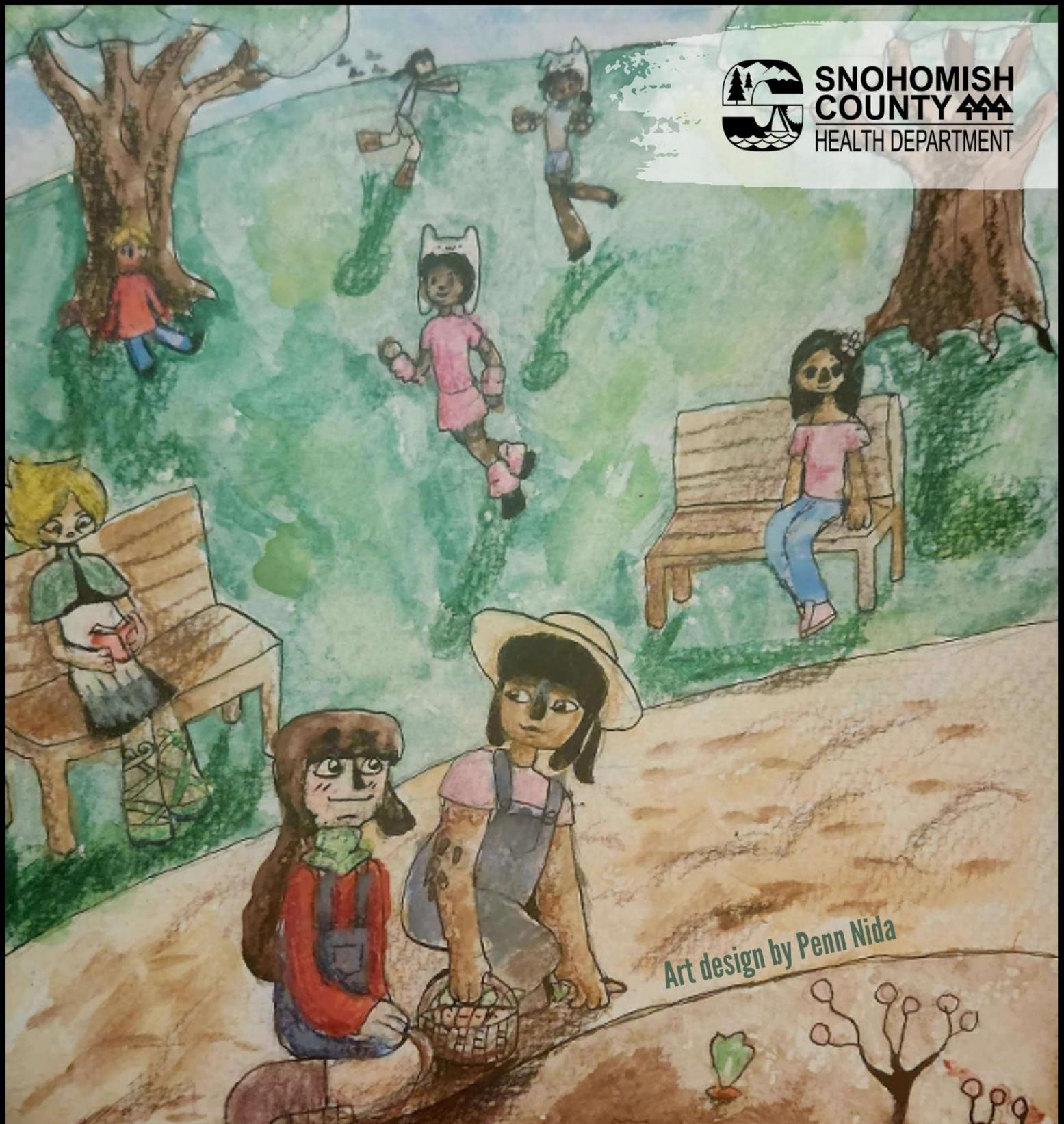




**SNOHOMISH  
COUNTY**   
HEALTH DEPARTMENT



*Art design by Penn Nida*

Snohomish County, WA

**COMMUNITY HEALTH  
ASSESSMENT**

**2022**

Published June 2023

## About the Artist: Penn Nida

Penn Nida is a student at AIM High School in Snohomish and submitted the winning art piece for the Community Health Assessment cover in November 2022. The piece focuses on a day at the park.

“I have been drawing since I was able to hold a pencil and have always wanted to make a comic,” Penn said. “I decided to use potential character designs from this comic to show a lovely day at the park.”

Penn was offered a \$200 stipend for their winning art piece.

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# Acknowledgements

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- Kaiser Permanente
- Index School District
- Latino Educational Training Institute (LETI)
- Mukilteo School District
- North Sound Emergency Medicine
- Pacific Islander Health Board of Washington
- Providence Regional Medical Center
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## Land acknowledgement

*Snohomish County Health Department acknowledges that we occupy the ancestral lands of the Coast Salish Peoples, in particular the Tulalip, Snohomish, Stillaguamish, and Sauk-Suiattle Tribes. Since time immemorial, they have hunted, fished, gathered, and taken care of these lands. We respect their sovereignty, their right to self-determination, and honor their sacred spiritual connection with the land and water. We will strive to be honest about our past mistakes and bring about a future that includes their people, stories, and voices to form a more just and equitable society.*

# Executive Summary

The Snohomish County Health Department is pleased to share the 2022 Community Health Assessment for Snohomish County. Health Department staff and a Data Committee comprised of 15 community partners and members reviewed data for nearly 200 health-related indicators. Data was reviewed in an effort to assess the health of the community and to identify top health priorities as areas of significant community need. These top health priorities were selected by Data Committee members through a voting process. They are intended to inform the development of a Community Health Improvement Plan.

Supplementally, community focus groups and key informant interviews provided qualitative data on top health issues and barriers to good health among Snohomish County residents. The voices of these community members are highlighted throughout this report.

A Community Health Assessment (CHA) is conducted every 3 to 5 years. The CHA is a key document leading to a more in-depth analysis of the identified top health priorities. The work culminates in a Community Health Improvement Plan (CHIP) that will aim to address the county's prioritized health concerns. This assessment aims to share the results and highlights of the CHA data analysis, and to assist local government organizations, community members, healthcare organizations and non-profit organizations in their health improvement planning.

## Significant community needs

The 2022 CHA Data Committee selected the following as top health priorities for Snohomish County:

<a href="#">Persons experiencing homeless</a>	<a href="#">Mental health access and provider ratios</a>
<a href="#">Opioid overdoses</a>	<a href="#">Adverse Childhood Experiences (ACEs)</a>
<a href="#">Inadequate prenatal care</a>	<a href="#">Food security</a>

The following were mentioned in over half of the focus group and key informant interviews as top health issues and barriers to good health in their communities, mirroring significant community needs selected by the Data Committee:

Health care (access including dental, affordability, competent care)
Mental health (access, affordability, and competent care), especially among youth
Basic needs (food, shelter, hygiene, etc.)

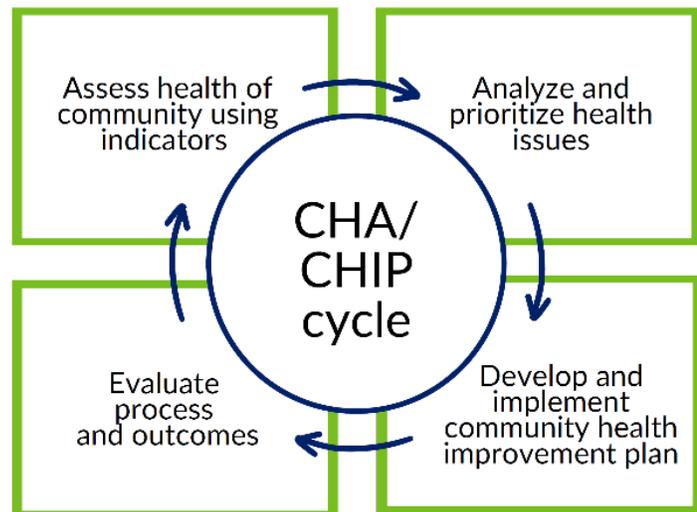
# Executive Summary (cont.)

## About the CHA process

This report is the result of a process for identifying Snohomish County's greatest health needs through a review of a wide range of indicators. Those indicators include rates of illness and disease, causes of death, health-related behaviors, and social and environmental determinants of health.

The 2022 Snohomish County Health Assessment is part of a four-step CHA/CHIP process. This process was developed by adapting frameworks used from the Missouri Community Health Assessment Resource Team and Island County Public Health.<sup>1</sup> The process entails:

1. Assessing the health of the community using indicators,
2. Analyzing and prioritizing health issues,
3. Developing and implementing a Community Health Improvement Plan (CHIP), and
4. Evaluating the process and outcomes.



The cycle repeats every 3-5 years. The first two steps are accomplished in the CHA. Further details on the 2022 CHA process and community recruitment can be found in [Appendix C](#).

## About the data

Health Department epidemiologists collected data on community health indicators through quantitative and qualitative means. Quantitative data is information that is countable or measurable (numbers-based), while qualitative data is information that describes and characterizes something (words-based). Abbreviations used throughout this report can be found in [Appendix A](#). A snapshot of community health indicators included throughout this report can be found in [Appendix B](#). Information about the CHA data and limitations can be found in [Appendix D](#).

### Data sources

Population-based health data is the most appropriate data to use in a CHA. This data is accessible at the county, state, and sometimes national level. Data sources used are considered standard and are assumed to be methodologically reliable and valid. Data sources can be found as in-text citations and as footnotes under each data figure. A description of the main quantitative data sources used throughout this report can be found in [Appendix E](#).

### Considerations, limitations, and data gaps

Data for this report was collected during a set timeframe in 2022 and may have since been updated or refreshed by their respective publishers. In the event of new data in the months and years to come, the report will remain unchanged, but readers may refer to the data sources directly to collect more recent data.

## Executive Summary (cont.)

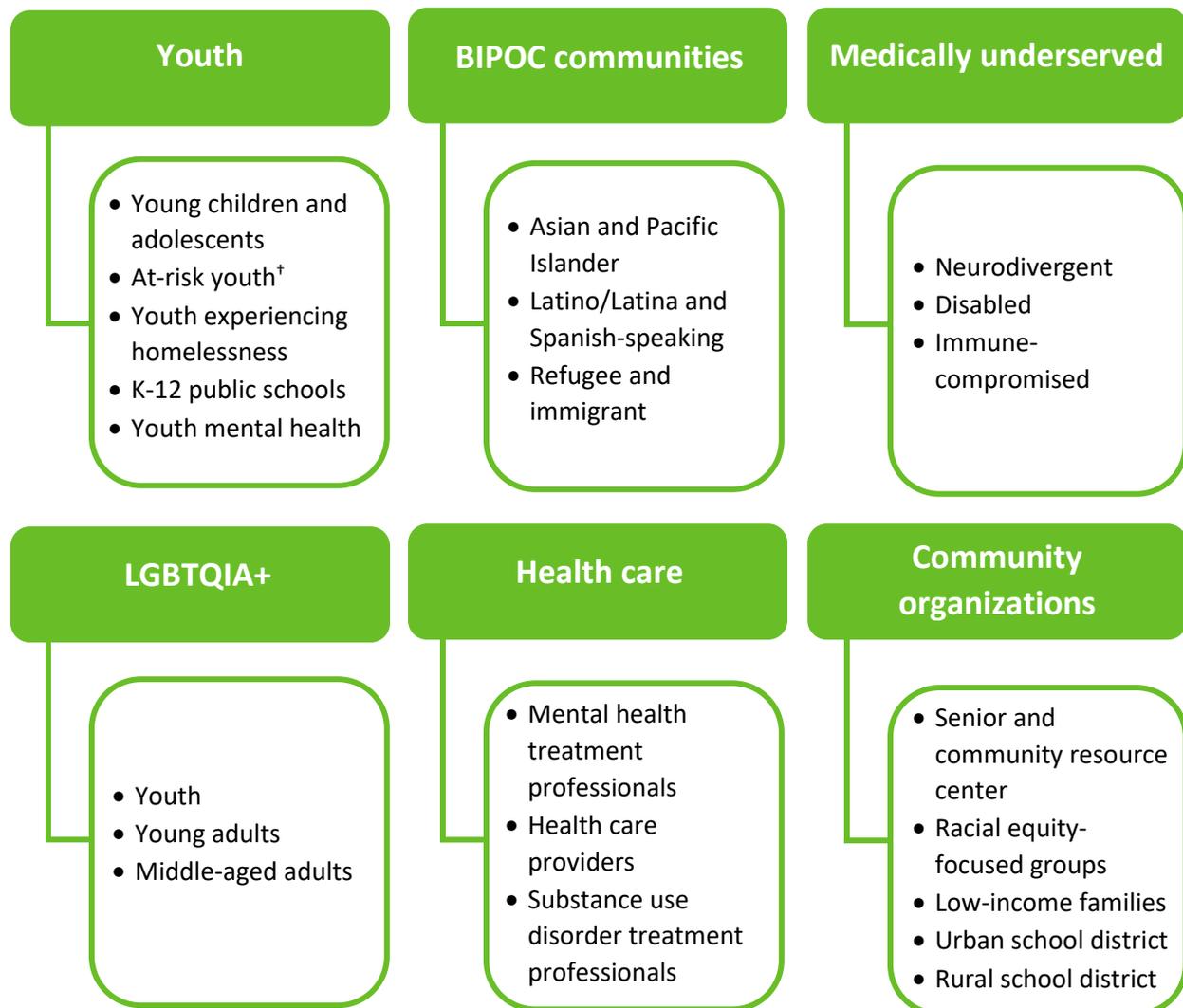
While this assessment covers a wide scope of health-related topics, it does not capture every unique perspective or population in Snohomish County. To prioritize equity, data was disaggregated by race and ethnicity when available and appropriate. When sample sizes were insufficient, the racial/ethnic categories were disaggregated into non-Hispanic White and BIPOC (Black, Indigenous, and people of color). Moving forward, efforts will be made to identify data sources that allow for a more comprehensive examination of health disparities.

