five data years must be considered reliable by both tests and the average of the yearly WRI for all five years must reach the WRI cut point value.

Rates: why is "raw data" converted to rates?

In order to make comparisons between counties and the state, and between counties that have different sizes, we use rates to describe an event in terms of a standard size population---either per 100 (percent), per 1,000 or per 100,000. For instance, what does it mean if County A has 42 alcohol retail licenses, and County B has 399? Does it mean that based on this indicator, the risk factor (Availability) is much higher in County B than it is County A? No, not if County B is a much bigger county. If County B is bigger, then the "rate" of liquor licenses per population might be the same or even lower. The only way to compare them is to convert the raw numbers to rates, based on the same population factor.

For instance:

County A: # of licenses – 42, # of persons (all ages) – 14, 297 County B: # of licenses – 399, # of persons (all ages) – 186,185

To calculate the rate per 1,000:

42 / 14,297 = .002937 .002937 X 1,000 = 2.94 399 / 186,185 = .002143 .002143 X 1,000 = 2.14

So the rate of alcohol retail licenses is 2.94 per 1,000 people in County A, and 2.14 per 1,000 people in County B.

Standardization of CORE Indicators

An individual indicator by itself is interesting because you can compare your county (school district, locale) to all other counties (school districts, locales), and to the state. You can also look at how the indicator changes over time. But it is more difficult to compare several indicators to each other, for example, if you want to see which indicator of risk is extremely high and which is just average. For instance, you cannot directly compare the number (or rate) of alcohol retail licenses to the number (or rate) of Food Stamp recipients---this would be like comparing apples and oranges and would not be meaningful.

The preferred way to compare different indicators is to find out how much each individual indicator varies from some common point; in CORE reports the point we use is the indicator's value for the state. In more technical terms, we transform the original absolute rates to a common scale: the relative deviation from the state rate. This is called a **standardized score**, and is based on the mathematical calculation of the standard deviation. For a particular indicator, the county (school district, locale) with the highest absolute rate will have the highest standardized score. A standardized score of 1.2, for instance, means that the county's rate is 1.2 standard deviations above the state rate, and a –1.2 would be 1.2 standard measures *below* the state rate. Approximately 95% of all counties (school districts, locales) in the state will fall between +2 and –2 standard deviations from the state rate.

Here is an example. Let's say an indicator for extreme family economic deprivation (Food Stamp recipients per 100 people) has a standardized score of 2.5 and an indicator for availability of drugs (alcohol retail licenses per 1,000 people) has a score of 1.2. We can say that, other things being equal, the county (school district, locale) in question has a higher risk for extreme family economic deprivation than for availability of drugs.

CORE indicators are standardized using a formula similar to the calculation of a z-score. A typical z-score for an observation (a county, a locale, a school district) is calculated as a difference between an observation and the mean (average) of all observations, divided by the standard deviation for all observations. A CORE standardized score for a county (school district, locale) is instead calculated using the state rate in place of the mean for all counties (school districts, locales). A standardized CORE indicator avoids the problem of using an unweighted mean of all counties (school districts, locales) that would give counties of very different size equal weight, and therefore provides a more meaningful comparison.

CORE standardized indicators for counties are calculated using the following formula. The same formula is used for locales and for districts, by substituting locale or district rates for county rates in the formula.

$$stdiz_score = \frac{county_{rate} - state_{rate}}{\sqrt{\sum_{i=1}^{N} (county_{rate,i} - state_{rate})^{2}}}$$

$$N$$

Graduation and Dropout Data Methodology Changes

Beginning with the 2011-2012 school year major changes were made in how to measure dropouts and graduation for students in Washington State. "Graduation Rate Calculations in Washington State", a March 2012 publication by the Office of Superintendent of Public Instruction, does an excellent job of explaining these changes. The following chart is an extract from that document (page 4).

How do the methods differ?

Estimated Cohort (old method) Prior to 2011-2012 school year	Adjusted Cohort (new method) 2011-2012 and beyond
Is a composite cohort. Uses dropout rates for all grades within one school year to determine an estimate of the number of students graduating.	Is an actual cohort; individuals are tracked over 4 years with adjustments made for transfers in/out.
Allows for alternate expected graduation year for students in special education or ELL programs.	Imposes concept of four-year timespan. There are no adjustments for Special Ed or Limited English students who are expected to take longer.
May adjust for deficient credits.	All students are expected to graduate four years after first entering 9th grade. Transfers from out of state or other districts who are credit deficient may not be reclassified into a lower grade.

