



MASON COUNTY
COMMUNITY SERVICES

Mason County Community Health Assessment

2021

Mason County Public Health

A Safe and Healthy Mason County

<http://healthymasoncounty.com/>

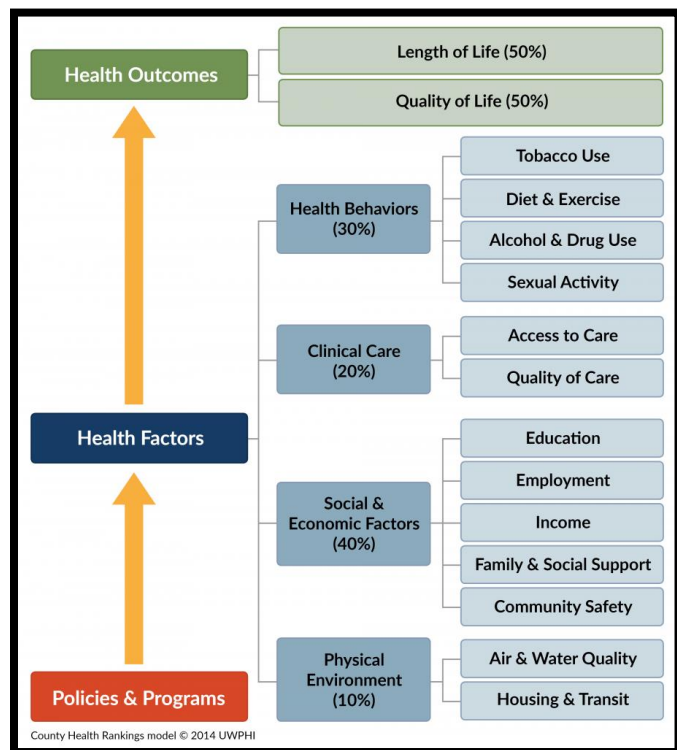
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Purpose

The Community Health Assessment (CHA) is a review of various health data used to illustrate the current health status of a community and monitor its progress over time. It is a critical step in defining the vision for health in Mason County so that we can choose targeted health improvement efforts that affect policies, dismantle health disparities, and promote health in our community. The findings of this assessment will be used to identify the health priorities of focus for the 2022-2026 Mason County Community Health Improvement Plan.

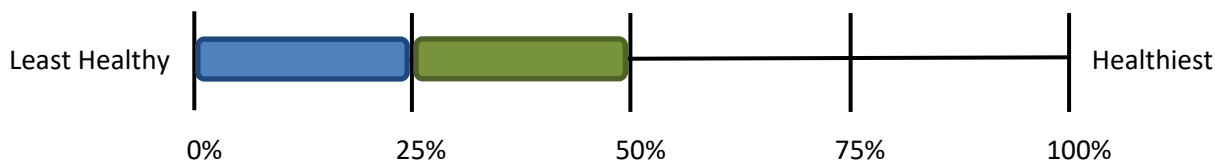
Background

Annually, the County Health Rankings & Roadmaps program of the University of Wisconsin Population Health Institute publishes the County Health Rankings. The local data reported in this section is organized by the Health Rankings Model (1). The Health Rankings Model emphasizes the many factors in population health that, if improved, can help make communities healthier places to live, learn, work, and play. In the Health Rankings Model, the current health status of a community is described as **health outcomes**, which are ranked by rates of mortality (premature death) and morbidity (chronic diseases). These health outcomes are influenced by **health factors** in a community, ranked by a calculation of various health behaviors, clinical care, social and economic, and physical environment measures. Health Factors represent what will influence the future health of a community, while health outcomes represent how healthy a community is today (1). There are evidence-based **policies and programs** that a community can implement to improve health factors and, ultimately, improve its health outcomes. These standard measures facilitate comparisons and benchmarking with similar communities and changes over time. Mason County is compared to two neighboring rural counties – Grays Harbor and Lewis – with similar populations, health factors, and health outcomes.



Due to the COVID-19 pandemic beginning in January 2020, the data reflected in this assessment are from 2019 and earlier; 2020 data is used for few measures where available. Data will be revised in the subsequent CHA after detailed 2020 data are released. The impacts of the

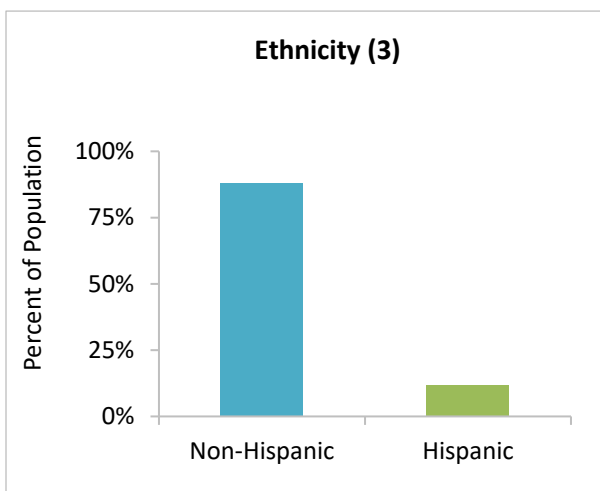
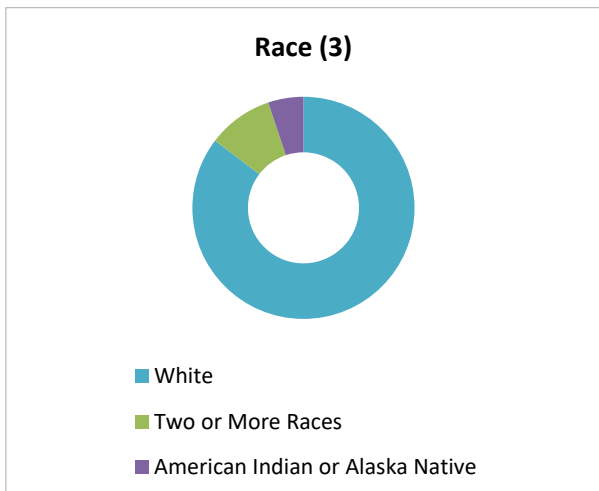
pandemic are unknown; therefore, we can only make assumptions about the anticipated outcomes as a result of the pandemic. COVID-19 will likely have a greater impact on unemployment, children in poverty, income inequality, premature age-adjusted mortality, food insecurity, and severe housing cost burden than is currently reflected in this assessment (1).



According to the Health Rankings, Mason County’s health outcomes is ranked in the lower middle range (25%-50%) of counties in Washington. Our community’s health factors are ranked among the least healthy counties (lowest 0%-25%) in the state.

Demographics

The 2021 estimated population of Mason County is 65,750 residents (2). Although Mason County is a predominantly white population (83%), 12% identify as Hispanic origin of any race (3). Nine percent (9%) of Mason County residents are biracial or multiracial, 5% are American Indian or Alaska Native, and 1% are Black/African American or Asian (3).



More than half (53%) of Mason County residents are adults ages 20-64 years (3). Twenty-six percent (26%) of the community are seniors over age 65 and 21% are under the age of 20 (3).

Age Group	Female	Male	Total	Percent of Population
0-4	1,529	1,599	3,127	5%
5-19	5,216	5,561	10,776	16%
20-64	16,341	18,419	34,759	53%
65+	8,794	8,293	17,087	26%
Total	31,879	33,871	65,750	100%

Health Outcomes

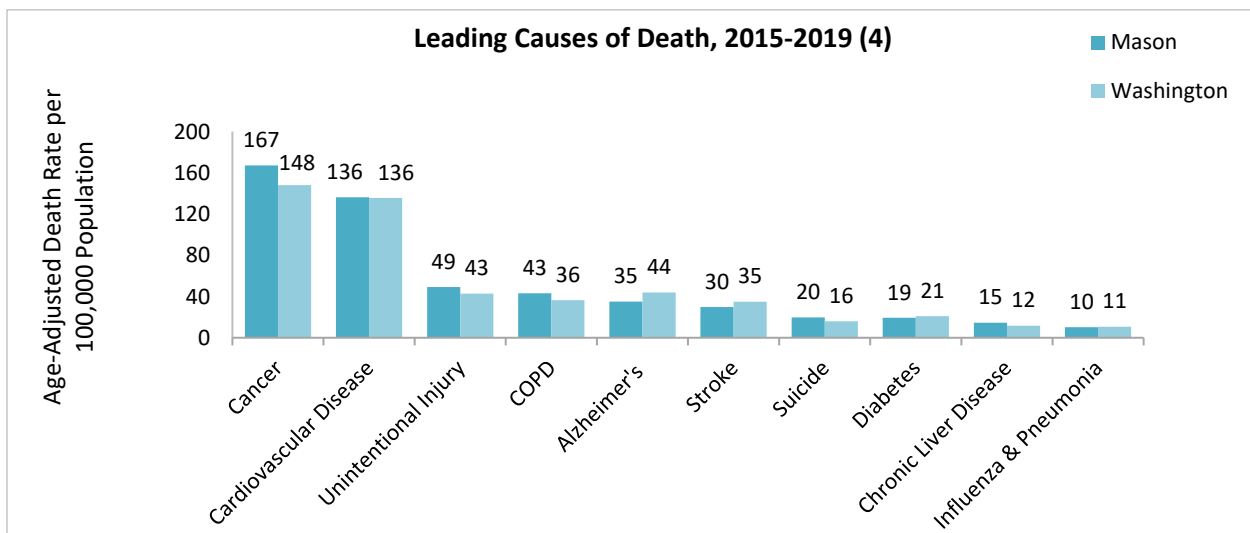
Health Outcomes represent how healthy a county is right now, reflecting the physical and mental wellness of residents within in a community through measures representing both the length and quality of life (1). The County Health Rankings measures life expectancy, premature death, birth risk factors, and ratings of physical and mental health as key factors that influence a community’s health outcomes.

Mortality

The life expectancy for a child born in Mason County between 2015 and 2019 is 79.7, meaning a person born in Mason County between 2015 and 2019 can be expected to live 79.7 years on average (4). In comparison, the life expectancy for the state of Washington for that same period is 80.4 years (4). Mason County’s life expectancy rate has increased steadily over the last 25 years; between 1994 and 2019, life expectancy increased by 4.3 years (4).