The COVID-19 pandemic led to several interruptions in regular data collection processes and structures that may have had an impact on results seen through this assessment. A more in-depth description of data considerations, limitations, and data gaps can be found in [Appendix D](#).

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# Key Informant Interview and Focus Group Themes

A total of 4 focus groups and 11 key informant interviews were conducted, involving a total of 46 community participants. These focus groups and interviews aimed to capture the experiences, voices, and opinions of people living in Snohomish County. Many of the participants were members of communities that have been historically and systemically excluded. These groups are not always well-represented in locally available quantitative data. Community representation in these focus groups and interviews included people who identify with or work in service of the following areas and communities within Snohomish County:



The 2022 CHA project team would like to acknowledge and thank an unnamed member of the Snohomish County hearing impaired and deaf community who was not interviewed. This person gave their time and showed an immense amount of patience while the project team tried and failed to secure an American Sign Language (ASL) interpreter for their key informant interview. The project team hopes that this shortcoming will contribute meaningfully toward equity-based initiatives and improvements in local public health practice. Further limitations regarding community participation can be found in [Appendix D](#).

<sup>†</sup> “At-risk youth” is specifically defined by [RCW 13.32A030](#).

# Key Informant Interview and Focus Group Themes (cont.)

## Community strengths

In the focus groups and key informant interviews, most people spoke to the supportive nature of their communities when asked about their community's strengths. Communities were defined in many ways by interviewees, including by physical location and by shared backgrounds and experiences. Snohomish County communities were described as hard working, passionate, dedicated, and strong in their interpersonal connections.

“ We know how to come together when somebody needs help. We are very quick to help each other out ”

“ There's a lot of folks looking out for each other...there's a level of understanding each other that I haven't seen...People recognizing how we struggle in different ways and how we can support each other. ”

## Themes identified

The input from the community interviews and focus groups was rich with detail and nuance than cannot be fully captured in this report. The themes extracted from these interviews and focus groups intentionally overrepresent the viewpoints of systemically excluded communities. In addition to the top health issues and barriers to good health mentioned in the [Executive Summary](#), the following overarching themes were brought to light in the interviews and focus groups:

### Social connectedness

- Social connectedness and engagement with the community are large components of overall health, personal growth, and community growth.
- Social connectedness and compassion for fellow community members are key components to incorporate when addressing health barriers.

### Community service organizations

- There is a need for more interorganizational partnership and communication among local public service agencies (e.g., local government, community-based, non-profit, etc.) about resources and services they provide. Many service providers did not feel well-equipped or -informed on what services and resources were available in Snohomish County.

# Key Informant Interview and Focus Group Themes (cont.)

## Community engagement and equity

- Diversity should be honored.
- There is a desire for increased visibility and representation among systemically excluded communities.
- Communities are motivated to improve the health and situation of their people and families.
- Leaders and people in decision- and policy-making positions should be flexible, keep an open mind, and meaningfully seek input and participation from systemically excluded and underrepresented communities when making decisions that impact them.
- There is a need to further address language barriers and to help non-English speaking communities equitably access services and care.

## Access to health and services

- There is a need for increased care and treatment capacity for mental health and substance use.
- There is a need for increased capacity among local health care providers and mental health care providers in providing language-appropriate, culturally competent, and gender-affirming care.
- Lack of access to reliable and adequate transportation impacts both social connectedness and health access.
- Housing affordability, homelessness, substance use, and poor mental health are intertwined.

## Community outreach and education

There is a desire for community outreach and education that addresses:

- Cultural education and competency
- Preventive health care in BIPOC communities
- How to access health care resources and social services
- How to navigate the health care and social services systems (e.g., housing resources)
- Adverse Childhood Experiences (ACEs) education for families and the community
- Experiences of people living with disabilities
- Experiences and increased representation and visibility of the LGBTQIA+ community
- Stigmas about people who are experiencing homelessness, who use substances, or who are struggling with addiction
- Health literacy
- Teen sexual and reproductive health education
- Vaccine hesitancy

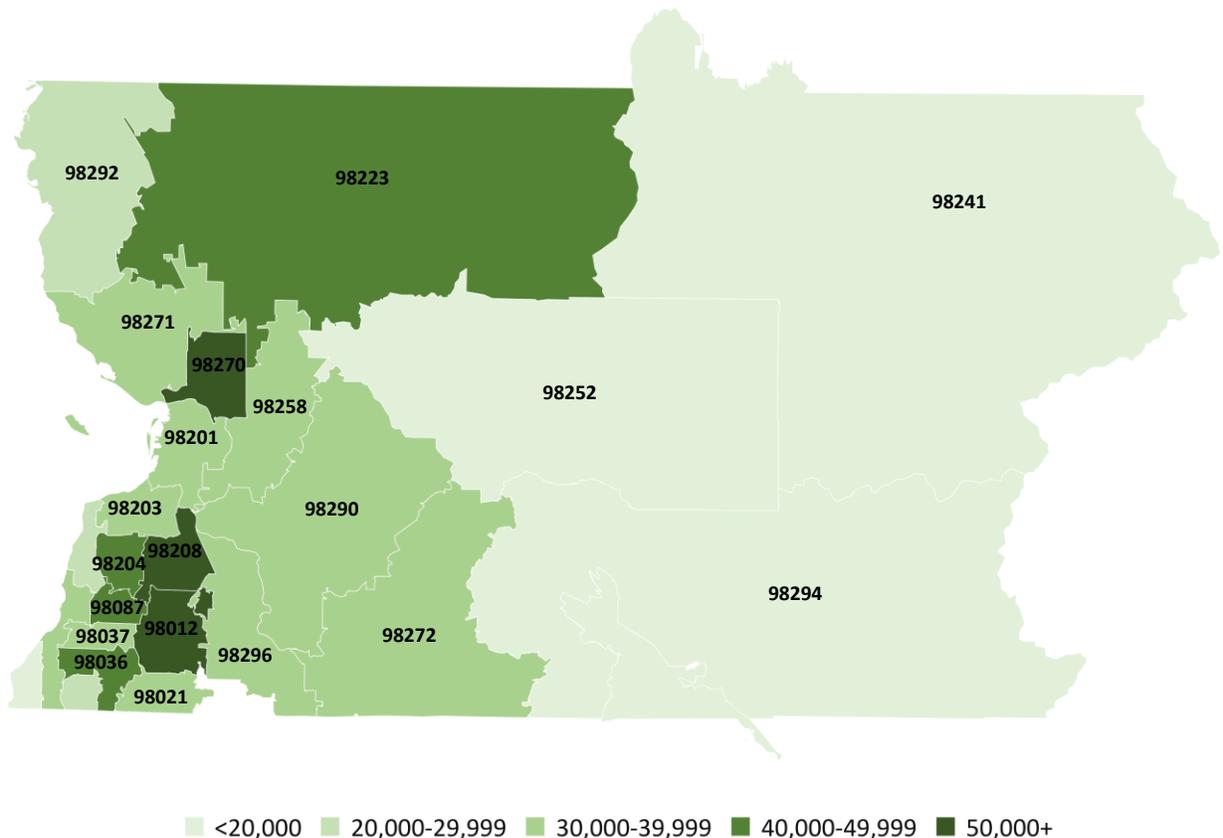
## About Snohomish County

Snohomish County is located in the northwestern corner of Washington State on Puget Sound and is the third most populous county in Washington State. It covers 2,090 square miles and is the 13<sup>th</sup> largest county by land mass in Washington State. Snohomish County was established in 1861 and is named after the Snohomish Tribe.

## Population

Snohomish County was estimated to have a population of 847,300 in 2022.<sup>1</sup> The majority of Snohomish County's population is clustered in six ZIP Codes (Figure 2.1). These areas include the cities of Lynnwood, Bothell, Everett, and Mill Creek. The ZIP Codes of 98012 and 98087 had the largest overall population growth since 2010. In this timeframe, 98012 grew by 35.1% and 98087 grew by 33.4%.<sup>2</sup> The Office of Financial Management (OFM) generates population projections for all counties in the state of Washington. By 2030, Snohomish County is projected to have a population of 955,910.<sup>3</sup>

Figure 2.1: Population in Snohomish County by ZIP Code, 2020



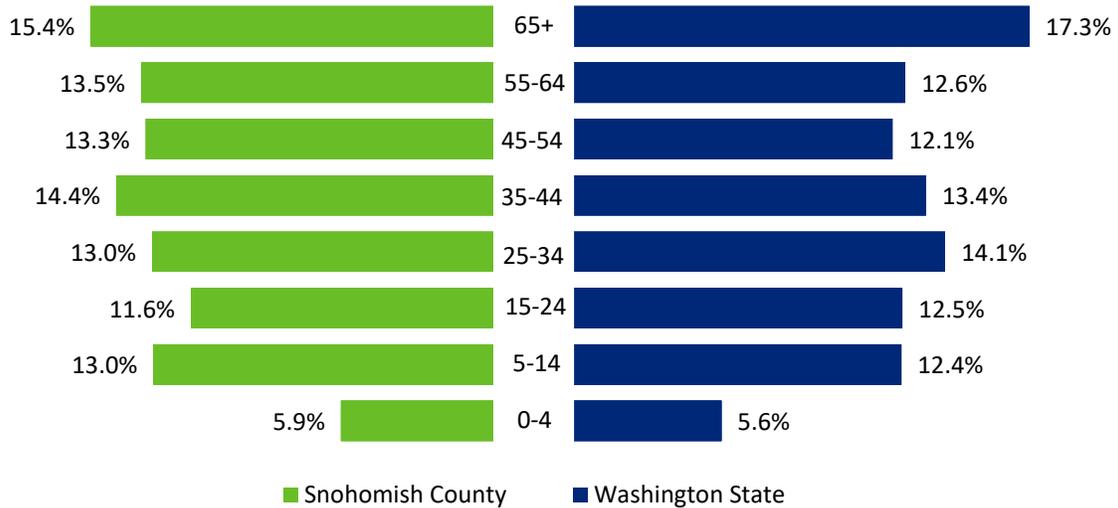
Source: WA OFM, 2020

# Demographics (cont.)

## Age

Snohomish County has a higher proportion of middle-aged residents than the state and a lower proportion of older adults aged 65 years and older (Figure 2.2).<sup>4</sup>

Figure 2.2: Percent of total population in Snohomish County and Washington State by age group (years), 2020

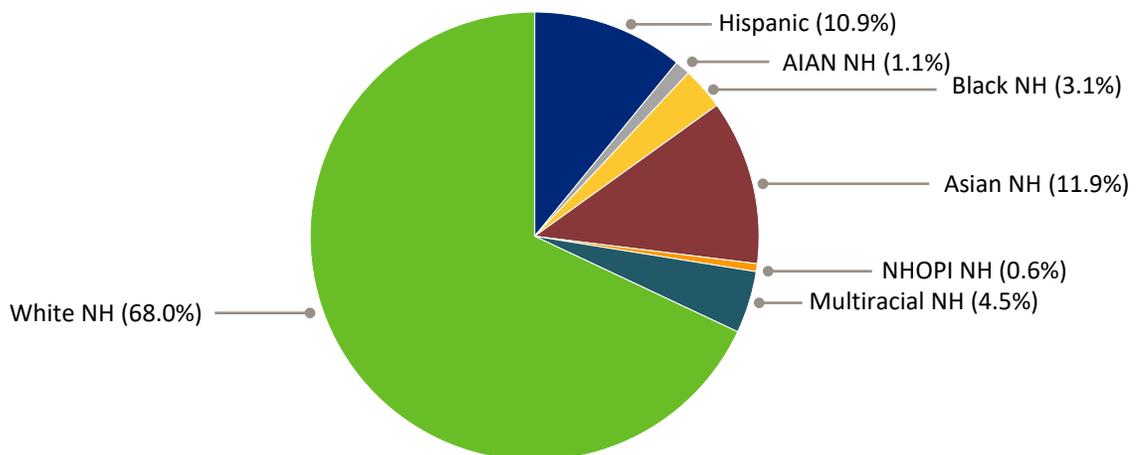


Source: WA OFM, 2020

## Race and ethnicity

Though Snohomish County is becoming more diverse, most people in Snohomish County are non-Hispanic White (Figure 2.3).<sup>5</sup> The share of the population who identify as non-Hispanic White has decreased from 74.5% in 2010 to 68.0% in 2020. Nearly all other racial/ethnic groups grew in number and percent in this 10-year span.<sup>5</sup>

Figure 2.3: Percent of total population in Snohomish County by race/ethnicity, 2020



Source: WA OFM, 2020

# Demographics (cont.)

## Language

Language barriers can have an impact on how an individual navigates all aspects of life including their health. One in every five people aged 5 years and older in Snohomish County speaks a language other than English in their home (22.1%). Spanish is the second most commonly spoken language in Snohomish County, with 6.7% of people aged 5 years and older speaking it in their home. Among those who speak the 10 most common non-English languages in Snohomish County (Figure 2.4), 44.1% speak English less than “very well.”<sup>6</sup> Another 6.7% of the county population speak other non-English languages in their home that are not listed in the top 10 in figure 2.4.<sup>6</sup> This highlights the growing diversity in our county and the importance of providing access to information and services in multiple languages.