Where are the roadblocks to learning in our communities? Academic Achievement:

The CORE measures academic achievement using three groups of indicators:

- 1. Poor Academic Performance on statewide tests (risk factor);
- Students who graduate from high school (protective factor);
- 3. Students who drop out of high school, failing to complete their education (risk factor).

Student Assessment

The indicators for *Poor Academic Performance*, are available for grades 4, 7 and 10. The indicators are calculated as a percentage of students tested in each grade assessment. Earlier years of information are from the Washington Assessment of Student Learning (WASL). In 2009-10 the WASL was replaced by the Measurements of Student Progress (MSP) for grades 3 through 8 and the High School Proficiency Exam (HSPE) for grade 10. Some districts have chosen to test students in both grades 9 and 10 for the 10th grade assessment, giving freshmen a second chance to pass the test. Passing the HSPE is essential for high-school graduation. Ninth graders who were tested are included with the tenth graders in the calculation of the Academic Achievement indicator for grade 10.

Graduating from High School

According to the National Institute on Drug Abuse (NIDA), protective factors are characteristics that decrease an individual's risk for a substance abuse disorder. Among the protective factors listed are: aspirations or expectations to go to college, high commitment to schooling, education is valued and encouraged, and academic competence. Children who graduate share many of these protections, therefore, CORE has chosen to categorize On-time and Extended Graduation as protective factors. Two types of high school graduation rates are listed in the CORE reports. On-time Graduation and Extended Graduation.

For On-time Graduation, a student must graduate within four years by completion of the graduation requirements. The **Estimated Cohort** (old method) On-Time Graduation rate formula uses dropout rates discussed below; the formula is: 100*(1-grade 9 dropout rate)*(1-grade 10 dropout rate)*(1-grade 12 dropout rate-grade 12 continuing rate). The on-time graduation rate is the inverse

of the cumulative dropout rate with the senior class adjusted to remove those students who stay in school for more than four years from the calculation. The **Adjusted Cohort (new method)** rate divides the number of students graduating in their fourth year by the adjusted freshman cohort for those students.

Extended Graduation requires more resources and dedication from district staff. It includes those students who stay in school after their senior year and complete the graduation requirements. Districts which have high extended graduation rates may also have higher dropout rates since the students attempting extended graduation are also at highest risk of again dropping out. A large difference in the size of the on-time and extended graduation rates may indicate that a district or school is working hard to keep students in school or to have dropouts return to school and attempt to graduate. The Estimated Cohort (old method) Extended Graduation rate formula is: (the number of on-time and late graduates)/(the number of on-time graduates divided by the on-time graduation rate). The Adjusted Cohort (new method) rate is the number of students graduating within five years divided by the adjusted cohort for the freshman class of the graduates.

Dropping Out of High School

Two types of high school dropout rates are listed in the CORE reports, Annual (Event) Dropouts and High School Cohort (Cumulative) Dropouts.

The Annual Dropout rate measures the proportion of students enrolled in grades 9-12 who drop out in a single year without completing high school as a percentage of all students in grades 9 through 12 that year. When districts try new policies or projects to keep students in school the impact of those actions will be more immediately visible in this rate. This rate is much more difficult for the data provider to compute from data stored within the new cohort designations for students as it draws information from four separate cohorts. Data production during the transition to the new method will likely have at least one year of data which will probably never be produced. The formula and the data for this rate have not been changed by the new methodology.

The High School Cohort Dropout rate (may also be referred to as the longitudinal, cumulative, or freshmen cohort dropout rate) measures what happens to a single group (or cohort) of students over a period of time. This rate is most useful for seeing the long-term impact on the community. The Estimated Cohort (old method) Cohort (Cumulative) Dropout rate formula is: 100-(100*(1-grade 9 dropout rate)*(1-grade 10 dropout rate)*(1-grade 12 dropout rate)). The cohort rate is significantly higher than the annual rate for the same area as it measures the cumulative effect of the multiyear loss of students from their freshmen cohort. The Adjusted Cohort (new method) rate is the number of students dropping out prior to graduation divided by the adjusted cohort for the freshman class of the graduates.

School Climate:

Indicators listed under School Climate give an idea of how safe students may feel in their school or how committed they and their fellow students are to learning. These indicators are *Weapons Incidents in School* (rate per 1,000 students) and *Unexcused Absences for Students in Grades 1 to 8* (as a percentage of total student days possible in the school year, which equals the number of students times teaching days). When weapons incidents are common or it is acceptable for young students to frequently miss school without explanation the school climate is not conducive to learning.