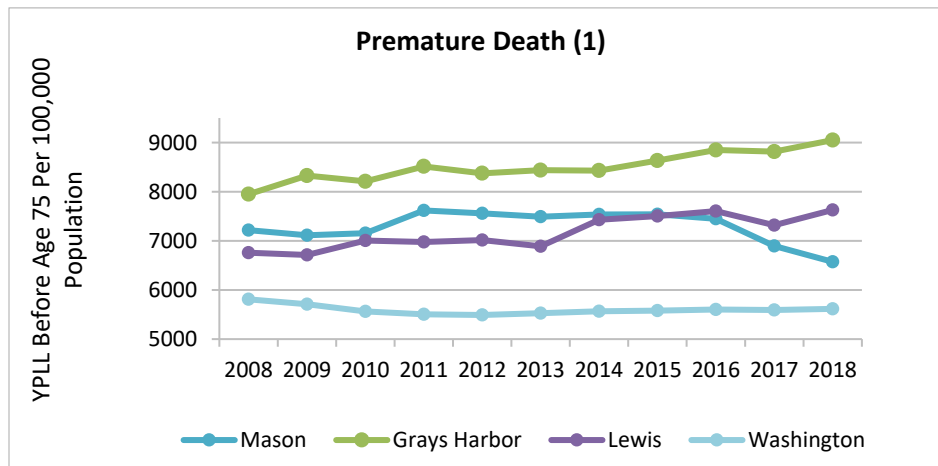
79.7 years

Life expectancy in
Mason County



The top 3 leading causes of death for both males and females in Mason County are cancer, heart disease, and unintentional injury; the cancer type that results in the most deaths in Mason County is lung cancer (4). Mason County has higher mortality rates due to cancer,

cardiovascular disease, unintentional injury, chronic obstructive pulmonary disorder (COPD), suicide, and chronic liver disease (4). Local mortality rates associated with Alzheimer’s, stroke, and diabetes are lower compared to the state’s rates (4).



Years of Potential Life Lost (YPLL) measures the rate and distribution of premature death, or deaths that could have been prevented (1). While statistics that include all mortality are dominated by deaths of the elderly, YPLL emphasizes deaths of younger people (1). The YPLL in Mason County has remained largely consistent over time; however, between 2015 and 2017, YPLL has begun to decline. While Mason County’s YPLL remains higher than the state’s, rates of premature death have declined over time and continue to remain lower than neighboring Grays Harbor County.

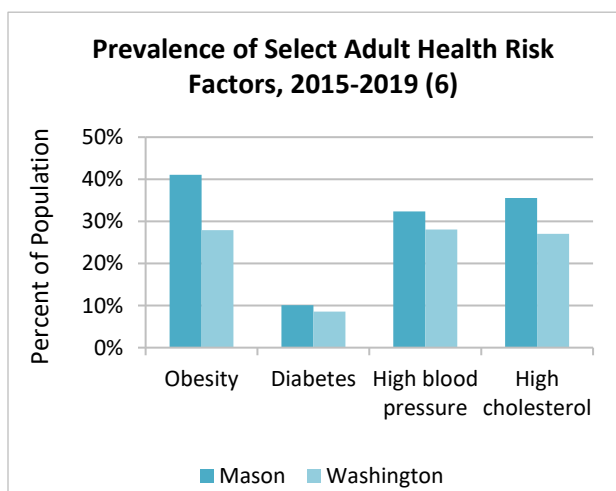
Morbidity

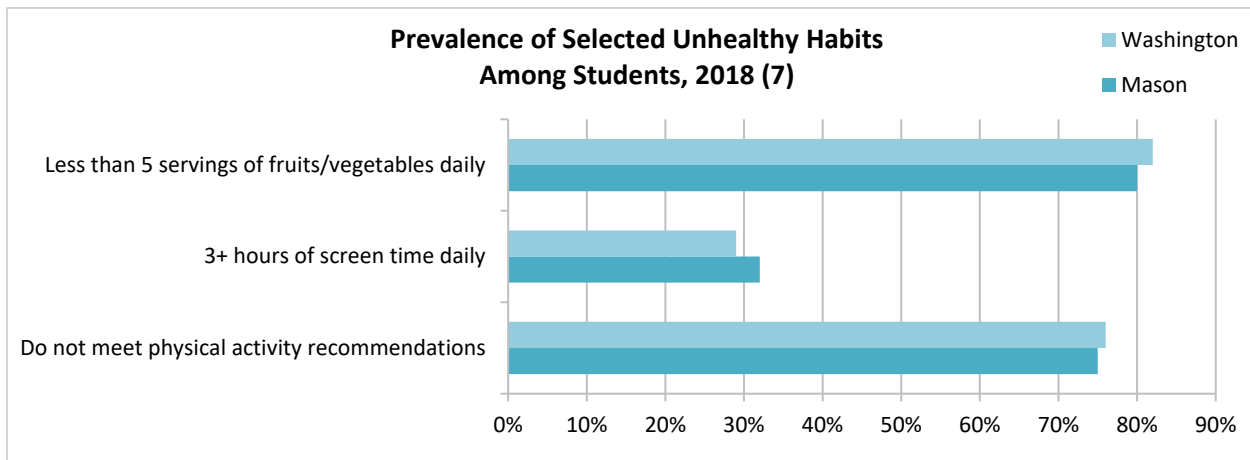
Morbidity measures the burden of disease on a population and can reveal how healthy a community is as well as indicators for future health (1). Many of the leading causes of death and chronic health conditions are caused or exacerbated by unhealthy lifestyle behaviors. Diet and exercise influence one’s risk for various chronic diseases including diabetes and heart disease. Many of these behaviors are established in childhood (1).



3,889 hospitalizations

Heart disease was the leading cause of hospitalizations in Mason County between 2016 and 2019 (5)





Health Factors

There is a plethora of factors that influence a person’s overall health. The Health Rankings Model focuses on four main health factors that influence the health of the county: Health Behaviors, Clinical Care, Social and Economic Factors, and Physical Environment (1). The remainder of this report will discuss the health indicators that make up the four Health Factors.

Health Behaviors

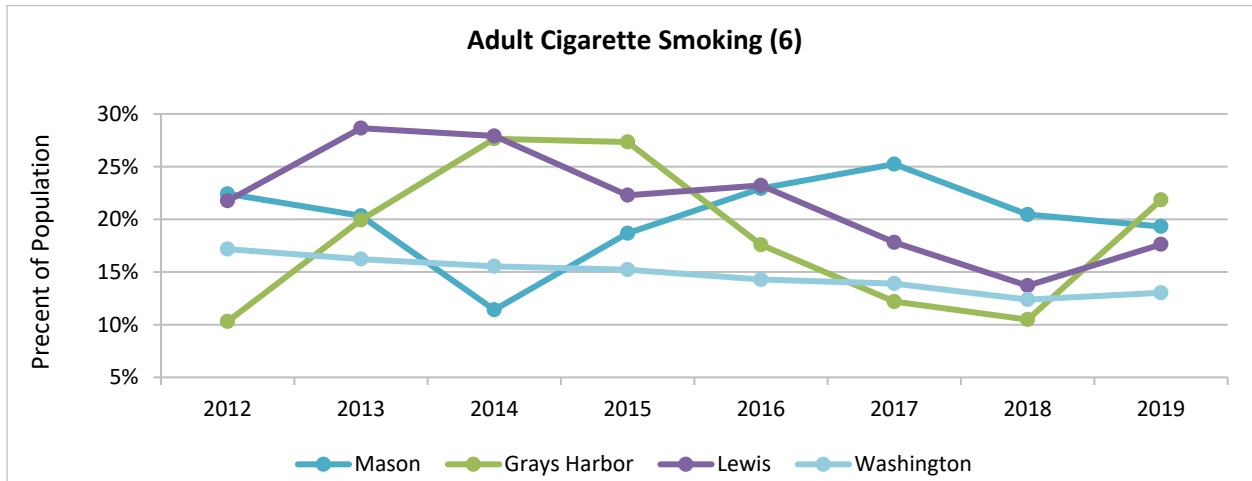
The Health Rankings Model estimates that approximately 30% of our health is influenced by an individual’s health behaviors (1). These include actions that improve health such as eating well and physical activity, as well as those that increase the risk of disease such as substance use and risky sexual behavior.

Comparison of Key Indicators (1)		
Health Behaviors	Mason	Washington
Adult Smoking (2015-2019)	23%	14%
Adult Obesity (2015-2019)	41%	28%
Physical Inactivity (2017)	22%	16%
Excessive Drinking (2015-2019)	15%	16%
Alcohol-Impaired Driving Deaths (2015-2019)	29%	33%
Sexually Transmitted Infections (rate per 100,000) (2018)	381.4	465.2
Teen Births (rate per 1,000 females ages 15-19) (2013-2019)	30	16

Smoking

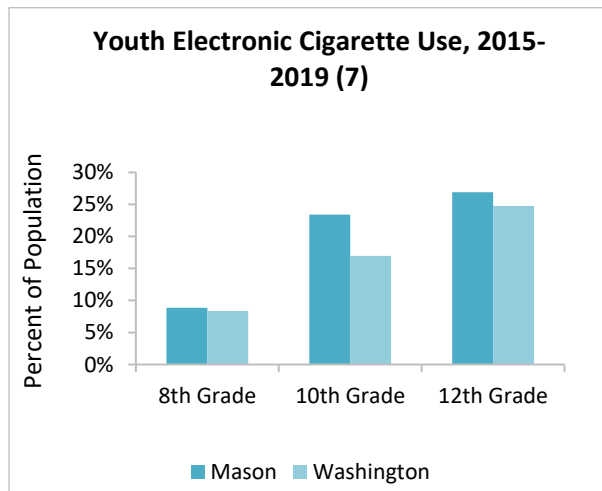
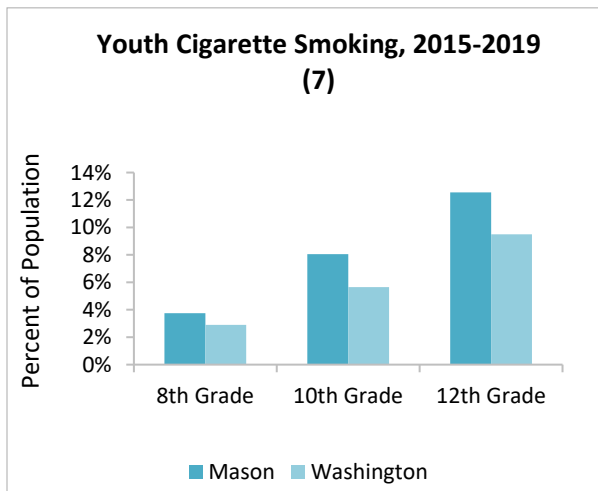
The smoking rates of both adults and youth in Mason County have historically been higher than the state’s rates. Between 2012 and 2016, 21% of Mason County residents were current smokers compared to 16% of Washington state residents (6). Since 2012, smoking rates among

adults in Mason County have remained around 1 in 5 residents while youth smoking rates have decreased over the last decade. Adult cigarette smoking trends in Mason County have varied over time and compared to similar counties. Due to changes in data collection methods for adult e-cigarette use, data between 2015 and 2019 are not comparable.



In 2008, 22% of 10th graders reported they were current cigarette smokers, compared to 9% in 2018 (7). Electronic cigarette use, or “vaping,” has become more popular in recent years. In 2012, only 4% of Mason County 12th graders reported vaping during the last 30 days compared to 37% in 2018. This staggering increase in vaping reflects national trends for which the Surgeon General declared youth vaping at epidemic levels in December of 2018 (8).