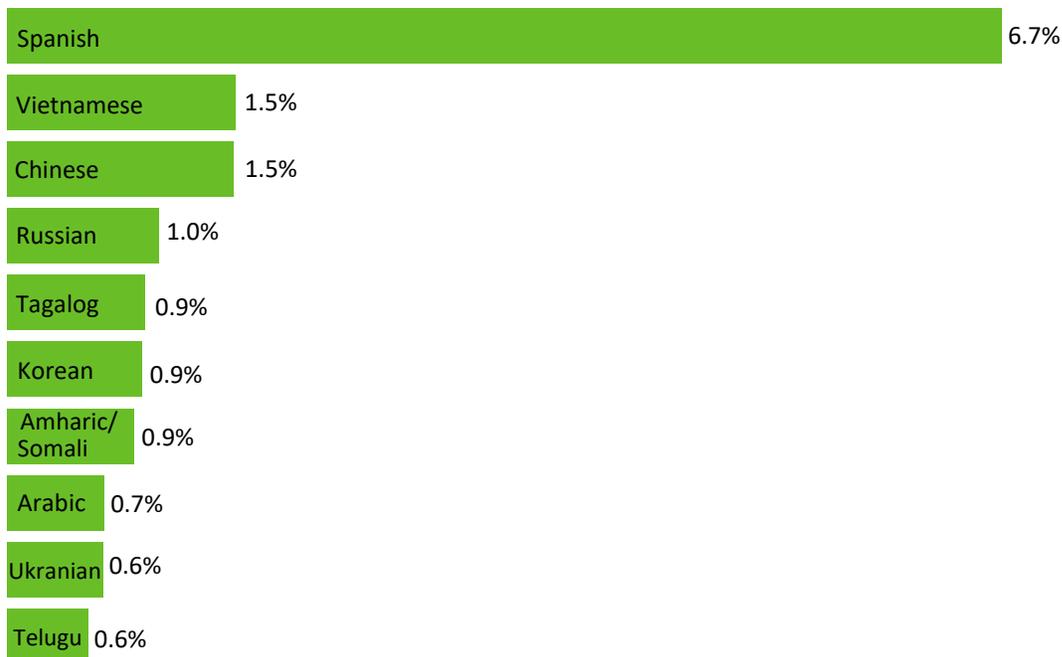
“

They have language barriers, especially for the medical [system]. When they go to the doctor, they have a really hard time to find translators.

- Asian and Pacific Islander  
Community member

”

Figure 2.4: Percent of population 5 years and older in Snohomish County by 10 most commonly spoken non-English languages in the home, 2021<sup>†</sup>



<sup>†</sup> Chinese (including Mandarin and Cantonese); Tagalog (including Filipino); Amharic, Somali, or other Afro-Asiatic languages; Ukrainian or other Slavic languages

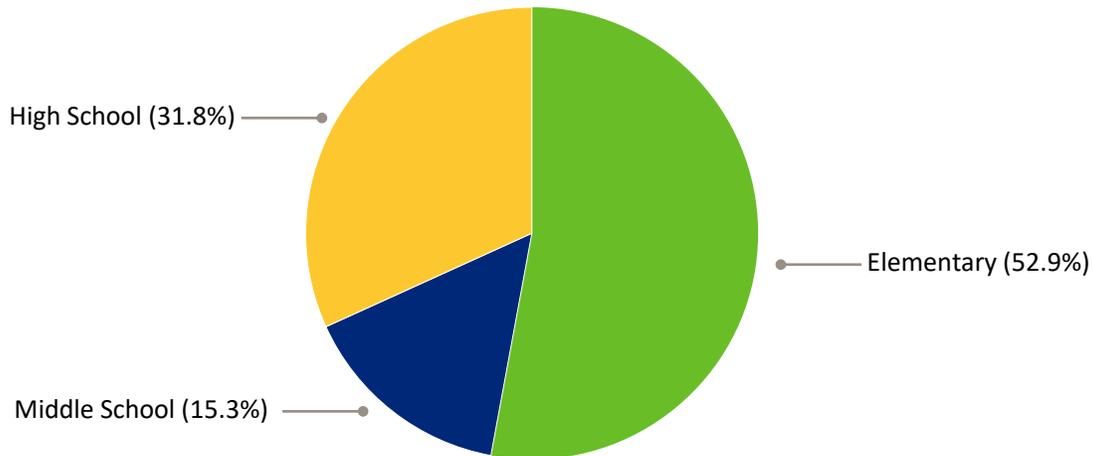
Source: U.S. Census Bureau, ACS table B16001 1-year estimate, 2021

# Demographics (cont.)

## School-aged children

There are 217,426 students enrolled in kindergarten through 12<sup>th</sup> grade (K-12) in Snohomish County. Most are in elementary school, which makes up 52.9% of all K-12 students locally (Figure 2.5).<sup>2</sup>

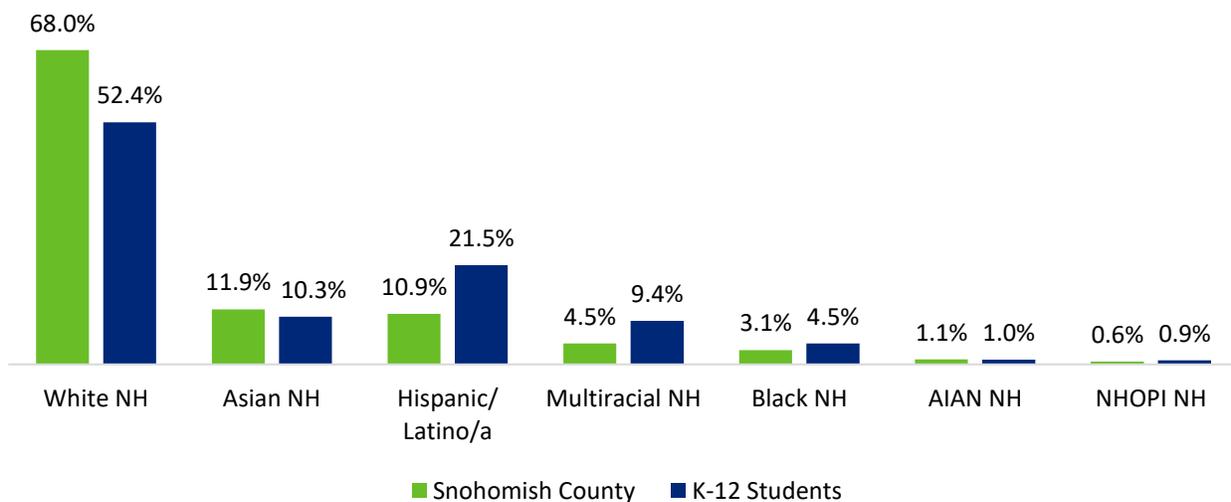
Figure 2.5: Percent of K-12 student population in Snohomish County by grade level, 2021-2022 school year



Source: OSPI, Student Enrollment Report Card, 2021-2022

The racial/ethnic makeup of these students differs compared to the general population. Twice as many students identify as Hispanic/Latino/Latina, fewer students identify as non-Hispanic White, and twice as many students identify as multiracial compared to the general population (Figure 2.6).<sup>5,7</sup>

Figure 2.6: Percent of K-12 student population and total population in Snohomish County by race/ethnicity, 2021-2022 school year<sup>†</sup>



<sup>†</sup> OFM, 2020 (Snohomish County population)

Source: OSPI, Student Enrollment Report Card, 2021-2022

# Demographics (cont.)

## Children in out-of-home care

When children cannot remain safely in their home, they are placed in out-of-home care by the child welfare system. The welfare system then works to find a safe and permanent home where the child can thrive. In many instances, children are ultimately reunited with their parents once all safety concerns have been addressed. In Snohomish County, nearly half of children are reunified with their parents or guardians, and a quarter are adopted within three years of being placed in care.<sup>8</sup> In 2019, a total of 490 children under the age of 18 years (or 2.7 per 1,000 children) were removed from their home in Snohomish County and placed into out-of-home care. The rate of removal has decreased over time from 3.5 per 1,000 children in 2015.<sup>9-11</sup>

## LGBTQIA+

There is limited data available for LGBTQIA+ populations. In the 2021 Behavioral Risk Factor Surveillance System (BRFSS) survey, 2.3% of Snohomish County respondents self-reported that they identified as gay or lesbian and 3.4% identified as bisexual. Females were more likely than males to identify with non-heterosexuality. Data was not sufficiently available for other sub-groups of the LGBTQIA+ community.<sup>12</sup>

“ We’re in a very strange time right now...I feel like we’ve been insulated in Washington State and [we’re] no longer feeling that protection...We see [basic human rights] taken away in many states. And I feel like we have a risk in Washington State that is new for us to deal with.  
- LGBTQIA+ community member, adult ”

In the 2021 Healthy Youth Survey (HYS), 2.4% of Snohomish County’s 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders combined self-reported that they identified as transgender, 4.2% self-reported that they were questioning or were unsure of their gender identity, and 4.0% reported that some other (non-binary) gender identity fit them best.<sup>13</sup>

“ [The LGBTQIA+ youth community has strength in] support, but with a sense of urgency and resilience, and resource sharing, and ingenuity. Grit.  
- LGBTQIA+ community member, youth ”

## Veterans

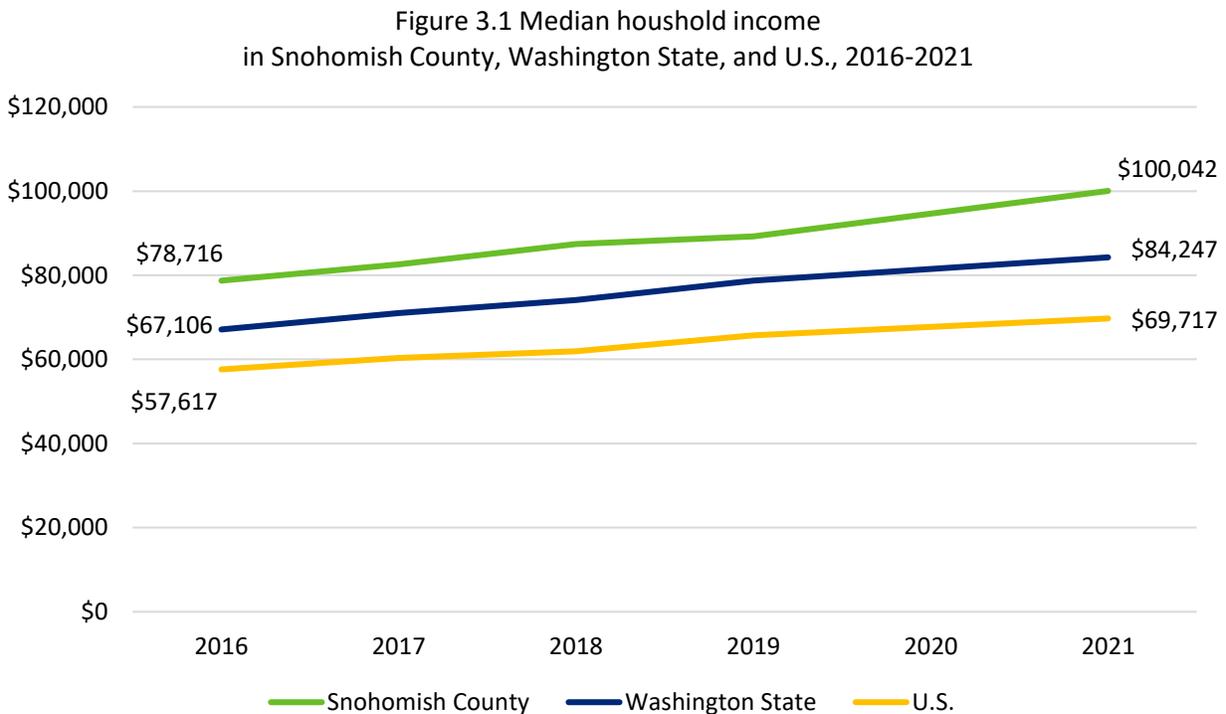
Veterans make up 5.5% of Snohomish County’s population. First and Second Gulf War Veterans comprise 54.0% of this group. The single largest group are Vietnam Veterans who make 38.1% of this population.<sup>14</sup>

A person’s socioeconomic environment and status (SES) can influence their access to care, health behaviors, use of preventative services, as well as their physical environment.<sup>1-3</sup> Socioeconomic environment encompasses geographically defined boundaries, which include economic, educational, social, cultural, and political characteristics of an area.<sup>1-4</sup> These influences are often referred to as social determinants of health.