Extreme Family Economic Deprivation:

Hungry students find it difficult to focus their attention long enough to learn. Those with inadequate housing or clothing may find it difficult to interact with their peers. There are three indicators which evaluate levels of poverty.

Child Recipients of TANF (Temporary Assistance for Needy Families) gives the rate of children from birth to 17 who receive income assistance. The child must be a citizen or legal alien and their caregiver must not have exceeded the 60 month maximum. There is a requirement for the adults to seek work and an income evaluation. Teen parents must attend school.

Supplemental Nutrition Assistance Program (SNAP) Recipients. The SNAP program was formerly called the Food Stamps program, and shows a more generalized level of need. While the persons must be citizens or legal aliens who seek work and meet the income guidelines there is no cutoff time limit for benefits.

Students Eligible for Free or Reduced Price Lunch gives a much broader look at poverty in your area. Children of people who are "working poor", who have exceeded 60 months in benefits, are not legal aliens, or are not seeking work can still receive meals and free milk. The free guidelines are at or below 130 percent of the Federal poverty guidelines and the reduced price guidelines are between 130 and at or below 185 percent of the Federal poverty guidelines.

However, there are other ways to qualify. Many persons earning a gross income up to 200% of the Federal Poverty Level apply for income assistance because their children are automatically eligible for free school lunch if they meet the adjusted income guidelines. These are sometimes called \$0 grants. Households receiving assistance under SNAP, TANF for their children, Food Distribution Program on Indian Reservations (FDPIR) or, with children who are homeless, fostered, runaway, migrant, or in Head Start Programs are eligible for free benefits. If <u>any</u> child or household member receives benefits under Assistance Programs <u>all</u> children who are members of the household are eligible for free school meals.

Suppression Codes for Yearly Trend Data

UN=Unreliable conversion of events to report geography, failure of weighted reliability index (WRI). The WRI evaluation process is further explained in the section labeled 'CORE Conversion Process and Weighted Reliability Index'.

SP=Suppressed by agreement with data provider when denominator is below agreed level and may compromise a person's rights to confidentiality.

SN=Small Number Sample. Geography has less than 30 events in the denominator. More reliable at 5 year level or for larger area.

NR=Not reliable due to non-reporting of police jurisdictions data. Fifty percent or more of the population is not represented by the data due to non-reporting jurisdictions.

Changes in Hospitalization Data

When CHARS was first developed there were basically two types of patients: inpatients and outpatients including emergency department. Since that time, however, a third category of patients has come into being, and has grown. These are known as "observation" patients. Some observation patients may be similar to outpatients in that their lengths of stay at the hospital can be measured in hours. Other observation patients are more like inpatients; their lengths of stay can be a full day – or longer. Up until May 2007 CHARS only collected data on inpatients. Observation patients with lengths of stay exceeding a day or more were previously not reported to CHARS. This situation becomes even more concerning because the designation of a patient as either an inpatient or an observation patient is based upon each patient's <u>payer's</u> criteria. Hence, one patient may be deemed an inpatient by their payer and have their data reported to CHARS, while another patient with exactly the same clinic conditions and treatments – but with a different payer – may be deemed an observation patient and did not have their data reported to CHARS in the past. Revisions have been made which add these observation events to CORE from 2008 forward. This will change the trend data for those years for any rate containing data from CHARS.

In addition to the inclusion of observation admissions, supplemental diagnosis fields and supplemental external cause fields have been added to the analysis of patient data. Previously analysis was limited to the first nine diagnosis and the first external cause code. Both of these changes may increase the rates seen in data trends for 2008 to the present.

Data on hospital stays after October 1, 2015 uses ICD-10 definitions. Both ICD-9 and ICD-10 categories used to define alcohol, drug, suicide and injury accidents are detailed in the section called Counting Alcohol- or Drug-related Deaths. CHARS events use only directly attributable diagnosis definitions.

Population of Areas Not Reporting Arrests or Offenses

Benton County

Populations subtracted for police agencies not reporting

Police agencies are not required to report arrests or offences to UCR/NIBRS, they do so voluntarily. For a variety of reasons, a jurisdiction may report part or none of the arrests or offences for a year. In these cases, the denominator is the population of the areas that did report. For example, if juvenile arrests for one agency are not reported, the juveniles for that jurisdiction are not included in the population denominator either.