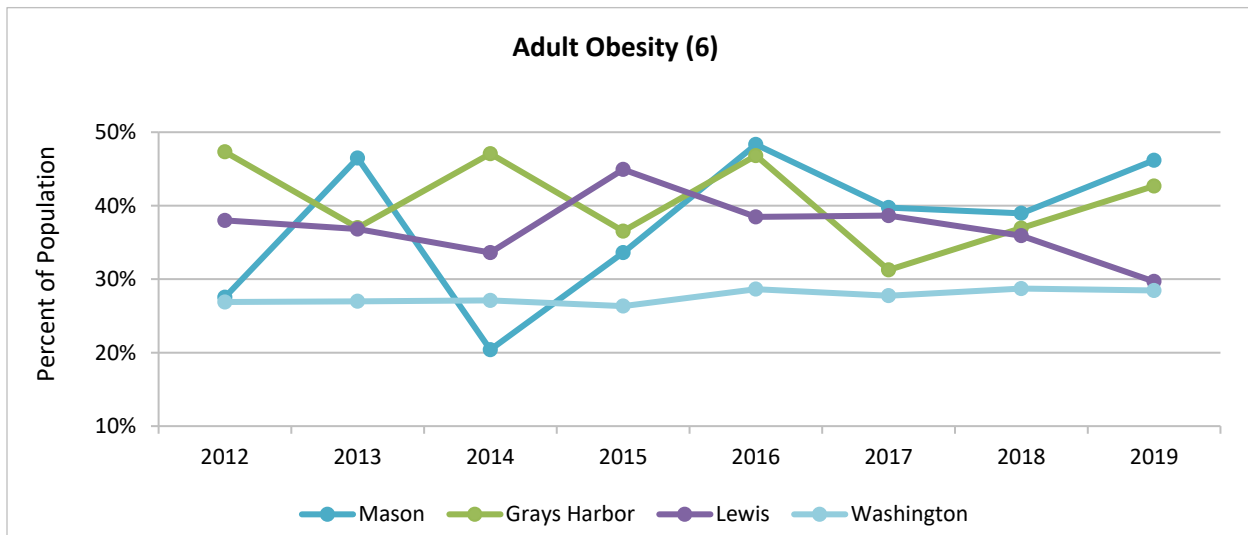
While youth smoking rates have decreased over the last decade, youth vaping in Mason County 12th graders has increased by 37% between 2012 and 2018



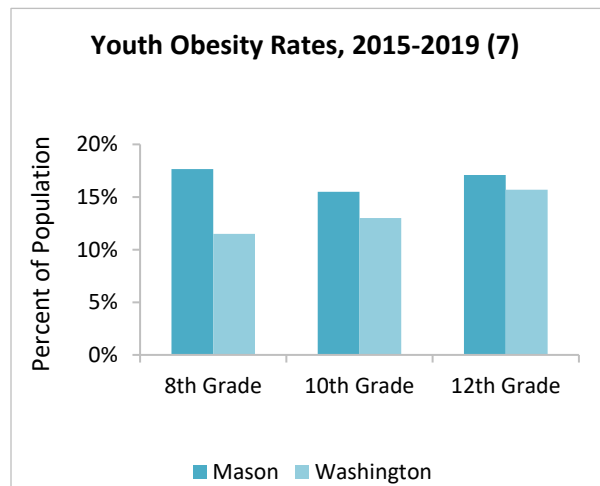
Obesity

Obesity increases the risk for chronic health conditions such as heart disease, type 2 diabetes, cancer, hypertension, and stroke (1). Although Mason County and Washington State report similar rates for adult diabetes (10% and 9% respectively), a larger portion of the Mason County adult population is diagnosed as obese (6). In addition to consistently exceeding statewide rates, Mason County's adult obesity rates have remained higher than Grays Harbor and Lewis counties over the last four years (6). Between 2015 and 2019, the five-year obesity rate for Mason County adults (41%) was 13% higher than the state's rate (28%) (6). Being obese prior to getting pregnant can result in negative health outcomes for both mother and baby (9). Between 2015 and 2019, over a quarter of mothers (27%) in Mason County had a BMI of 30 or greater prior to pregnancy (10).

Adult obesity rates in Mason County have exceeded those of neighboring counties and the state over the last four years

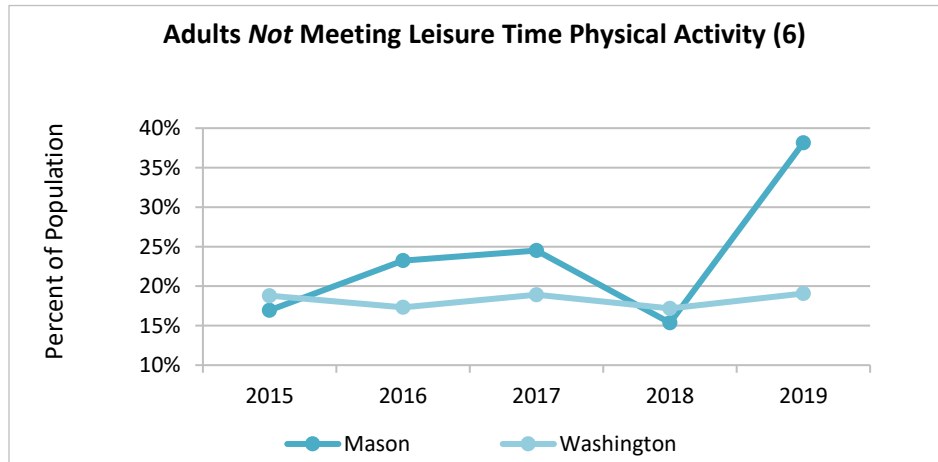


Mason County's youth also experience higher rates of obesity compared to the state. Eighteen percent (18%) of Mason County 8th graders are obese, compared to the state average of 12% (7). Youth obesity rates have remained relatively consistent over time in Mason County, with the sharpest increase occurring in 8th graders between 2016 and 2018 by 50% (7).

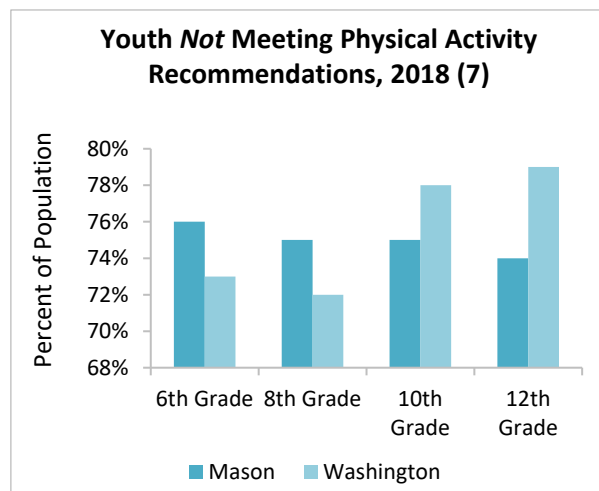


Physical Activity

Leisure time physical activity is defined as “physical activity or exercises such as running, calisthenics, golf, gardening, or walking for exercise” (6). The percent of adults **not** meeting leisure time physical activity recommendations has varied over time. In 2019, 38% of adults did not meet physical activity recommendations compared to 15% in the previous year (6).



In 2018, 79% of 12th graders in Mason County **did not** meet the recommendations for 60 minutes of physical activity 7 days a week, compared to the state’s 74% (7). The percent of Mason County 8th, 10th, and 12th graders meeting the physical activity recommendations has increased over the last decade while the rate of 6th graders meeting recommendations has decreased over time (7).

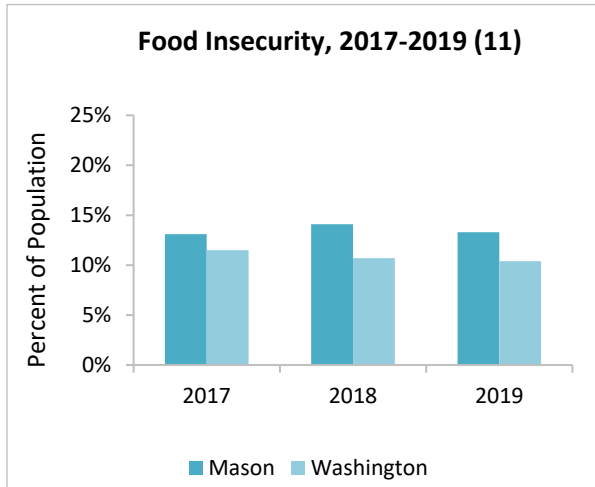


The percent of adults not meeting physical activity recommendations more than doubled between 2018 and 2019, and only a quarter (25%) of youth meet physical activity recommendations

Food Insecurity

The County Health Rankings measures a county’s Food Environment Index based on 1) estimated percentage of low-income population who live more than 10 miles from a full-service

grocery store and 2) food insecurity – the percentage of a population that did not have access to a reliable source of food during the past year (1). The Food Environment Index is ranked from 0 (worst) to 10 (best). Mason County’s Food Environment Index in 2018 was 7.7 compared to the state’s score of 8.2 (1). Mason County is largely rural; compared to similar counties, Mason’s food environment index is scored higher than Grays Harbor (6.8) and Lewis County (7.2).



Food Insecurity measures prior to COVID-19 pandemic revealed that 13% of Mason County were food insecure (11). The impact of the pandemic is projected to increase food insecurity to 15.8% (11).

Households that experience income insufficiency usually supplement their budgets by participating in various programs such as free and reduced meal programs and SNAP (12,13).