The factors that influence socioeconomic environment and status that were evaluated for this community health assessment included income, poverty, housing, cost of living, and education.

## Income

In Snohomish County the median household income has increased significantly over time from \$78,716 in 2016 to \$100,042 in 2021. Median income is historically higher in Snohomish County compared to Washington State and the U.S.; this continued to be the case in 2021 (Figure 3.1).<sup>5</sup>



Source: U.S. Census Bureau, ACS table S1901 1-year estimates, 2016-2021

## Employment

The employment rate in Snohomish County is higher than both statewide and national rates. In 2021, 62.5% of the population 16 years and older in Snohomish County was employed. The unemployment rate in Snohomish County has also significantly decreased from 7.5% in 2015 to 4.1% in 2020. In 2020, the unemployment rate was significantly higher for residents who identified as either American Indian/Alaska Native (10.7%) and multiracial (6.7%) when compared to non-Hispanic Whites (3.9%) in Snohomish County. The unemployment rates of all other BIPOC groups in Snohomish County were not statistically different from that of non-Hispanic White residents (3.3% non-Hispanic Other; 3.9% Hispanic/Latino/Latina; 3.9% non-Hispanic Black; 4.5% non-Hispanic Asian; 4.7% non-Hispanic Native Hawaiian or Other Pacific Islander).<sup>6</sup>

# Socioeconomic Environment (cont.)

## Poverty

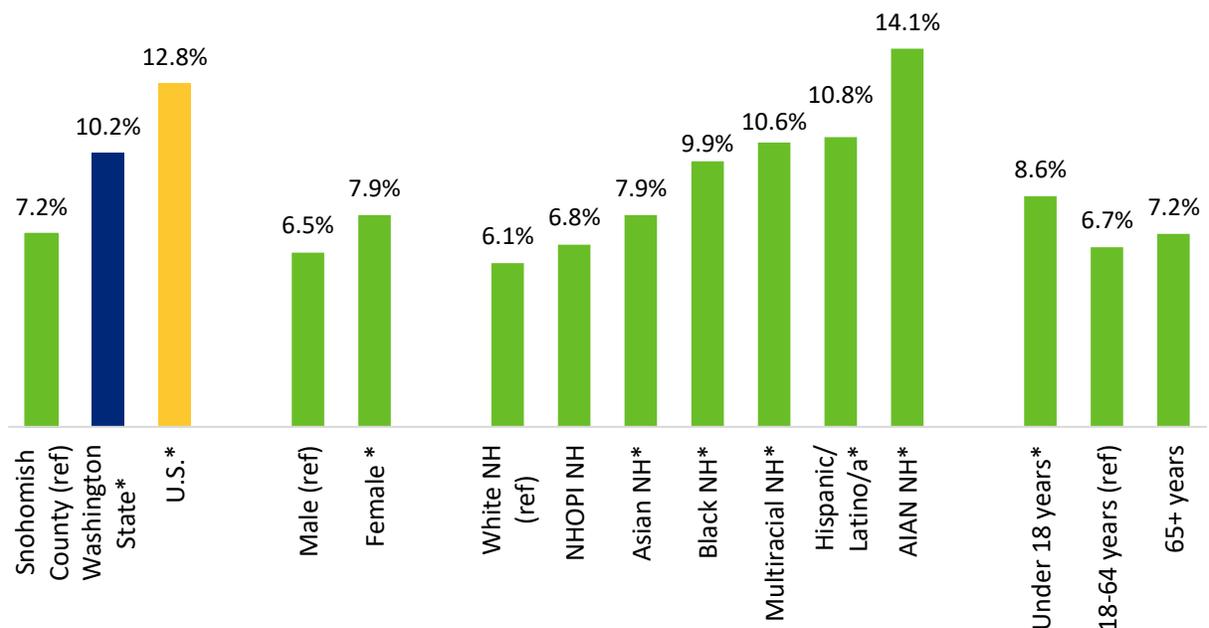
The Federal Poverty Level (FPL) is a national measure of income by family size. It is adjusted annually by the Department of Health and Human Services (HHS). This measure determines whether individuals qualify for programs and benefits such as Medicaid and Children’s Health Insurance Program. In 2020, HHS defined the 100% FPL as \$12,760 for a single-person household and \$26,200 for a four-person household.<sup>7,8</sup> In the same year, the American Community Survey (ACS) reported 3.5%, 7.2%, and 9.5% of Snohomish County’s population had an income less than 50%, 100%, and 125% of the FPL, respectively.<sup>9</sup>

“ We have many families that need financial assistance.  
- Rural school district nurse ”

“ There’s that struggle of being above “low income,” but just scraping by.  
- High school student ”

In 2020, approximately 56,026 people in Snohomish County had a household income below 100% of the FPL, and approximately 28,013 people below 50% of the FPL. There are significant disparities by race and ethnicity among those living under the FPL. In 2020, a high percentage of those who identified as non-Hispanic American Indian/Alaska Native, multiracial, Black, Asian, and Hispanic/Latino/Latina were in poverty (Figure 3.2).<sup>9</sup>

Figure 3.2: Percent of total population in Snohomish County below 100% Federal Poverty Level (FPL), 2020



\* Indicates statistically significant difference compared to reference group (ref).

Source: U.S. Census Bureau, 2020 ACS 5-year estimates, Table S1703

# Socioeconomic Environment (cont.)

The Healthy People 2030 goal indicates there should be less than 8% of a population living below 100% FPL.<sup>10</sup> While the population of Snohomish County as a whole has met this goal, those who identify as Black/African American, American Indian/Alaska Native, Multiracial, and Hispanic have higher percentages living below the 100% FPL compared to non-Hispanic White individuals.<sup>9</sup> This gap in prevalence of poverty by racial/ethnic groups has lessened in recent years, with smaller percentages of all groups living below 100% FPL in 2020 compared with previous years.<sup>9</sup>

## Cost of living and housing

The median household income in Snohomish County is high relative to the United States and Washington State. However, the cost of housing and cost of living are also higher in comparison. The median cost of rent for a two-bedroom apartment in Snohomish County has increased by 33.7% from 2015 to 2020. The median cost of rent in Snohomish County is significantly higher than statewide and national costs of rent.<sup>11</sup>

“ Cost of living is still going up. People are struggling to even pay rent or buy food.  
- Community partner, racial equity-centered work ”

“ Nobody can afford housing. Nobody. I think a one-bedroom apartment is well over two grand right now. It’s more than most people make in a month.  
- Immunocompromised and disabled community member ”

The cost of living in the Snohomish County is high when compared to Washington State. The Massachusetts Institute of Technology (MIT) living wage calculator accounts for localized cost-of-living factors including housing costs, tax rates, and childcare costs.<sup>12</sup> Comparing the calculated living wage to the most recent measure for the 100% FPL in 2022, a single person in Snohomish County needs to earn over three times the FPL to meet the estimated local living wage. Figure 3.3 shows the gap between the FPL and required annual living wage in Snohomish County among different household sizes. The annual income at 100% FPL for a single individual is \$13,590, compared to the estimated living wage of \$44,557 for a single-person household in Snohomish County.<sup>7,8,12</sup>

Figure 3.3: Income comparisons in Snohomish County by household size: Estimated annual living wage vs. 100% Federal Poverty Level (FPL), 2022

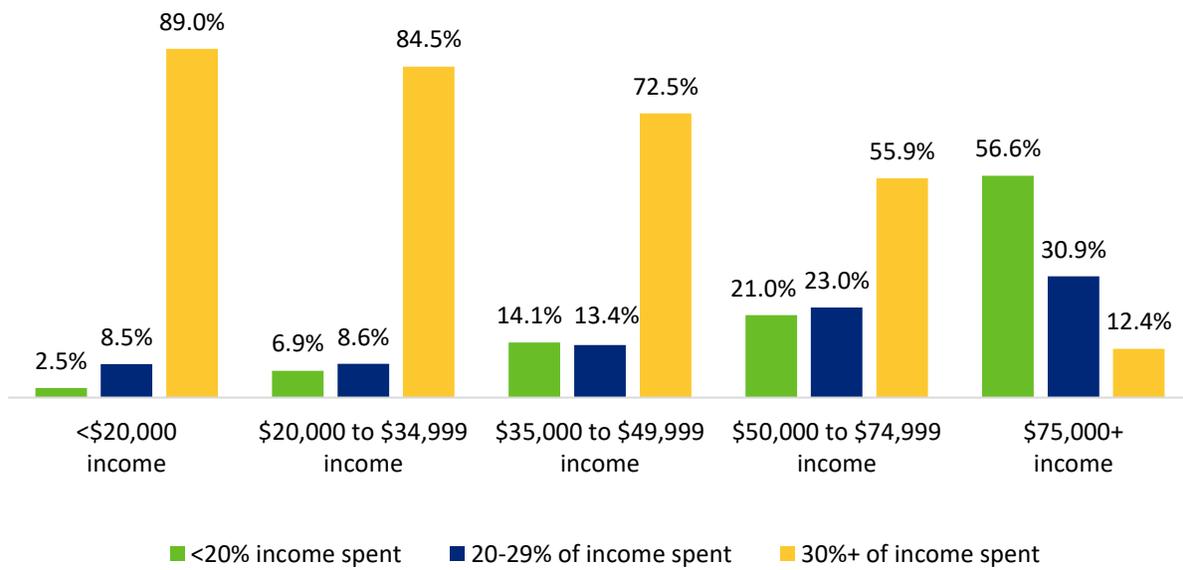


Source: Glasmeier, Amy K, 2022 Living Wage Calculator, MIT

# Socioeconomic Environment (cont.)

The Department of Housing and Urban Development defines spending more than 30% of income on housing as cost burdensome.<sup>13</sup> By this definition, 33.1% of Snohomish County’s households were cost burdened in 2021. Locally, a higher proportion of lower income households are cost burdened. Nearly 90% of households with an annual income under \$20,000 are cost-burdened (Figure 3.4).<sup>14</sup>

Figure 3.4: Percent of income spent on housing in Snohomish County by household income level, 2021



Source: U.S. Census Bureau, 2021 ACS 1-year estimates, Table S2503

## Persons experiencing homelessness

Snohomish County Human Services conducts an annual Point-in-Time (PIT) count of persons experiencing homelessness. The PIT is a snapshot in time that counts how many people are residing in shelter, transitional housing, or living without shelter the night of the annual count. Due to inherent limitations of PIT counts (e.g., weather, targeted but not comprehensive canvassing, etc.), this snapshot should be interpreted as an indicator of overall trends rather than a conclusive number of individuals experiencing homelessness in a given year.<sup>15</sup> On the night of February 21, 2022, there were 1,184 individuals counted who met this definition, which was the highest count since 2012 (Figure 3.5).<sup>15,16</sup>



I have some peers that have the same disease that I have that live here in this county who have had several stints of homelessness in the last several years. And it’s not like you can live in a shelter [when you’re immunocompromised]. You can’t be exposed to tons of people. My friend [who experiences homelessness] is much younger than me...[but] I know that her health maintenance is nowhere near as stable as mine because she’s in survival mode.