The tables below show the values that comprise the adjustment for your county for each age range we report. "% Subtracted" is the percent of the county's population subtracted for non-reporting. "Subtracted" is the amount subtracted. "Persons" is the locale's population. "Adjusted Pop" is the denominator used to calculate indicator rates.

Nevertheless, rates can differ markedly from year to year particularly if a jurisdiction, where most of the crime in the county occurs, did not report. When 50% or more of the population is not reported the yearly rate is suppressed. Jurisdictions crossing county boundary lines are apportioned to each area by age, and sex of the population. When more than 40% of the reported events have been apportioned, "synthetically estimated", the yearly rate is suppressed.

All **Arrests** for 10-14 year olds have 5 year rates which represent Adjustments for Non-reporting Arrests (age 10-14)

100.00 % of the population.

% Subtracted
Subtracted, 10-14
Persons, 10-14
Adjusted Pop 10-14

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
0.00	0.00	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	246	0	0	0	0	0	0	0	0
13,074	13,350	13,448	13,438	13,549	13,672	13,720	13,796	14,088	14,528	14,935
13,074	13,350	13,202	13,438	13,549	13,672	13,720	13,796	14,088	14,528	14,935

All Arrests for 10-17 year olds have 5 year rates which represent Adjustments for Non-reporting Arrests (age 10-17)

100.00 % of the population.

% Subtracted
Subtracted, 10-17
Persons, 10-17
Adjusted Pop 10-17

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
0.00	0.00	1.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	405	0	0	0	0	0	0	0	0
21,206	21,514	21,403	21,267	21,491	21,661	21,820	22,000	22,279	22,714	23,229
21,206	21,514	20,998	21,267	21,491	21,661	21,820	22,000	22,279	22,714	23,229

All Arrests for adults have 5 year rates which represent Adjustments for Non-reporting Arrests (age 18+)

100.00 % of the population.

% Subtracted
Subtracted, 18+
Persons, 18+
Adjusted Pop 18+

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
0.00	0.00	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	2,203	0	0	0	0	0	0	0	0
124,438	127,511	130,034	131,840	134,289	136,656	138,307	139,631	141,634	144,438	147,569
124,438	127,511	127,831	131,840	134,289	136,656	138,307	139,631	141,634	144,438	147,569

All Offenses for persons have 5 year rates which represent Adjustments for Non-reporting Offenses

100.00 % of the population.

% Subtracted Subtracted, 18+ Persons, 18+ Adjusted Pop 18+

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0
171,293	175,177	177,653	179,350	182,290	185,058	187,006	188,712	191,411	194,942	198,958
171,293	175,177	177,653	179,350	182,290	185,058	187,006	188,712	191,411	194,942	198,958

Agencies Not Reporting Arrests and/or Offenses

Benton County Percent of Adult Arrests Not Reported to UCR/NIBRS by Year

Police agency jurisdictions which are located at least partially in your county are listed below. The table shows the percentage of non-reporting by jurisdiction for each year.

percentage of non-reporting by jurisdiction to											_
Jurisdictions	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Benton CO			8.0								
Benton City PD											
Franklin CO											
Grandview PD											
Kennewick PD											
Prosser PD											
Richland PD											
West Richland PD											
Yakima CO											
					L	L	l				

Benton County

Back to Population Deducted

Percent of Juvenile Arrests Not Reported to UCR/NIBRS by Year

Police agency jurisdictions which are located at least partially in your county are listed below. The table shows the percentage of non-reporting for juvenile arrests each year.

percentage of non-reporting for juvernie arres		, , , , , ,	0011	0010	2010	2011	2045	2242	0045	2242	0010
Jurisdictions	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Benton CO			8.0								
Benton City PD											
Franklin CO											
Grandview PD											
Kennewick PD											
Prosser PD											
Richland PD											
West Richland PD											
Yakima CO											
Takiilla CO											
				1							
	<u> </u>					<u> </u>	<u> </u>	<u> </u>			

Benton County

Back to Population Deducted

Percent of Offenses Not Reported to UCR/NIBRS by Year

Police agency jurisdictions which are located at least partially in your county are listed below. The table shows the percentage of non-reporting for offenses each year.

Jurisdictions		2011	2012	2013	2014	2015	2016	2017	2018	2019
Benton CO										
Benton City PD										
Franklin CO										
Grandview PD										
Kennewick PD										
Prosser PD										
Richland PD										
Most Bishland DD										
West Richland PD										
Yakima CO										