Participation Rate in Food Supplement Programs (12,13)					
	2015	2016	2017	2018	2019
Mason County Free and Reduced Meal Programs	62%	62%	59%	60%	61%
Mason County SNAP – Basic Food	25%	25%	24%	-	-
WA Free and Reduced Meal Programs	45%	44%	43%	42%	43%
WA SNAP – Basic Food	20%	19%	17%	-	-

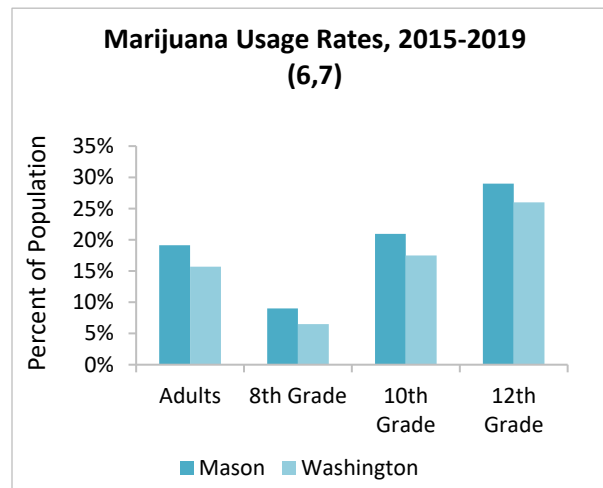
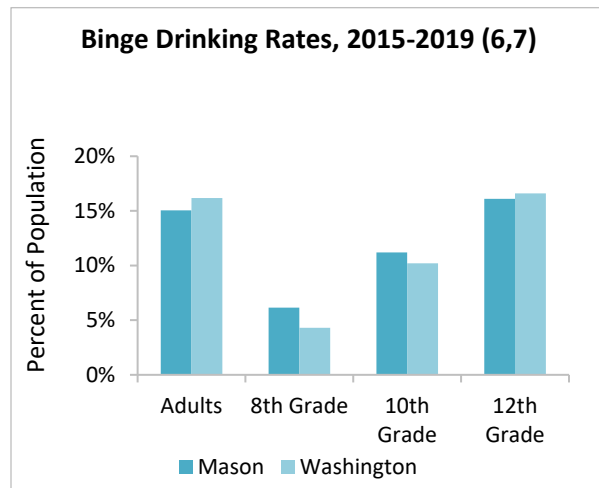
Substance Use

Substance use and abuse is a health behavior that is harmful to the health and well-being of individuals as well as their families, friends, and communities (1). In Mason County, adult marijuana usage rates have increased rapidly since 2012, whereas heavy alcohol usage rates have fluctuated but decreased between 2018 and 2019 (6).

Mason County adults have higher usage rates of marijuana and similar heavy alcohol usage compared to the state

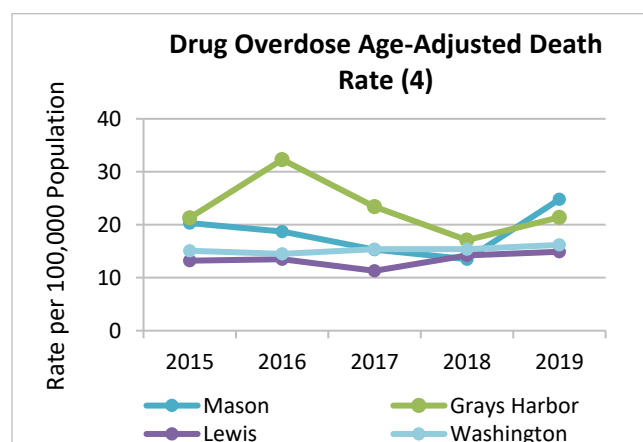
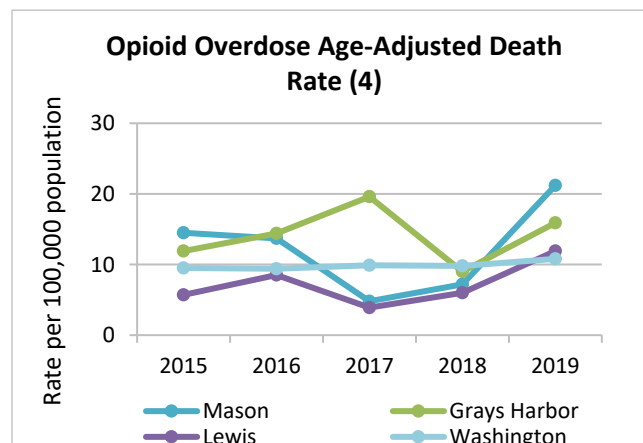
Binge drinking is defined as having five or more drinks in a row in the past 2 weeks (6). Mason County youth have similar binge drinking rates compared to the state, which have decreased steadily over the last decade (7). In 2008, 27% of 10th graders reported binge drinking compared to only 10% in 2018 (7). Youth marijuana usage rates have historically been higher than the state’s. In 2019, youth marijuana use increased in 8th and 12th graders compared to the previous year. Between 2016 and 2018, marijuana use in 12th graders increased by 10% (7).

Alcohol- or drug-related deaths have remained consistent over the past decade (14). Mason County's death rate between 2015 and 2019 (13.9 per 100 deaths) has remained similar to both the previous five years (13.8 per 100 deaths) and alcohol- or drug-related deaths statewide (14).



Drug Overdose Deaths

Drug-specific overdose deaths have increased in Mason County over the last decade. Prior to 2010, death rates due to any drug overdose were as low as 8.2 per 100,000 population (4). In 2016, Mason County Community Services – Public Health implemented new programs to reduce drug overdose deaths throughout the county. In the subsequent years, opioid death rates dropped dramatically. In 2017, the age-adjusted death rate due to opioid overdose decreased by 65%, and the age-adjusted death rate due to any drug overdose decreased by 18% compared to the previous year (4). In 2019, deaths due to any drug overdose, including opioids, increased dramatically from the previous year while rates statewide increased only slightly. The age-adjusted death rate due to opioid overdose increased by 14 per 100,000 compared to the previous year (4). The age-adjusted death rate due to any drug overdose increased by 11.3 per 100,000 (4).

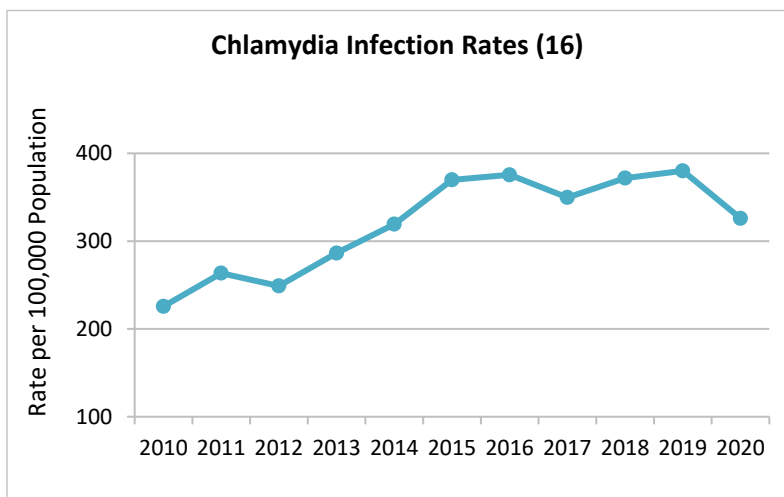


The increase in opioid and drug overdose death rates in 2019 may be an outlier in overall trends; the cause of the one-year increase cannot be immediately identified, though behavioral health professionals have inferred it may be due to the increase of fentanyl use. Between 2018 and 2019, Washington state deaths due to opioid overdose increased by 1 per 100,000 (4).

In late 2021, the Substance Abuse and Mental Health Services Administration (SAMHSA) released findings from the 2020 National Survey on Drug Use and Health that suggests the COVID-19 pandemic has had a negative impact on mental health, which includes exacerbating use of alcohol or drugs (15).

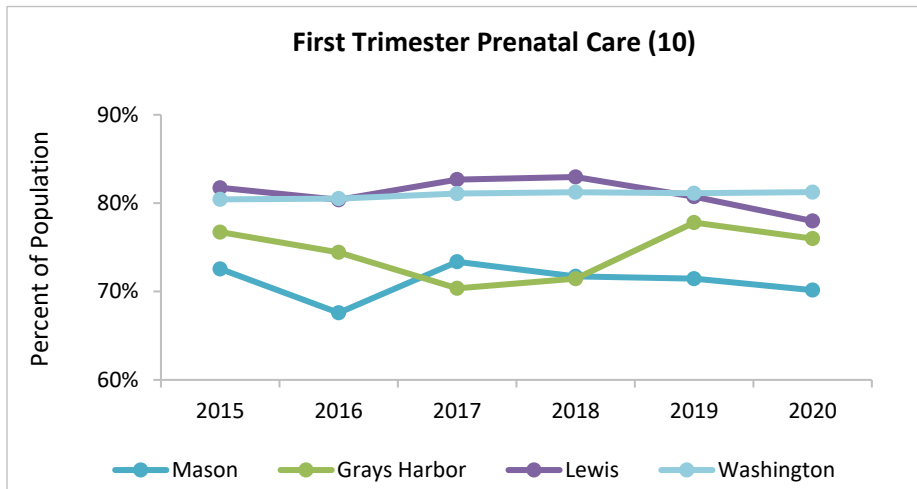
Sexually Transmitted Infections

Sexually transmitted infection (STI) indicators are typically based upon reported Chlamydia cases, as Chlamydia is the most common bacterial sexually transmitted infection in the United States (1). In 2020, the rate of Chlamydia infection was 326 per 100,000 in Mason County, which was less than the state rate of 410.4 per 100,000 (16). Despite the overall rate being lower than the state's, Chlamydia infection rates are increasing in Mason County. Since 2010, Chlamydia infection rates have increased by 44% (16). Rates of STIs are based on clinically diagnosed STI cases reported to the Washington State Department of Health (WA DOH) through public health surveillance. Therefore, the burden of disease may be greater than these data indicate as not all cases of sexually transmitted infections are diagnosed and not all diagnosed cases are laboratory confirmed (17).



In Mason County, Planned Parenthood was a highly utilized service for young adults between ages 20 and 24, teens, and Mason County's growing Hispanic population. In early 2021, the state closed three Planned Parenthood centers in Washington, including Mason County's location in Shelton (29). In Mason County, Planned Parenthood provided services to 1,200 clients in 2020, a growing number compared to

1,100 clients in 2019. Planned Parenthood provided a safe haven for people to receive STI testing and contraception for family planning. Planned Parenthood also demonstrated an impact on maternal and child health by providing an avenue for young people to receive pregnancy testing and increasing referrals to early prenatal care.



Early initiation of prenatal care can improve maternal and infant health outcomes. Women who receive delayed prenatal care after first 12 weeks of pregnancy or no prenatal care at all are at risk of undetected pregnancy complications (28).

Compared to similar counties and the state, mothers have lower rates of seeking early prenatal care in Mason County (10).

While the closure of Planned Parenthood is too recent to see any immediate outcomes, the anticipated impact is expected to be significant on a community that relied so heavily on the access it provided to sexual and reproductive health services. Similarly, the Shelton WIC clinic also closed its doors in late 2021, creating a new gap in services to over 3,000 families who accessed resources to healthy foods, breastfeeding support, and nutrition education. Evidence suggests teen pregnancy significantly increases the likelihood of future risky sexual behavior, STI, and other adverse health outcomes (1). Pregnant teens are more likely than older women to receive late or no prenatal care and experience increased risk of complications in pregnancy, preterm delivery, low birthweight, and severe neonatal conditions (1). Teen pregnancy is also associated with poor socioeconomic, behavioral, and mental health outcomes (1). The teen birth rate in Mason County has historically been higher than the state's (1). Between 2013 and 2019, there were 30 births per 1,000 female population ages 15-19, compared to 16 births per 1,000 for Washington State (1). The teen birth rate in Mason County varies by demographic. For instance, the teen birth rate among Hispanics is 77 births per 1,000 female population ages 15-19, compared to 22 births per 1,000 among Whites (10).