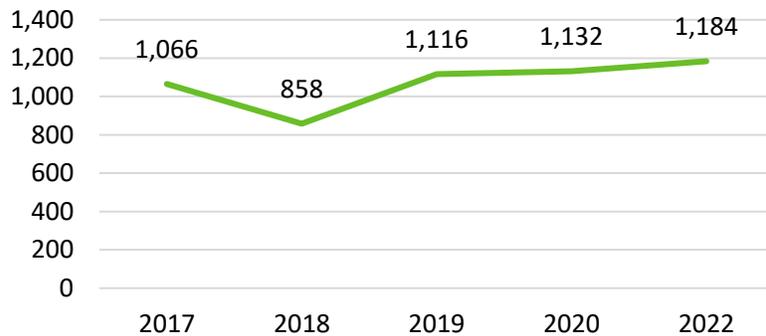
- Immunocompromised and disabled community member



# Socioeconomic Environment (cont.)

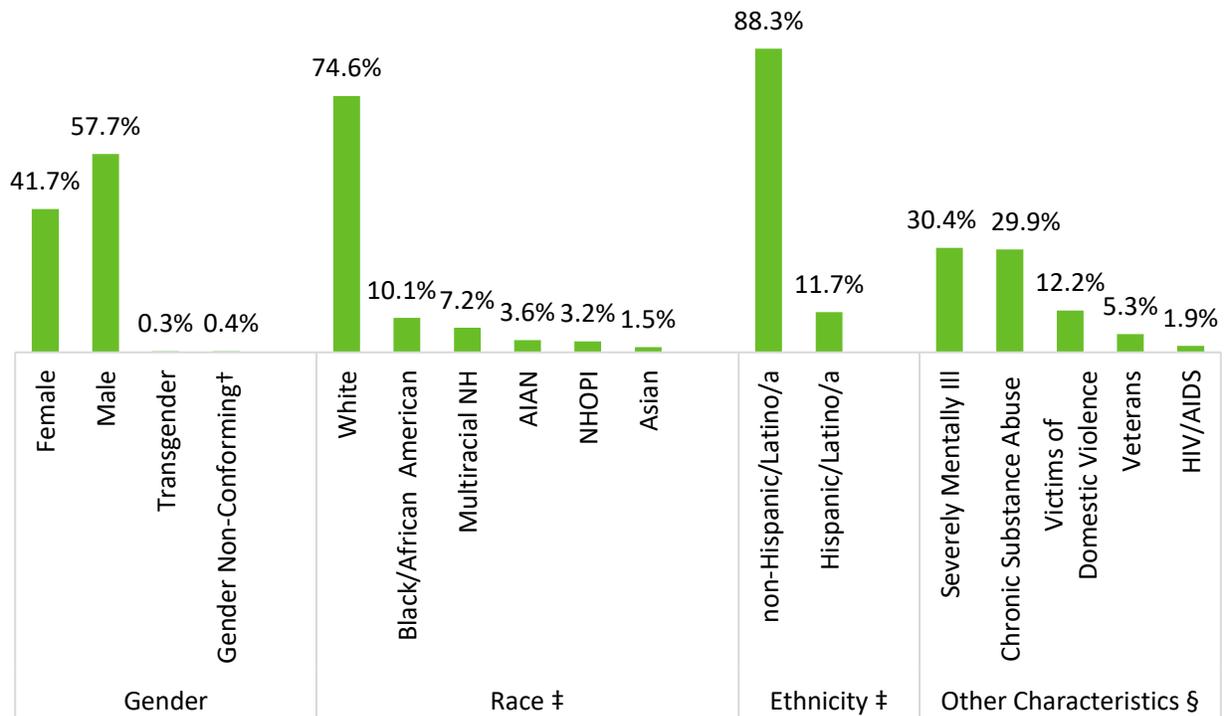
Among people who are experiencing homelessness, those who identify as Black/African American, American Indian/Alaska Native, and men are overrepresented (see demographic makeup of Snohomish County [here](#)). The PIT count also identified known barriers to stability and housing among this population, such as high prevalence of severe mental illness, chronic substance use, and histories of domestic violence among this population (Figure 3.6).

Figure 3.5: Point-in-Time counts (PIT) of persons experiencing homelessness in Snohomish County, 2017-2022



Source: HUD Exchange, CoC Homeless Populations and Subpopulation Reports, 2015-2020; Snohomish County PIT Estimates, 2017-2022

Figure 3.6: Demographics and other characteristics of people experiencing homelessness in Snohomish County, 5-year average Point-in-Time (PIT) count results, 2016-2020



† 2016 data unavailable

‡ Hispanic/Latino/a ethnicity is not mutually exclusive with racial groups.

§ Severe Mental Illness and Chronic Substance Abuse are determined subjectively by PIT Count surveyors according to [HUD definitions](#) that include a long-term or indefinite duration affliction that substantially impairs a person's ability to live independently.

Source: CoC Homeless Populations and Subpopulation Reports, 2016-2020

# Socioeconomic Environment (cont.)

## K-12 students experiencing homelessness

The Washington Office of Superintendent of Public Instruction (OSPI) reports on different characteristics of students who are enrolled in the public school system. Their reports include the number of students experiencing homelessness. Homelessness among children is defined as “individuals who lack a fixed, regular, and adequate nighttime residence.”<sup>17,18</sup>

“ Let’s not be blind to the fact that Snohomish County does not have sufficient affordable housing. We don’t have sufficient shelters. We don’t have sufficient motel vouchers...I have more [students] sleeping in cars right now than ever before. Because there is no [expletive] solution. And we try everything.

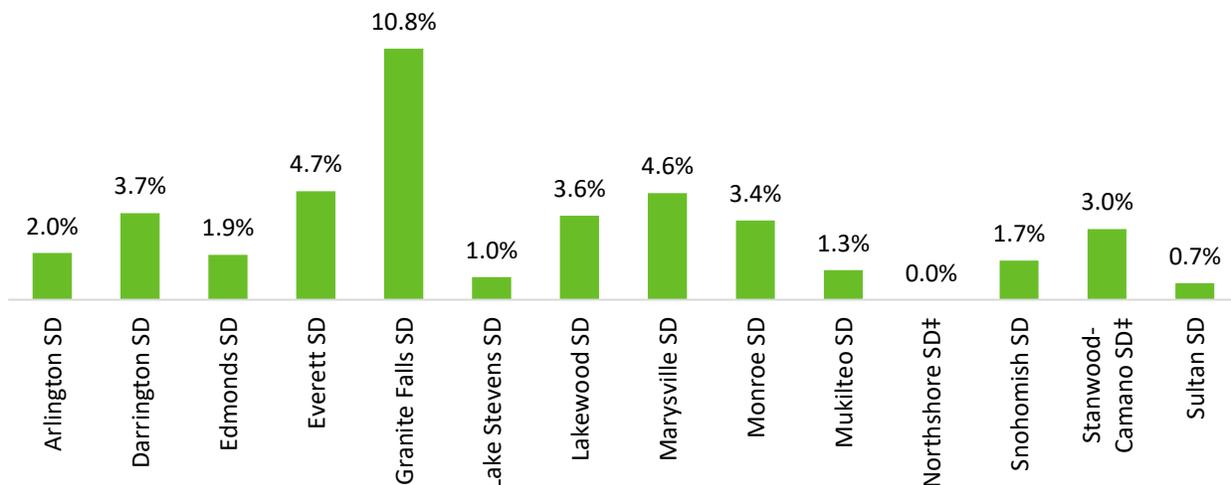
- Urban school district staff

“ [The most important issue or concern in the LGBTQIA+ youth community is the need for] support. Not just from the community but from families. That’s a big issue which ties in with the homelessness. Just [having] support and somewhere for them to go when they don’t have it.

- LGBTQIA+ community member, youth

Unstable housing among children can impact early development and preventive care, leading to adverse impacts on health.<sup>19</sup> In Snohomish County, Granite Falls School District reported the highest percentage of students experiencing homelessness at 10.8%, followed by Everett School District at 4.7% of students (Figure 3.7).<sup>20</sup>

Figure 3.7: Percent of students in Snohomish County experiencing homelessness by school district (SD)†, 2021-2022 school year



† Index School District not shown due to small, non-zero sample size

‡ School district includes schools from Snohomish County and neighboring county

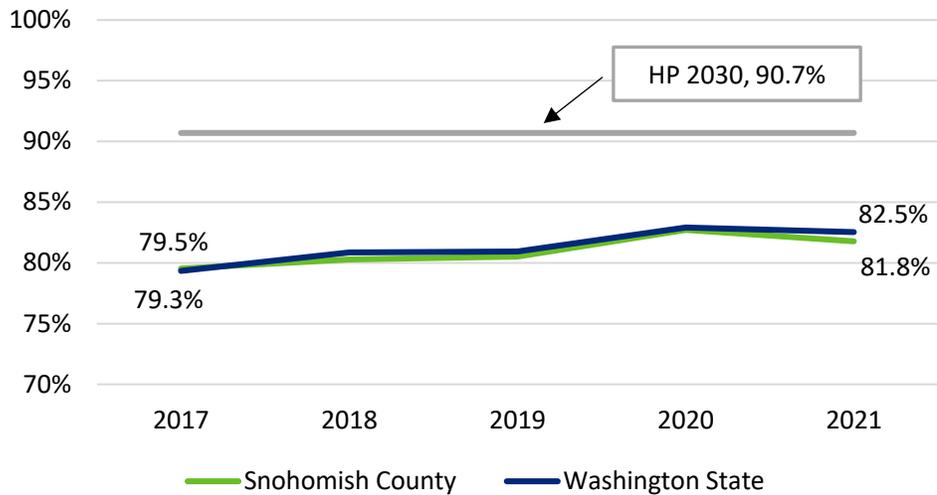
Source: OSPI, Report Card Enrollment, 2021-2022

# Socioeconomic Environment (cont.)

## Education

The on-time graduation rate in Snohomish County was 81.8% in the 2020-2021 school year. This falls short of the HP 2030 goal of 90.7% but has increased from the on-time graduation rate of 79.3% in 2017 (Figure 3.8).<sup>21,22</sup> There are differences in local on-time graduation rates by school district, from 95.4% at Northshore School District to 73.5% at Granite Falls School District.<sup>22</sup>

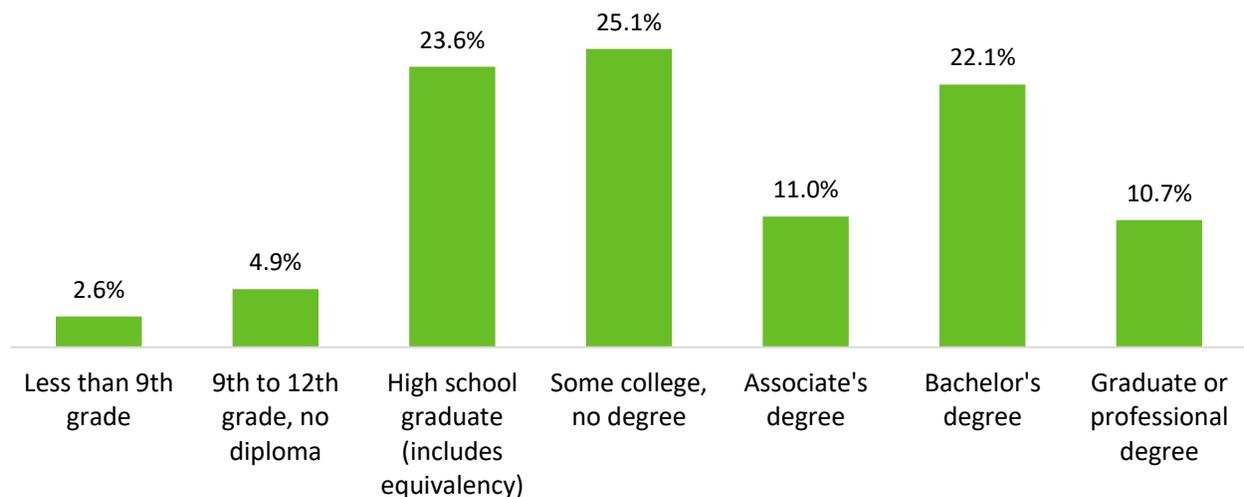
Figure 3.8: Percent of on-time high school graduations in Snohomish County by graduating class, 2017-2021



Source: OSPI, Report Card Graduation, 2017-2021

High educational attainment in adults can have a positive impact on health and lifespan.<sup>23</sup> The most common educational attainment category among Snohomish County adults is those with *some college*. Fewer than 8% of adults have no high school diploma/GED (Figure 3.9).<sup>24</sup>

Figure 3.9: Percent of adults aged 25 years and older in Snohomish County by highest educational attainment, 2020



Source: U.S. Census Bureau, 2020 ACS 5-year estimates, Table S1501

## Life expectancy

In 2020, Snohomish County residents' life expectancy at birth was similar to statewide and national life expectancies. Life expectancy had been increasing since 2017 but, similar to what was seen nationwide and globally, life expectancy decreased in the first year of the COVID-19 pandemic (Figure 4.1). In 2020, females continued to have a longer life expectancy than males (82.7 vs 78.3 years).<sup>1,2</sup>

Figure 4.1: Life expectancy at birth in Snohomish County, Washington State, and U.S., 2020



Source: WA DOH CHAT, CHS Death Certificate Data, 2020; CDC NCHS Data Brief No. 427, Dec. 2021

Disparities in life expectancy are seen among some racial/ethnic groups in Snohomish County. While non-Hispanic Asians and Hispanic residents have the highest life expectancy by racial/ethnic group, non-Hispanic Black and Pacific Islanders have the lowest (Figure 4.2).<sup>1</sup>

Figure 4.2: Life expectancy at birth in Snohomish County by race/ethnicity, 2020†



\* Indicates statistically significant difference compared to reference group (ref)

† Multiracial life expectancy not displayed due to data validity concerns

Source: WA DOH CHAT, CHS Death Certificate Data, 2020

# General Health (cont.)

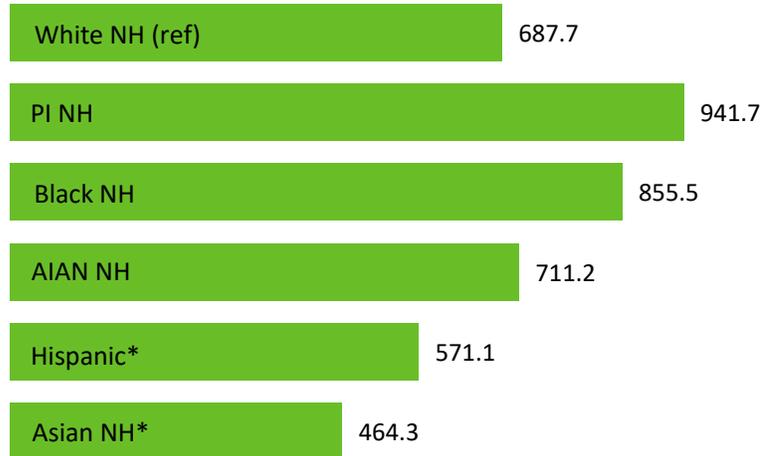
## Death rates and leading causes of death

### General population

Snohomish County's overall death rate from all causes was decreasing in recent years until the first year of the COVID-19 pandemic. In 2020, the death rate was 663.9 deaths for every 100,000 people. This was lower than both statewide and national rates (697.6 per 100,000 and 835.4 per 100,000, respectively).<sup>1,2</sup> Though not statistically different from non-Hispanic White residents, non-Hispanic Pacific Islander, Black, and American Indian/Alaska Native residents suffered the highest death rates in 2020 (Figure 4.3).<sup>1,2</sup>

In 2020, the top three leading causes of death for all of Snohomish County remained unchanged from previous years (cancer, heart disease, and unintentional injury). COVID-19 followed as the fourth leading cause of death (Figure 4.4).<sup>1</sup>

Figure 4.3: Death rate per 100,000 in Snohomish County by race/ethnicity, 2020<sup>†</sup>

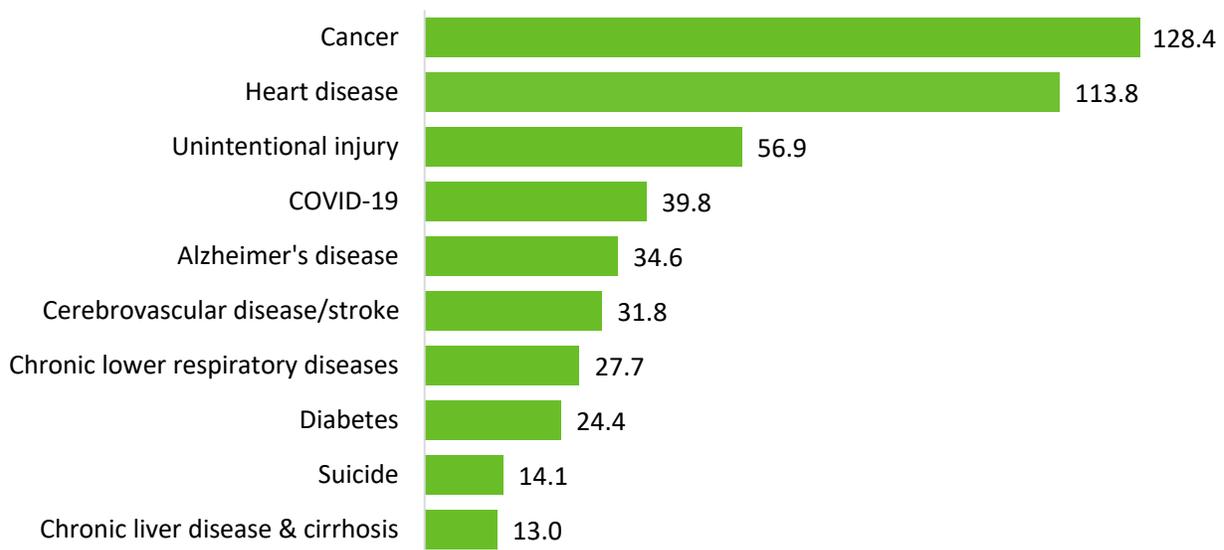


\* Indicates statistically significant difference compared to reference group (ref)

† Multiracial deaths not displayed due to data validity concerns

Source: WA DOH CHAT, CHS Death Certificate Data, 2020

Figure 4.4: Death rate per 100,000 in Snohomish County by leading causes of death, 2020



Source: WA DOH CHAT, Center for Health Statistics Death Certificate Data, 2020

## **Childhood death rates**

### ***Infants (under 1 year old)***

The Healthy People 2030 goal aims for no more than 5 infant deaths for every 1,000 live births. An infant death is counted when a baby dies in the first year after birth. In 2020, there were 32 infant deaths in Snohomish County. Most of these deaths were due to congenital defects. Snohomish County's infant death rate has consistently remained below the Healthy People 2030 goal and has decreased in the past 5 years (4.7 per 1,000 in 2016 to 3.4 per 1,000 in 2020). It is also lower than the statewide infant death rate (4.5 per 1,000 live births).<sup>1,3</sup>

### ***Children aged 1 to 4 years old***

In the combined years of 2016 to 2020, there were 16.3 deaths for every 100,000 children aged 1 to 4 years old. Consistent with previous years, the leading cause of death among this age group was accidents (4.6 per 100,000).<sup>3</sup>

### ***Children aged 5 to 14 years old***

In the combined years of 2016 to 2020, there were 10.7 deaths for every 100,000 children aged 5 to 14 years old. Consistent with previous years, the leading cause of death among this age group was accidents (3.3 per 100,000).<sup>3</sup>

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Access to quality and timely health care is critical to the well-being of a population. A shortage of health care providers can impose barriers to care by limiting the number of available appointments for the population. This can be especially detrimental to the quality of life for those with lower socioeconomic status.<sup>1</sup>

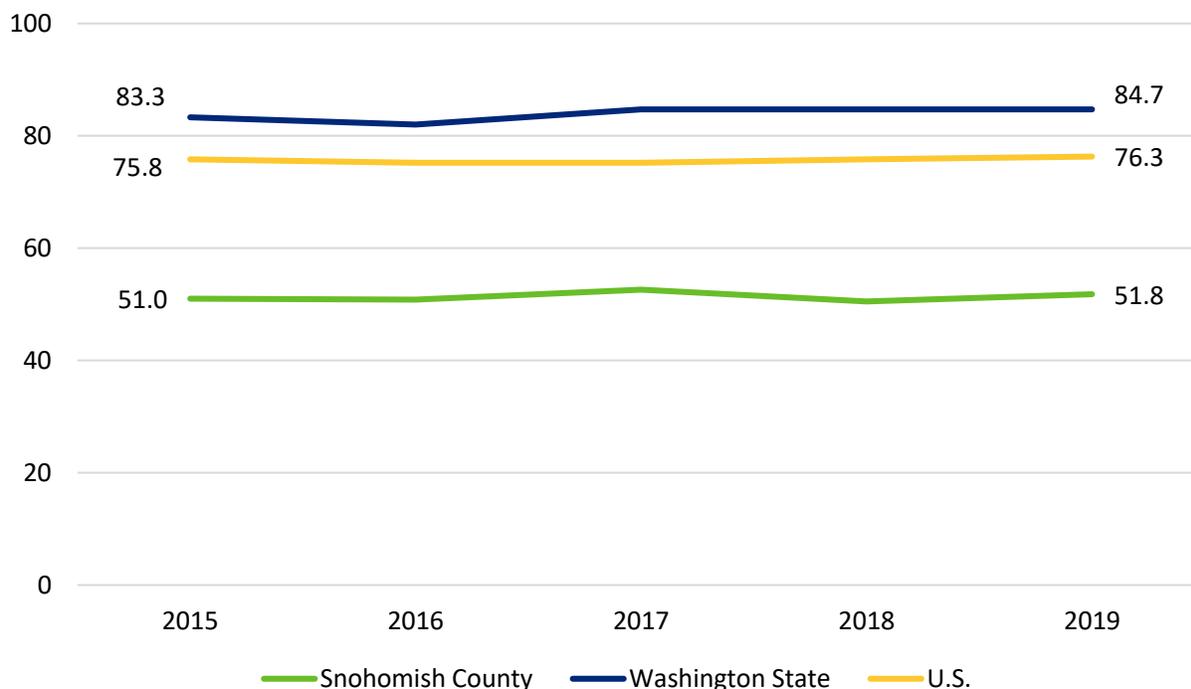
“ So much of [barriers to good health] has to do with access to care. Can I get to my appointments? Can I pick up my medications? Can I afford my medications? Do I have the education to understand how to take them? Do doctors have enough time to explain it? ”

- *Emergency health care provider*

## Primary care providers

Snohomish County has fewer physicians per 100,000 than Washington State and the U.S. In 2019, there were 51.8 primary care physicians for every 100,000 residents. This ratio has stayed steady over time (Figure 5.1).<sup>2</sup>

Figure 5.1: Primary care physicians per 100,000 in Snohomish County, Washington State, and U.S., 2015-2019



Source: County Health Rankings, 2015-2019

# Access to Care (cont.)

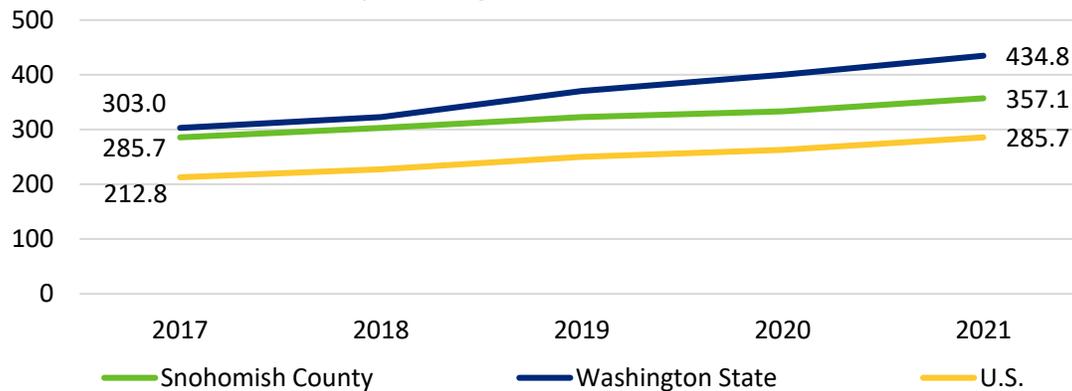
## Mental health providers

Mental health care providers for the county have become more prevalent. Numbers of mental health providers such as psychiatrists, psychologists, licensed clinical social workers, counselors, therapists, substance use disorder professionals, and ARNPs specializing in mental health care have increased from 285 per 100,000 in 2017 to 357 per 100,000 in 2021 (Figure 5.2). It is estimated that only 9.6 per 100,000 population of these mental health care providers are psychiatrists.<sup>3,4</sup>

“ Even if you try to seek help outside of school, you have to pay some kind of money to see somebody [for mental health treatment]. Or an online program to even Zoom someone for 10 minutes, you have to pay. And that is ridiculous because you shouldn't have to pay for something that is really important to your mental health. And it's just not accessible at all. ”

- High school student

Figure 5.2: Mental health care providers per 100,000 in Snohomish County, Washington State, and U.S., 2017-2021

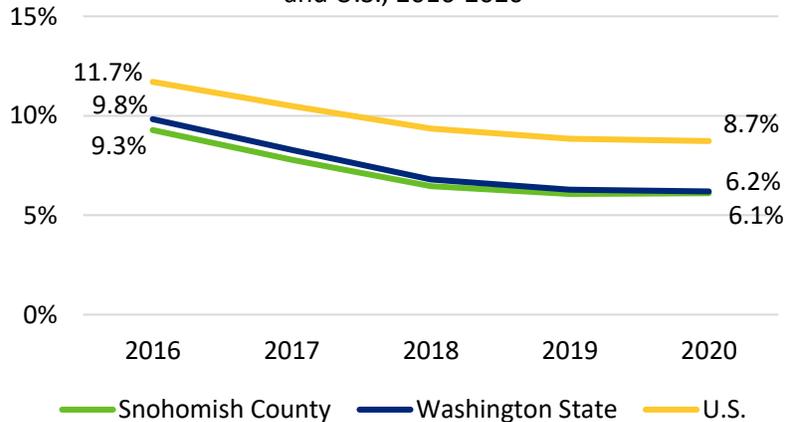


Source: County Health Rankings, 2017-2021

## Health insurance

Health insurance enables access to not only emergency care, but also preventive medicine which improves quality and length of life. The possession of adequate health insurance can influence whether an individual seeks care and if they follow treatment guidelines. A 2015 brief by the National Center for Health Statistics (NCHS) estimated that nearly 8% of U.S. adults did not take medication as directed due to cost.<sup>5</sup>

Figure 5.3: Percent of total population that is uninsured in Snohomish County, Washington State, and U.S., 2016-2020