Clinical Care

Clinical Care factors account for 20% of a community's health status as demonstrated in the Health Rankings Model diagram on page 1 of this report (1). Clinical Care considers both access to care and quality of care issues. Key indicators examined in clinical care include the percentage of uninsured individuals, and the ratios of population to providers for medical, dental, and mental health services. These indicators help to show how readily accessible these crucial services are in the community.

Comparison of Key Indicators (1)		
Clinical Care	Mason	Washington
Uninsured (2018)	10%	7%
Primary Care Physicians (2018)	3,850:1	1,180:1
Dentists (2019)	2,900:1	1,200:1
Mental Health Providers (2020)	490:1	250:1

Health Insurance Status

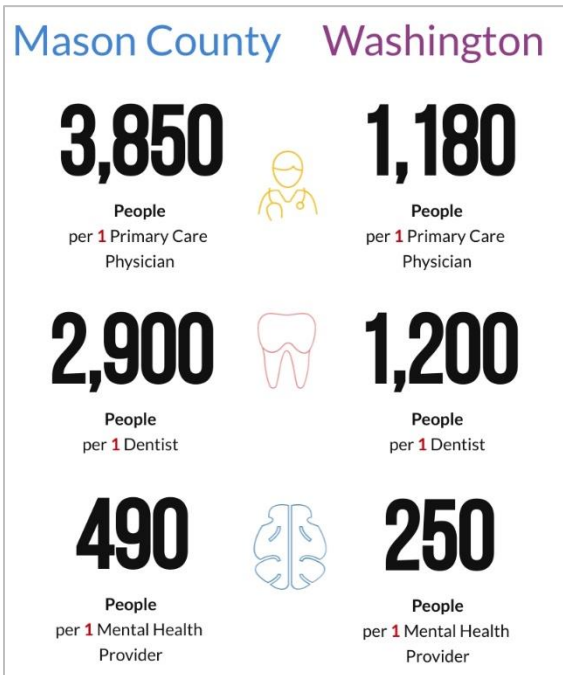
The quality of health care in a community is dependent on an individual’s ability to access both health insurance coverage and health care providers (1). Between 2015 and 2019, the number of Mason County residents who are insured has remained consistent as in previous years, which is also historically lower than the number insured statewide (18). In 2019, 95.4% of children under the age of 19 in Mason County were also insured. That same year, 96.9% of children under the age of 19 were insured in Washington State (18).

Access to Healthcare

Mason County’s shortage in primary care physicians exceeds other counties and the state

Access to health care can be challenging in Mason County due to barriers such as geographical distances and provider shortages. In 2018, the ratio of Mason County’s population to primary care physicians was 3,850:1, meaning there is only one primary care provider per every 3,850 residents in Mason

County (1). In comparison, the ratio for Washington State was 1,180:1 (1). Comparing provider rates per 100,000 population to other counties with similar populations and geographical barriers as Mason County further illustrates our community’s access to healthcare needs. In Mason County, there are approximately 26 primary care physicians per 100,000 people; there are 34 in Grays Harbor County, 43 in Lewis County, and a statewide rate of 84 primary care physicians per 100,000 people (1). As a result, many residents are forced to leave the county to access primary care or utilize urgent cares and emergency departments.



In 2019, the population to dentist ratio was 2,900:1, more than twice the state’s ratio of 1,200:1 (1). Finally, the ratio of residents to mental health care providers – psychiatrists, social workers, counselors, marriage and family

therapists, and those who treat alcohol and other drug abuse – was also nearly twice the state’s ratio. In 2020, Mason County’s ratio was 490:1 compared to the state’s ratio of 250:1 (1).

Social and Economic Factors

The Health Rankings Model estimates that 40% of our health is influenced by the social and economic conditions in which we live (1). Some examples of social and economic factors of interest are education, employment, income, poverty, and crime.

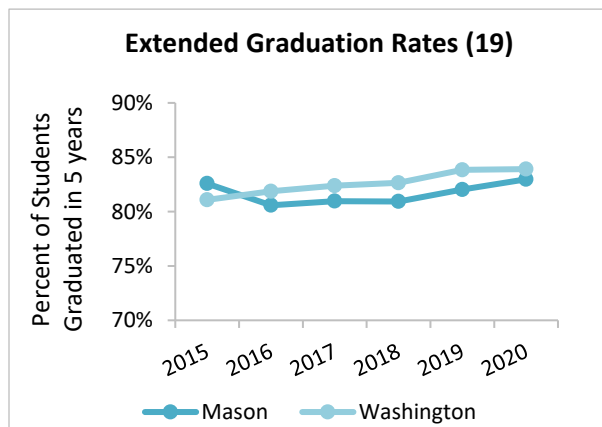
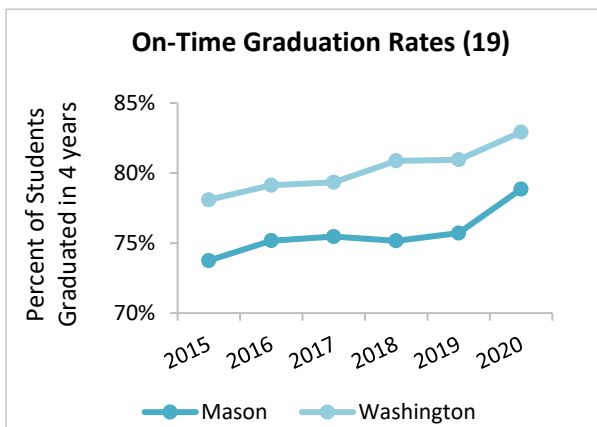
Comparison of Key Indicators (1)		
Social and Economic Factors	Mason	Washington
On-time graduation rates (2015-2020)	76%	81%
Adults w/ some college education (2015-2019)	49%	71%
Unemployment rate (2019)	6.3%	4.3%
Children in poverty (2019)	21%	12%
Income inequality ratio (2015-2019)	4.3	4.4
Children in single-parent households (2015-2019)	23%	20%
Violent crime rate (per 100,000 (2014-2016)	220	294
Injury deaths rate (per 100,000) (2015-2019)	96	67

Graduation Rates

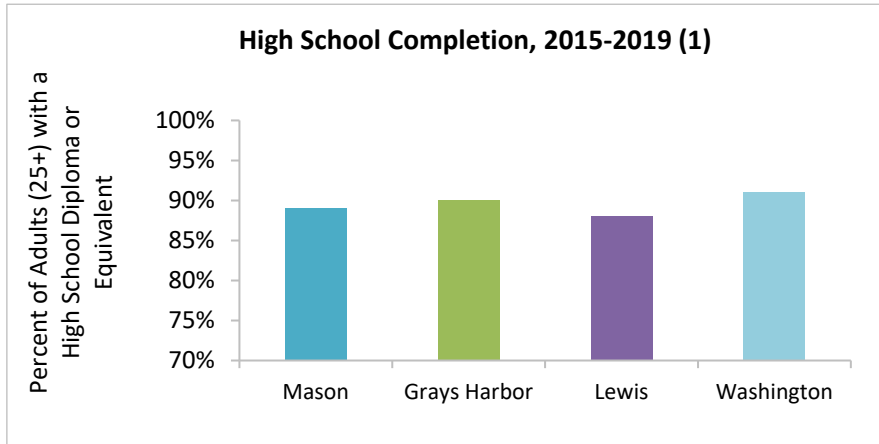
In 2020, Mason County achieved its highest on-time graduation rate in the last decade



A high school degree is correlated with higher life expectancies and improved quality of life (1). Adults with high school diplomas are more likely to be employed and earn more than their less educated counterparts (1). Historically, Mason County’s high school graduation rates have been lower than the state rates for both on-time and extended graduation (19). On-time graduation rates in Mason County have remained consistent over the last five years but have increased steadily over the last decade; our highest rate of on-time graduation was achieved in 2020 (19).



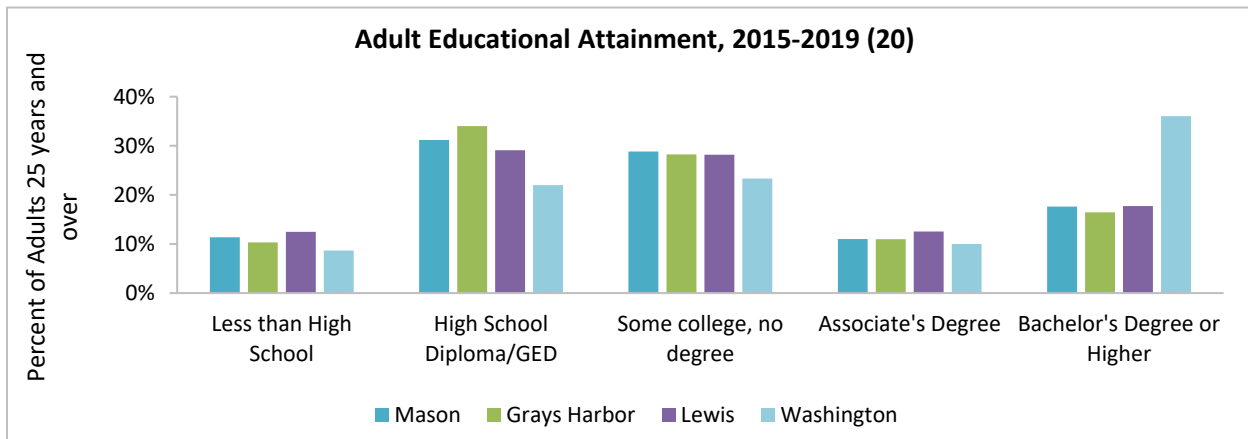
Extended graduation rates include students who completed their high school diploma after their expected year of graduation (19). Rates for students who graduated in 5 years have remained consistent at both the local and state level with improvements seen in the last two years (19).



High school completion rates are similar across Mason, Grays Harbor, and Lewis counties. Although slightly lower than the state, all counties are similar to Washington high school completion rates (1).

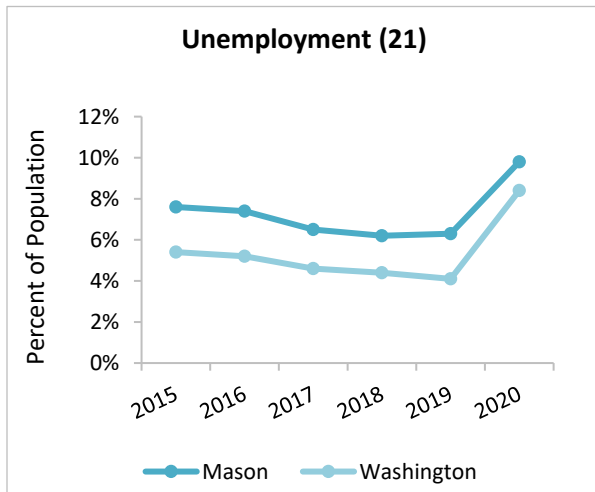
Educational Attainment

Mason County’s adult educational attainment levels have been consistent over the past decade and have historically been lower than the state’s rates (20). Mason County has a higher percent of adults with less than a high school diploma and a lower percent of adults who have completed a college degree. Thirty-six percent of Washington State residents have a Bachelor’s Degree or higher, while only 17% of Mason County residents has attained this same education level (20). Educational attainment levels are comparable to neighboring rural counties.