Source: U.S. Census Bureau, ACS, Table B27001, 5-year estimates, 2016-2020

# Access to Care (cont.)

The percent of the Snohomish County population without health insurance has been declining in recent years, similar to Washington State and U.S. rates (Figure 5.3). In 2020, the COVID-19 public health emergency and associated federal regulations and policies led to an extension and expansion of Medicaid health insurance eligibility and coverage.<sup>6</sup> In this same year, 6.1% of Snohomish County had no health insurance. A majority of the uninsured are those aged 19 to 44 (Figure 5.4). Older and younger groups were less likely to be uninsured, which is most likely due to structural factors like insurance laws extending a parent’s insurance to their children, government programs like Medicaid/Medicare insuring older adults, and the Children’s Health Insurance Program (CHIP) for children. Locally, significant racial/ethnic disparities exist among the uninsured, particularly among residents who identify as Hispanic/Latino/Latina or other race of non-Hispanic ethnicity (Figure 5.4).<sup>7</sup> The COVID-19-related Medicaid expansion expired on March 31, 2023. The rate of uninsured and underinsured people is anticipated to increase with the end of this expansion.<sup>8,9</sup>

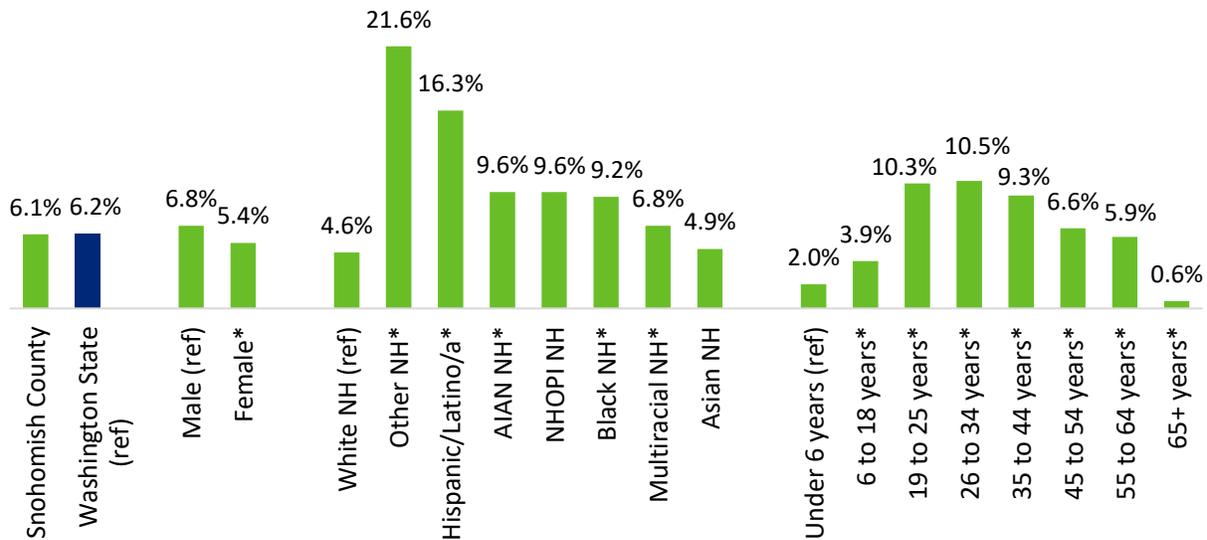


[My] community has been in this area for quite some time. Most of them are working and getting insurance through their employers. And they say that their insurance does not cover a lot and they have to pay a lot of bills from out of pocket. Others have insurance through the state, Washington Apple Health. They also say the same thing when they go to see the doctor that does not cover major treatments, and they have to pay a lot of bills from their pocket. Because of that, they have problems supporting their families financially.

- Asian and Pacific Islander  
Community member



Figure 5.4: Percent of total population that is uninsured in Snohomish County by demographic characteristics, 2020



\* Indicates statistically significant difference compared to reference group (ref)

Source: U.S. Census Bureau, ACS, Table S2701, 5-year estimate, 2020

# Access to Care (cont.)

## Last routine medical visit: adults

Routine medical care is part of overall preventive health care. It helps people of all ages stay healthy and can identify potential health problems before they worsen.

Over 80% of Snohomish County adults surveyed reported they'd had a primary care checkup within the last two years. Those aged 65 years and older were most likely to have had a medical visit within the last year, while those 18 to 24 years old were the least likely (figure 5.5). There was no statistically meaningful difference between non-Hispanic White and BIPOC individuals in the BRFSS survey data, but women were slightly more likely than men to have a recent routine medical visit.<sup>10</sup>

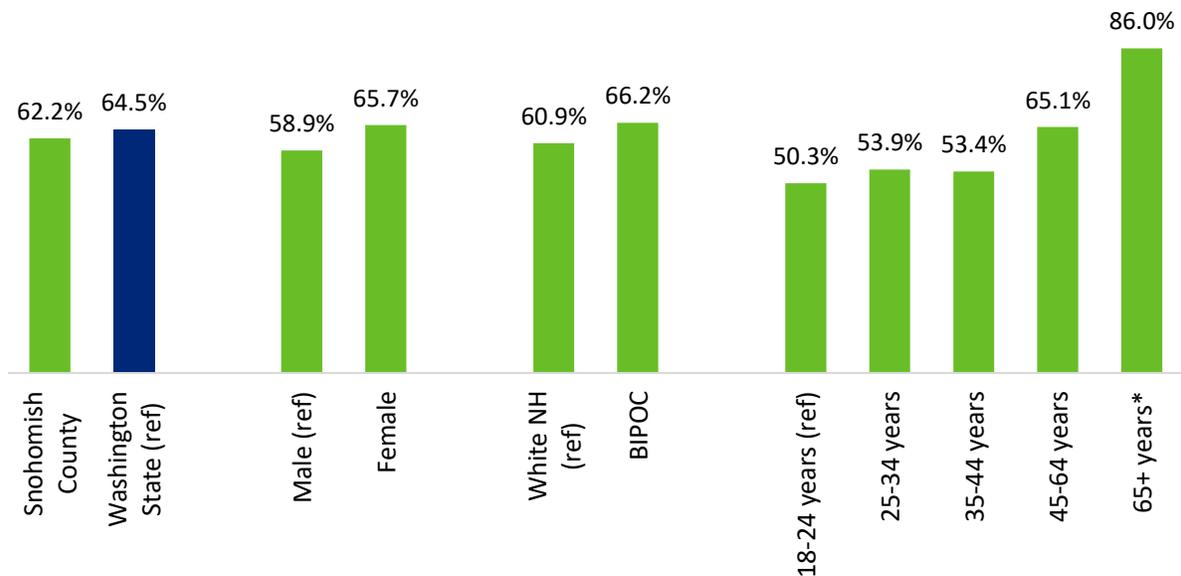


Prevention is so new [to us]... and [people in our community] don't see that prevention applies to them. So education, group meetings, sharing information, community gatherings – that's the time to share with them – prevention, prevention, prevention!

- Asian and Pacific Islander Community member



Figure 5.5: Percent of adults in Snohomish County reporting a routine medical check-up in the last year by demographic characteristics, 2021



\* Indicates statistically significant difference compared to reference group (ref)

Source: BRFSS, 2021

## Last routine medical visit: youth

Nearly 65% of students reported they'd seen a doctor in the past year for a regular check-up (Figure 5.6). Most students from communities of color were less likely to have had a routine medical visit in the past year compared to non-Hispanic White students, though these differences are not statistically significant.<sup>11</sup>

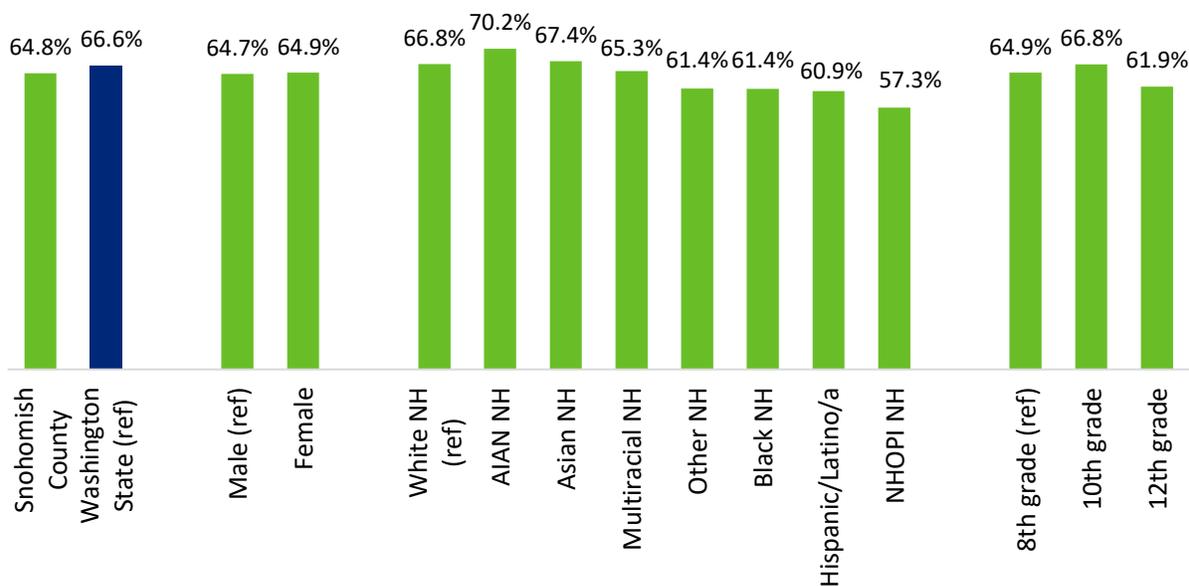


[At-risk] youth repeatedly report not feeling welcomed into mainstream medical institutions or facilities. They don't feel respected. They're intimidated. So just navigating those, our youth tend to not be comfortable. And so, what ends up happening is maybe what would [otherwise] be considered a small-scale health issue becomes a larger scale health issue due to neglect...things that could have been addressed way earlier, but just the psychological safety wasn't there to do it.

- Community partner, works with at-risk youth and young adults



Figure 5.6: Percent of students<sup>†</sup> in Snohomish County who report having had a routine doctor checkup in the last year by demographic characteristics, 2021



\* Indicates statistically significant difference compared to reference group (ref)

† 8<sup>th</sup> - 12<sup>th</sup> grade

Source: HYS, 2021

# Access to Care (cont.)

## Delays in care

The most common reason cited for a delay in medical care was a lack of appointment availability (Figure 5.7). Lack of appointment availability may be due to a shortage of providers, a lack of appointment times outside of normal working hours, or other reasons.<sup>10</sup> One study from 2004 found that low-income workers not only couldn't afford to take time off for preventive care, but even if sick leave was offered to employees, they may not use it for preventive care due to a fear of losing wages.<sup>12</sup> Another leading reason cited for a delay in medical care is a lack of adequate transportation.<sup>10</sup> Services available to assist in transportation to and from doctors' appointments are generally limited to individuals on Medicaid.<sup>13</sup>

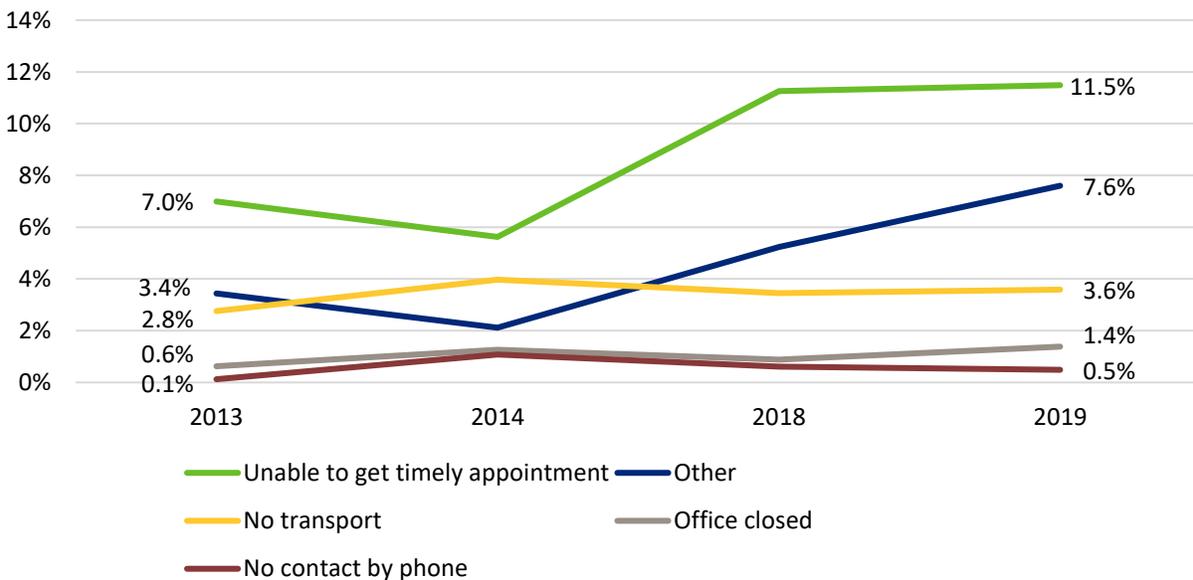


[The most important issue for people in my community is] getting to health care. We're pretty remote and rural...We're a minimum of 30 minutes from a doctor's office or a hospital. And the biggest issue I see are parents coming home from school, and somebody's not feeling well. It's really, really hard to compel a parent to put the kid in the car and go right back down the highway that they just struggled to get home on and go back to try to get into an urgent care center at 6 or 7 o'clock in the evening. They typically won't, even though the child is pretty sick.