Unemployment

Historically, Mason County’s unemployment rates have been consistently higher than the state’s rate. Despite a slow recovery after the 2008 economic downturn, unemployment rates in Mason County fell by 3.7 percentage points between 2013 and 2019 (21). In March 2020, the



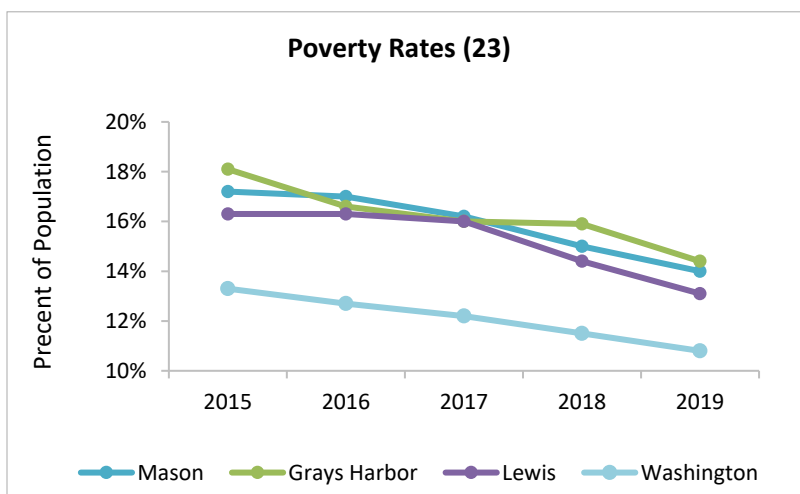
COVID-19 coronavirus pandemic profoundly impacted the Washington labor market. Widespread business closures prompted a wave of mass unemployment that would have been uncharacteristic in a pre-pandemic setting. Washington state’s unemployment rate reached an all-time high of 16.3% in April 2020 and declined to 5.1% by July 2021 (21). Concurrently, the unemployment rate in Mason County reached 17.5% at the start of the pandemic and declined to 5.7% by July 2021 (21). Economic recovery is ongoing as the virus continues to impact communities and the workforce worldwide; however, the outlook

appears promising with the sharp decline in unemployment in the later months of the COVID-19 pandemic.

Poverty and Income Inequality

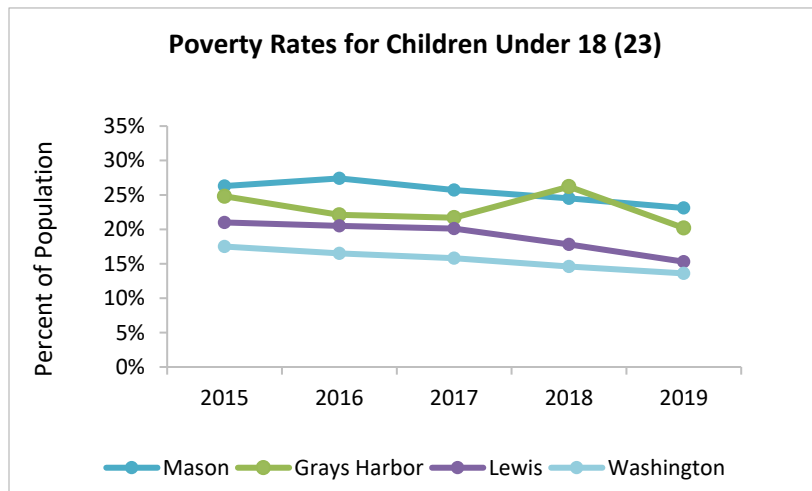
The poverty rate is a ratio of the number of people whose income is at or below the Federal Poverty Guidelines. In 2019, the poverty threshold for a family of four with two children under the age of 18 was any family making at or below \$25,926 a year (22). In Mason County, 12.8% of residents met these criteria and were living below the federal poverty level (23). Nearly a quarter (21%) of Mason County children under the age of 18 lived in poverty (23). Though Mason County’s poverty rates historically exceed the state’s, local rates have decreased slowly over the last half decade.

Mason County’s poverty rates continue to decline from previous years but remain high compared to the state. Poverty rates are similar to neighboring rural counties

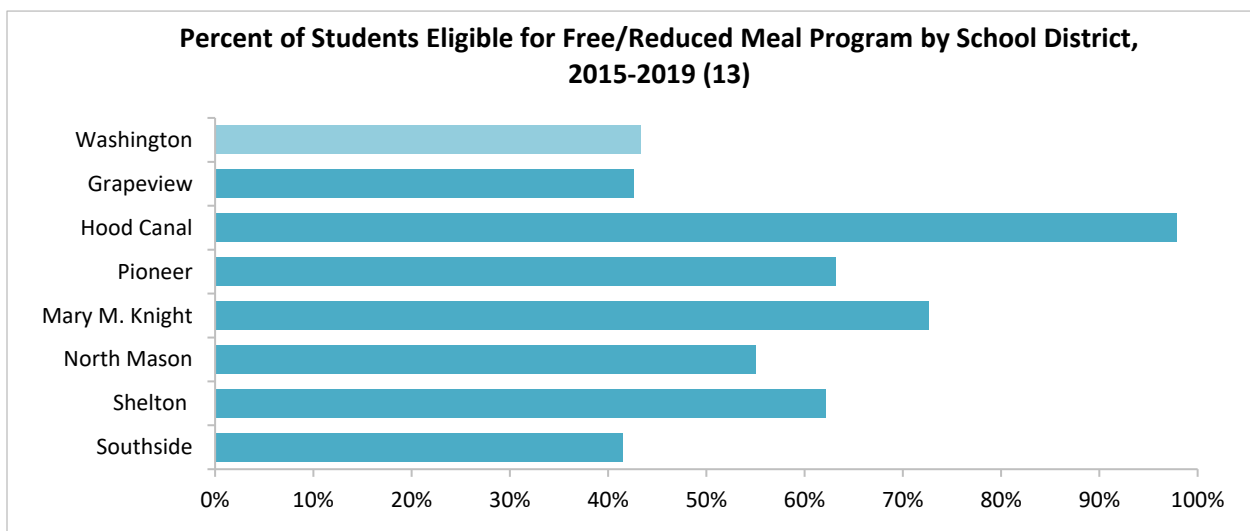


Over the past five years, poverty rates have remained similar across Mason County and neighboring Grays Harbor and Lewis counties. While poverty rates have decreased over time in all three counties, progress has been slower in Grays Harbor, which has had the highest rates of poverty over the last two years. Rates for all counties consistently average 33% higher than the state.

While poverty at any age contributes to increased risk of more frequent and severe chronic health conditions, children in poverty may experience long-term effects on academic achievement, health, and income into adulthood (1). Child poverty rates in Mason County have been consistently higher than in similar counties and compared to the state.



The incidence of children in poverty is not evenly spread across the county, as indicated by Free and Reduced Meal Program data (13). All but one Mason County school district reported higher or equal rates of poverty compared to the state (13).

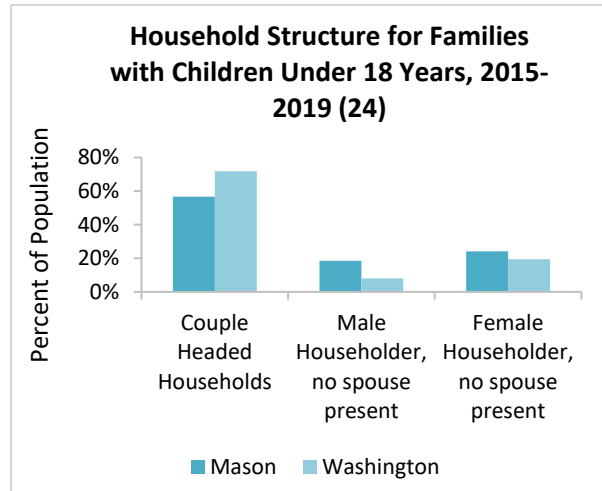


Mason County's income inequality ratio is consistent with the state's rate

Income inequality can also be an indicator of health outcomes, increasing risk for chronic disease and mortality (1). Income inequality is defined as the ratio of household income at the 80th percentile to that at the 20th percentile. A higher inequality ratio indicates greater division between the lowest income and highest income earners in a community (1). Between 2015 and 2019, Mason County's income inequality ratio was 4.3, which is consistent with Washington state's ratio of 4.4 (1).

Household Structure

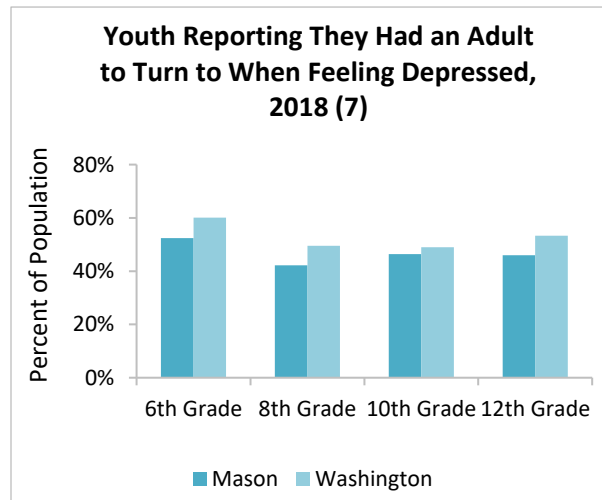
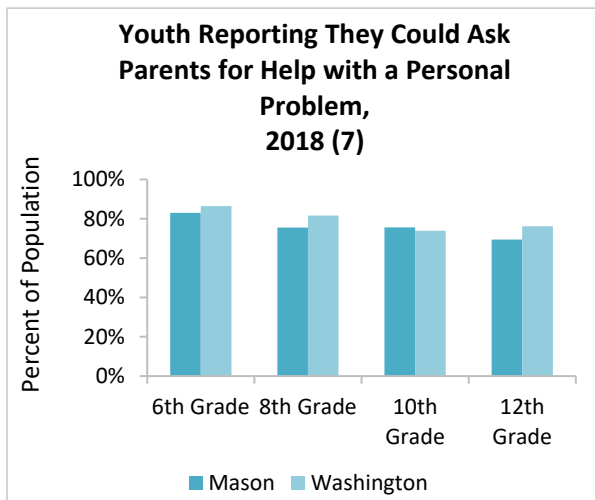
Adults and children in single-parent households are at higher risk for adverse health outcomes (1). In 2019, the divorce rate in Mason County was 3.6 per 1,000 persons, with a recorded 194 divorces (14). Divorce rates in Mason County remained relatively the same prior to 2017 when the trend decreased by 27% from the previous year; rates remain lower than the previous 10 years (14). The majority of families in Mason County with children under the age of 18 are headed by couples (24). However, 42% of families are single parent households (24).



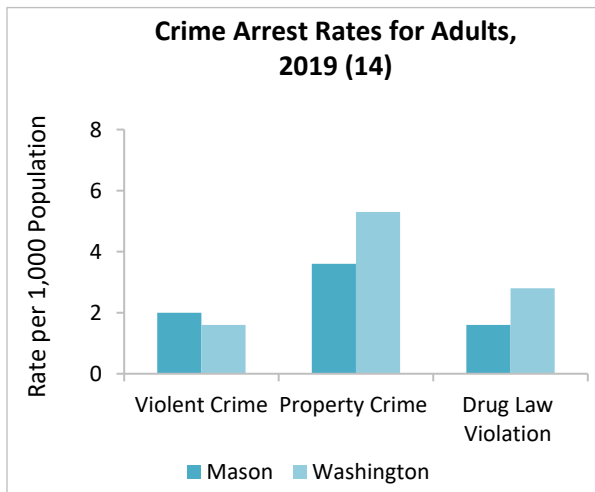
Family & Social Support

Research shows that individuals with limited social and emotional support experience poorer health outcomes (1). Three out of 4 Mason County youth reported that they could ask their parents for help with a personal problem (7). Nearly half also reported having an adult in their lives they could turn to if they felt depressed (7). For 12th grade students in particular, the percent of youth who feel they have an adult they can turn to for help has decreased over time. In 2012, 57% of 12th graders reported having a supportive adult (7). By 2018, less than half (46%) reported feeling they had an adult they could turn to when they felt depressed, 20% less than in 2012 and a 15% decrease over the last decade (7).

The majority of Mason County youth report having consistent social and emotional support; however, rates have decreased for 12th graders over time



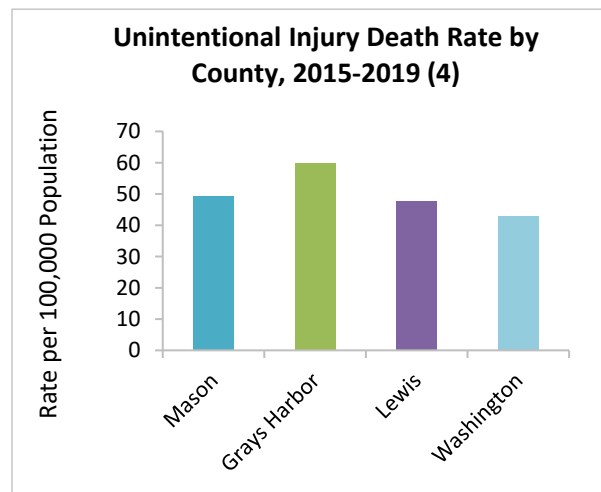
Community Safety



The safety of the communities in which we live and work can also be an indicator of health outcomes (1). In Mason County, the arrest rates for youth ages 10-17 are lower than the state's rates for all types of crime (14). The total arrests for youth in Mason County have decreased significantly over the past decade. In 2005, there were 381 recorded arrests for youth ages 10-17, compared to a mere 32 arrests in 2019 (14). For adults, Mason County arrest rates are lower than the state's rate for property crime and for drug law violations; arrest rates are similar to the state for violent crime (14). Arrest rates for adults have remained relatively the same over time (14).

Unintentional Injury Deaths

The final indicator used to assess social and economic health is injury death rates (1). Between 2015 and 2019, deaths due to unintentional injury or accidents were the third leading cause of death for Mason County residents, occurring at an age-adjusted rate of 49.2 per 100,000 (or 192 deaths) (4). This rate is higher than the state's rate for that same time period of 42.8 per 100,000 (4). The top 3 causes of unintentional injury death in Mason County between 2015 and 2019 were poisoning, motor vehicle-traffic, and falls, in that order (4). Death rates due to unintentional injury have remained consistent over the past two decades (4).



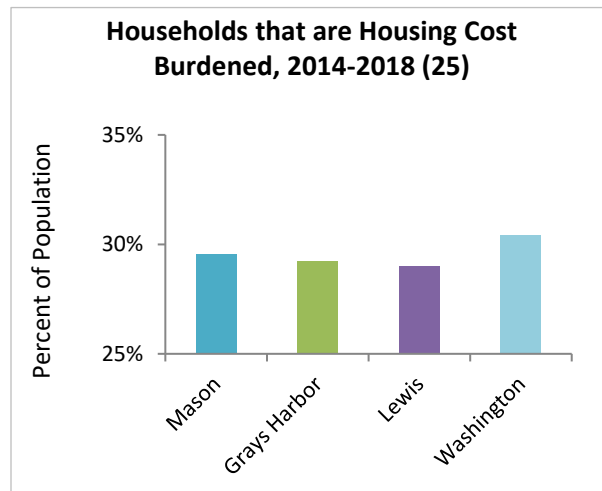
Physical Environment

Physical Environment factors account for 10% of a community's health status as demonstrated in the Health Rankings Model. The physical environment is where individuals live, learn, work, and play (1). The air we breathe, the water we drink, the housing we live in, and the transportation we have access to are examples of the physical environment that can affect our ability to live long and healthy lives (1).

Housing & Homelessness

Stable, affordable housing can provide a safe environment for families to live, learn, and grow. A home that is safe and free from physical hazards reduces the risks for infectious diseases, injuries, and poor childhood development. Conversely, unaffordable housing can create additional stress. Housing is often a family’s largest expense and when the majority of a paycheck goes to the rent or mortgage, this housing cost burden can force people to choose among paying for other essentials such as utilities, food, transportation, or medical care (1). According to the American Community Survey, between 2015 and 2019 there were 33,503 housing units located in Mason County (26). Of that total, 24,278 units are currently occupied with 77% of units being owner-occupied and 23% of units being rentals (26).

A measure used to identify housing problems is housing cost burden (1). The U.S. Department of Housing and Urban Development (HUD) considers households that pay more than 30% of their income on rent or housing costs (including utilities) as housing cost burdened (25). Nearly a third of Mason County residents have a housing cost burden greater than 30% of their income (25). Of those residents that are housing cost burdened, 34% of households are renters and 66% are owner households (25). Mason County has a lower housing cost burden compared to the State of Washington, but a higher housing cost burden compared to neighboring Grays Harbor and Lewis counties (25).



HUD and Washington state require an annual statewide count, known as the Point in Time (PIT) count, of people experiencing homelessness. The PIT count includes both sheltered and unsheltered persons. “Sheltered” refers to all persons living in temporary housing programs, and “unsheltered” refers to those living in places not meant for human habitation (31). Due to the pandemic, Mason County conducted a PIT count of sheltered homeless in 2021, but did not conduct a PIT count of unsheltered homeless.

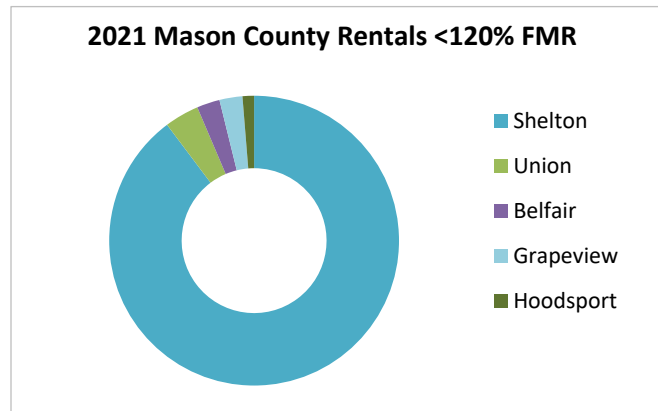
2021 Point in Time Count (30)						
	Households with children & adults		Households without children		Households with only children	
	Households	People	Households	People	Households	People
Emergency Shelter	11	33	37	37	0	0
Transitional Housing	7	24	0	0	0	0

According to the Washington State Department of Commerce, increasing rents have been the main driver of homelessness in Washington over the last decade (31). Fair Market Rent (FMR) is

a statistic calculated by HUD to determine payments for various housing assistance programs (32). Payment standards can be approved up to 120% of FMR.

2021 Fair Market Rent by Unit Bedrooms (32)				
Efficiency	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
\$660	\$825	\$949	\$1,297	\$1,373

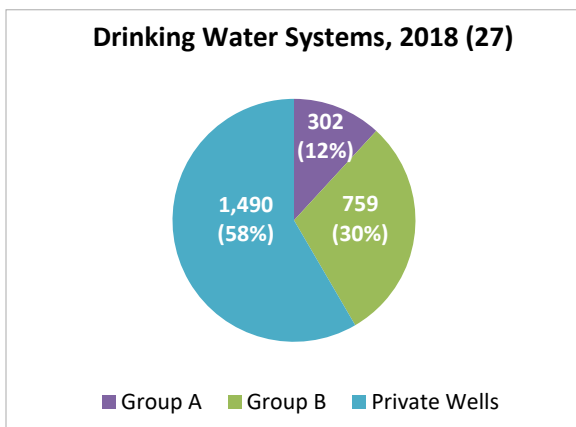
Availability of rental units further impacts housing costs, with low vacancy rates leading to housing price inflation and housing cost burden (31). In 2021, a count of 78 unduplicated rentals at <120% FMR were found in Mason County. Ninety percent (or 70 units) were located in Shelton. Three units were found in Union, 2 in Belfair, 2 in Grapeview, and 1 in Hoodspport.



2021 Mason County Rentals by Unit Bedrooms	
Bedrooms	Count
One-Bedroom	18
Two-Bedroom	34
Three-Bedroom	23
Four-Bedroom	1

Nearly half (40%) of Mason County’s homeless population are in a one-person household, demonstrating the need for efficiency, such as studio apartments, and one-bedroom units, yet less than a quarter (23%) of available rentals were one-bedroom units.

Water Quality



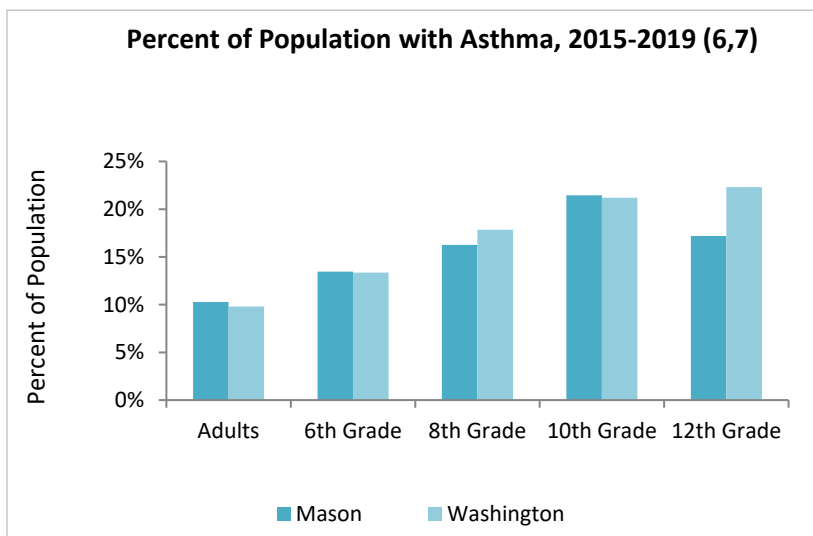
Water contaminated with chemicals, pesticides, or other contaminants can lead to illness, infection, and increased risks of cancer (1). Mason County residents receive drinking water from three different types of public water systems: Group A, Group B, and private wells (27). Group A systems are the largest type of system and are regulated by the State Department of Health Office of Drinking Water (27). Group B systems are smaller systems and are regulated by Mason County Public Health (27). Homeowners with private wells are


responsible for monitoring their own drinking water systems for quality. Between 2015 and 2019, the United States Environmental Protection Agency reported no drinking water violations in Mason County (1).

Open shellfish harvesting areas are an indicator of good water quality (28). Washington State monitors marine water quality to assure safe shellfish for the consumer (28). In addition to shellfish harvesting, stringent water quality requirements exist to ensure the public’s health is protected for other water recreation uses. At the beginning of 2018, 350 acres in Mason County were restored to harvestable shellfish acreage. This increase in harvestable shellfish acres indicates the correction of pollution sources (28).

Air Quality

Poor air quality can be detrimental to a population’s health outcomes such as greater incidence of asthma, chronic bronchitis, decreased lung function, and other adverse pulmonary effects (1). This is especially true for more vulnerable populations such as the elderly, the very young, and those with existing chronic health conditions (1). Particulate matter is a measure of outdoor quality; in Mason County, the main source of particulate matter is wood burning fire emissions. Forest fires are also a source of particulate matter. A key method for evaluating the quality of the air is to measure the average daily density of fine particulate matter in the air that are less than 2.5 micrometers in diameter (PM2.5) (1). Levels of particulate matter may vary geographically; more urban areas may have additional contributing factors such as vehicle or industrial emissions while heavily forested areas may have higher risk of wildfires (28). For most areas in Washington, PM2.5 levels are not considered a contribution to elevated risk of adverse health outcomes (28). The prevalence of asthma in Mason County has fluctuated over the last decade but has ultimately decreased in 2018 compared to the previous year. Rates are similar in Mason County compared to the rest of the state, suggesting that there are no major environmental conditions contributing to adverse health outcomes in the county.





Levels of fine particulate matter have generally declined in Mason County and statewide since 2000

Conclusions

Strengths

Mason County residents are expected to live longer lives, an improvement in life expectancy that can be linked with positive changes in other health factors:

- Life expectancy has improved by over 4 years and premature death has begun to decline in recent years
- Graduation rates have increased steadily over the last decade and reached its highest rate in 2020
- Adult crime rates are lower than the state's rate for property crime and drug law violations
- Arrest rates for youth have decreased significantly over the last decade
- Water and air quality continue to improve and suggest that there are no major physical environment factors that contribute to health outcomes in the county
- Binge drinking rates for both adults and youth have decreased over time

Weaknesses

Ultimately, Mason County is ranked among the least healthy counties in Washington. In addition to demonstrating our strengths, this report has highlighted some areas where Mason County can improve its health factors and health outcomes:

- Access to healthcare continues to be a major barrier in Mason County; local provider to population ratios are very large as many residents seek primary care or utilize urgent cares and emergency departments in larger neighboring counties
- Adult obesity rates in Mason County have exceeded those of neighboring counties and the state over the last four years, increasing the risk of chronic health conditions
- The percent of adults not meeting physical activity recommendations more than doubled between 2018 and 2019, and only a quarter of youth meet physical activity recommendations
- Chlamydia infection rates have nearly doubled over the last decade
- Teen birth rates remain higher than teen births statewide
- The rate of drug overdose and opioid overdose deaths have increased significantly in Mason County, inconsistent with the state; in 2019, Mason County reached its highest rate of opioid overdose deaths in the last ten years
- While poverty rates are declining compared to previous years, they remain much higher than the state's
- Cigarette smoking rates remain higher than the state for both adults and youth
- Electronic cigarette use or "vaping" in youth has increased by 22% across all grade levels
- Mason County adults have higher marijuana usage rates compared to the state
- Nearly a third of Mason County residents are housing cost burdened

References

- (1) County Health Rankings & Roadmaps. University of Wisconsin Population Health Institute. www.countyhealthrankings.org
- (2) Office of Financial Management. (30 November 2021). *April 1 official population estimates*. <https://ofm.wa.gov/washington-data-research/population-demographics/population-estimates/april-1-official-population-estimates>
- (3) Office of Financial Management. (11 January 2022). *Estimates of April 1 population by age, sex, race and Hispanic origin*. <https://ofm.wa.gov/washington-data-research/population-demographics/population-estimates/estimates-april-1-population-age-sex-race-and-hispanic-origin>
- (4) Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990-2019, Community Health Assessment Tool (CHAT), January 2021.
- (5) WA Hospital Discharge Data, Comprehensive Hospitalization Abstract Reporting System (CHARS) 1987-2019. Washington State Department of Health, Center for Health Statistics, Community Health Assessment Tool (CHAT), Aug 2021.
- (6) Behavioral Risk Factor Surveillance System (BRFSS) 2012-2019. Washington State Department of Health, Center for Health Statistics, Community Health Assessment Tool (CHAT), December 2020.
- (7) Washington State Department of Health. (2019). *Healthy Youth Survey*. <https://www.askhys.net/>
- (8) Stein, R. (2018, December 18). Surgeon General Warns Youth Vaping is Now an Epidemic. *NPR*. <https://www.npr.org/sections/health-shots/2018/12/18/677755266/surgeon-general-warns-youth-vaping-is-now-an-epidemic>
- (9) Vinturache, A., Moledina, N., McDonald, S., Slater, D., & Tough, S. (2014). Pre-pregnancy Body Mass Index (BMI) and delivery outcomes in a Canadian population. *BMC Pregnancy and Childbirth*, 14, 422. <http://doi.org/10.1186/s12884-014-0422-y>
- (10) Washington State Department of Health, Center for Health Statistics (CHS), Birth Certificate Data, 1990-2019, Community Health Assessment Tool (CHAT), October 2020.
- (11) Feeding America. (2021). Food Insecurity in Mason County Before COVID-19. <https://feedingamericaaction.org/resources/state-by-state-resource-the-impact-of-coronavirus-on-food-insecurity/>

- (12) Client Count and Direct Services Expenditures: Washington State Department of Social and Health Services, Research and Data Analysis, Client Services Database.
<http://clientdata.rda.dshs.wa.gov/Home/ShowReport?reportMode=2>
- (13) Washington Office of Superintendent of Public Instruction Data Portal. (2015-2019). *School Meals Participation Report*. <https://www.k12.wa.us/policy-funding/child-nutrition/child-nutrition-program-reports>
- (14) Washington State Department of Social & Health Services, Research and Data Analysis Division. (2021). *Risk and Protection Profile for Substance Abuse Prevention in Mason County*. <https://www.dshs.wa.gov/data/research/research-4.47-mason.pdf>
- (15) Substance Use and Mental Health Services Administration. (26 October 2021). *SAMHSA releases 2020 National Survey on Drug Use and Health*.
https://www.samhsa.gov/newsroom/press-announcements/202110260320?utm_campaign=386b60df3a-SAMHSA+Announcement+2021+10+26+1600418&utm_medium=email&utm_source=SAMHSA&utm_term=0_ee1c4b138c-386b60df3a-168173297
- (16) Washington State Department of Health. (1 June 2021). *Sexually Transmitted Infection Cases and Rates by County*.
<https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease>
- (17) Washington State Department of Health, Infectious Disease, STD Services Section, PHIMS-STD, 1992-2019, Community Health Assessment Tool (CHAT), Oct 2021.
- (18) U.S. Census Bureau. (2019). *2008-2019 Small Area Health Insurance Estimates (SAHIE) using the American Community Survey (ACS)*.
<https://www.census.gov/data/datasets/time-series/demo/sahie/estimates-acs.html>
- (19) Washington Office of Superintendent of Public Instruction Data Portal. (2020). *Report Card Graduation 2014-15 to Most Recent Year*. <https://www.k12.wa.us/data-reporting/data-portal>
- (20) U.S. Census Bureau. (2019). *Educational Attainment for the Population 25 Years and Over, 2015-2019 American Community Survey 5-Year Estimates*.
<https://data.census.gov/cedsci/>
- (21) U.S. Bureau of Labor Statistics, U.S. Department of Labor (2021). *Local Area Unemployment Statistics Map*. <https://data.bls.gov/map/MapToolServlet?survey=la>
- (22) U.S. Census Bureau (2021). *Poverty Thresholds by Size of Family and Number of Children*. <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>

- (23) U.S. Census Bureau. (2019). *Poverty Status in the Past 12 Months, 2015-2019 American Community Survey 5-Year Estimates*. <https://data.census.gov/cedsci/>
- (24) U.S. Census Bureau. (2019). *Children Characteristics, 2015-2019 American Community Survey 5-Year Estimates*. <https://data.census.gov/cedsci/>
- (25) U.S. Department of Housing and Urban Development. (2020). *Comprehensive Housing Affordability Strategy (CHAS) 2014-2018*.
<https://www.huduser.gov/portal/datasets/cp.html>
- (26) U.S. Census Bureau. (2019). *Selected Housing Characteristics, 2015-2019 American Community Survey 5-Year Estimates*. <https://data.census.gov/cedsci/>
- (27) Washington State Department of Health. (2018 December). *Water System Data*.
<https://www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/DrinkingWaterSystemData/DataDownload>
- (28) Washington State Department of Health. (2018 March). *2018 Washington State Health Assessment*.
https://www.doh.wa.gov/Portals/1/Documents/1000/2018SHA_FullReport.pdf
- (29) Santos, Melissa. (2021, March 15). Planned Parenthood shuts 3 clinics, including the only one in Mason County. *Kitsap Sun*.
<https://www.kitsapsun.com/story/news/2021/03/15/planned-parenthood-shutters-3-clinics-including-only-one-mason-county/4707972001/>
- (30) Washington State Department of Commerce. (2017-2021). *Annual Point in Time Count*.
<https://www.commerce.wa.gov/serving-communities/homelessness/annual-point-time-count/>
- (31) Washington State Department of Commerce. (2017 January). *Why is homelessness increasing?* <http://www.commerce.wa.gov/wp-content/uploads/2017/01/hau-why-homelessness-increase-2017.pdf>
- (32) U.S. Department of Housing and Urban Development. (2017-2021). *Fair Market Rents*.
<https://www.huduser.gov/portal/datasets/fmr.html>

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