- Rural school district nurse



Figure 5.7: Top reasons reported for delays in medical care among Snohomish County adults, 2013-2019



Source: BRFSS, 2013- 2019

## Access to Care (cont.)

### Health literacy

Health Literacy is defined by the Centers for Disease Control and Prevention (CDC) as either personal health literacy, the “degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others,” and organizational health literacy, “the degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.”<sup>14</sup>

“

Our community needs to learn what preventive care really means and how we do it [in a way that does] not lose our sense of dignity or who we are as a community of color.

- *Asian and Pacific Islander Community member*

”

There are some available surveys that measure people’s literacy, mathematical skills and understanding, and health literacy skills and experience with health care. These include surveys such as the National Assessment of Adult Literacy, National Assessment of Educational Progress, Consumer Assessment of Health Care Providers and Systems, Agency for Healthcare Research and Quality (AHQR) Health Literacy Measurement Tool and health literacy tool shed.<sup>14</sup>

“

Health literacy comes in many forms. It comes in medical terminology. It comes in finances. It comes in how insurance works. It comes in rights and responsibilities of both the patient and the provider. And I think that those things are lacking [among the populations I work with].

- *Community partner, early childhood education*

”

Behavioral health encompasses a broad range of elements of a person’s overall health, such as feelings and behaviors related to life stressors, crises, substance use and abuse, as well as the associated prevention, diagnoses, and/or treatments.

### Poor mental health days

The percentage of adults who had zero poor mental health days out of the last 30 has decreased each year from 2017 to 2021 (Figure 6.1). Meanwhile, the percentage of adults reporting 1 to 13 days or 14 or more days of poor mental health has increased. Women and non-Hispanic White adults are about twice as likely to report 14 or more poor mental health days compared to male and BIPOC individuals, respectively (Figure 6.2).<sup>1</sup>

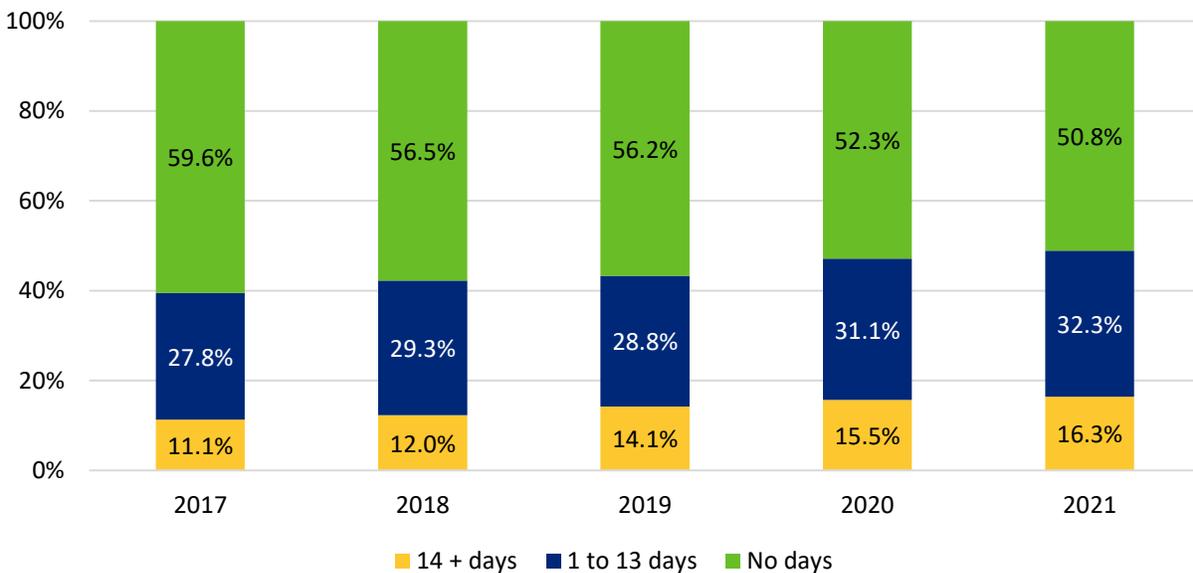


It’s hard to really shake off this image that everyone has a place where [hate groups] have such negative viewpoints of people who have been historically marginalized. It’s really hard to shake off an image like that, even if a lot of meaningful work has been done. And that kind of goes into the mental health aspect where if you feel like you’re likely to get attacked just going out and living life in the city you live in, that’s not going to do well for you psychologically.

- Community partner, racial equity-centered work



Figure 6.1: Percent of adults in Snohomish County by number of poor mental health days "out of the last 30" days, 2017-2021



Source: BRFSS, 2017-2021

# Behavioral and Mental Health (cont.)

Figure 6.2: Percent of adults who report 14 or more poor mental health days out of the last 30 days in Snohomish County and Washington State by demographic characteristics, 2021



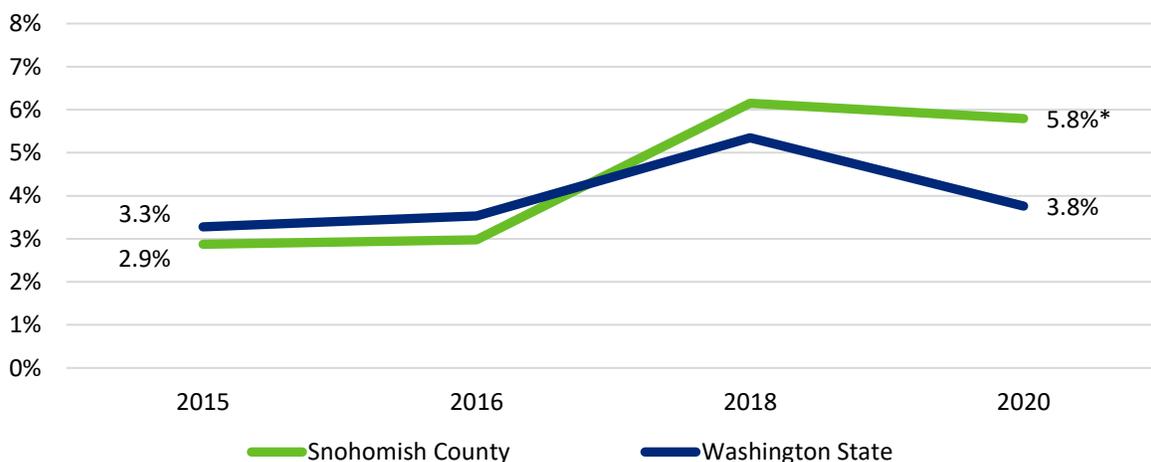
\* Indicates statistically significant difference compared to reference group (ref)

Source: BRFSS, 2021

## Serious mental illness among adults

The Kessler 6 psychological distress scale (K6 scale) is a validated method of determining levels of mental wellness among adults. It's a simple survey comprised of a series of six questions about a person's recent feelings of mental unwellness. A score above 13 indicates serious mental illness.<sup>2</sup> The percentage of adults in Snohomish County who meet the K6 definition for Serious Mental Illness (SMI) roughly doubled from 2015 to in 2020 (Figure 6.3). As of 2020, Snohomish County has a statistically greater percentage of people with SMI compared to the Washington State average. Like many other measures of poor mental health, women and young adults tend to be more likely to meet this definition of SMI compared to men and older adults.<sup>1</sup>

Figure 6.3: Percent of adults in Snohomish County and Washington State with serious mental illness (Kessler 6 Score >13), 2015-2020



\* Indicates statistically significant difference from 2020 Washington State

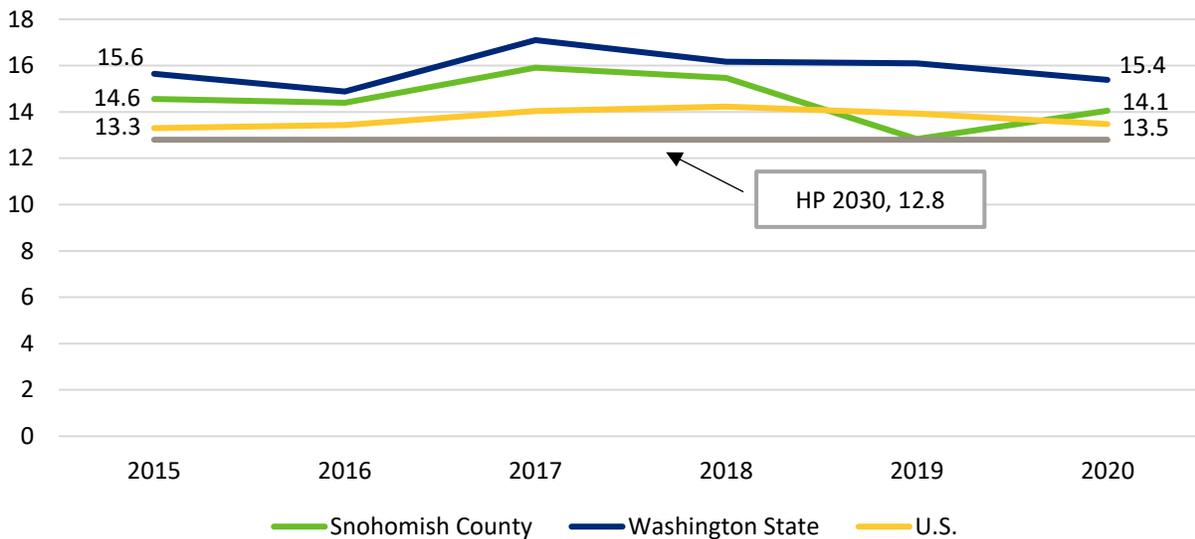
Source: BRFSS, 2015-2020

# Behavioral and Mental Health (cont.)

## Suicide

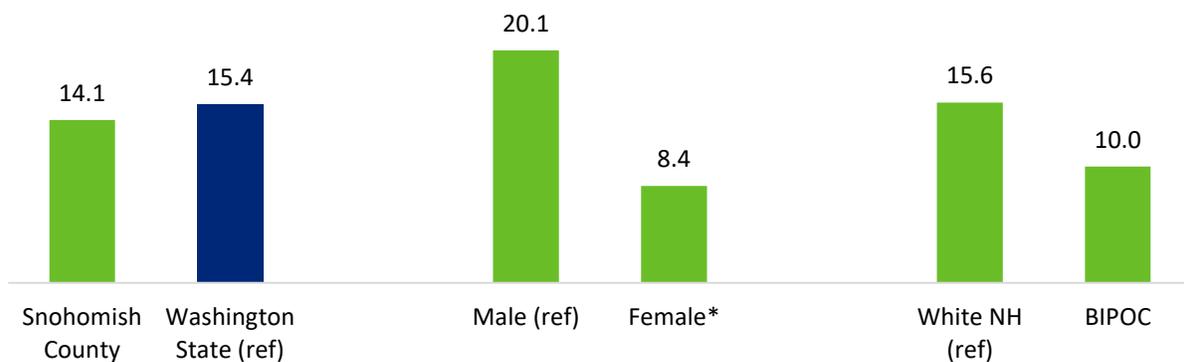
Suicide rates in Snohomish County, Washington State, and the U.S. more broadly have stayed generally steady in recent years. Local rates do not yet meet the Healthy People 2030 goal of fewer than 12.8 suicides for every 100,000 people (Figure 6.4).<sup>3-6</sup> Men typically have higher rates of suicide deaths compared to women (Figure 6.5). This difference by gender is typically attributed to methods used in suicide attempts. Specifically, men are more likely to use firearms in their suicide attempts, which more often leads to a completed suicide. Due to small sample sizes, BIPOC racial/ethnic subpopulations were combined.<sup>4</sup>

Figure 6.4: Suicide rate per 100,000 in Snohomish County, Washington State, and U.S., 2015-2020



Source: WA DOH CHAT, Death Certificate Data, 2015-2020; CDC WONDER; Healthy People 2030

Figure 6.5: Suicide rate per 100,000 in Snohomish County by demographic characteristics, 2020



\* Indicates statistically significant difference compared to reference group (ref)

Source: WA DOH CHAT, Death Certificate Data, 2020

# Behavioral and Mental Health (cont.)

## Adverse Childhood Experiences (ACEs)

Adverse Childhood Experiences (ACEs) are potentially traumatic events that may occur in life before a child turns 18. These experiences can include verbal or physical abuse, exposure to substance misuse, carceral involvement of a household member, and other traumatic events. A higher number of ACEs experienced – or ACEs score – corresponds to a higher risk of many poor health outcomes, including but not limited to depression, illicit drug use, smoking, attempted suicide, partner violence, obesity, COPD (chronic obstructive pulmonary disease), and others.<sup>7</sup>



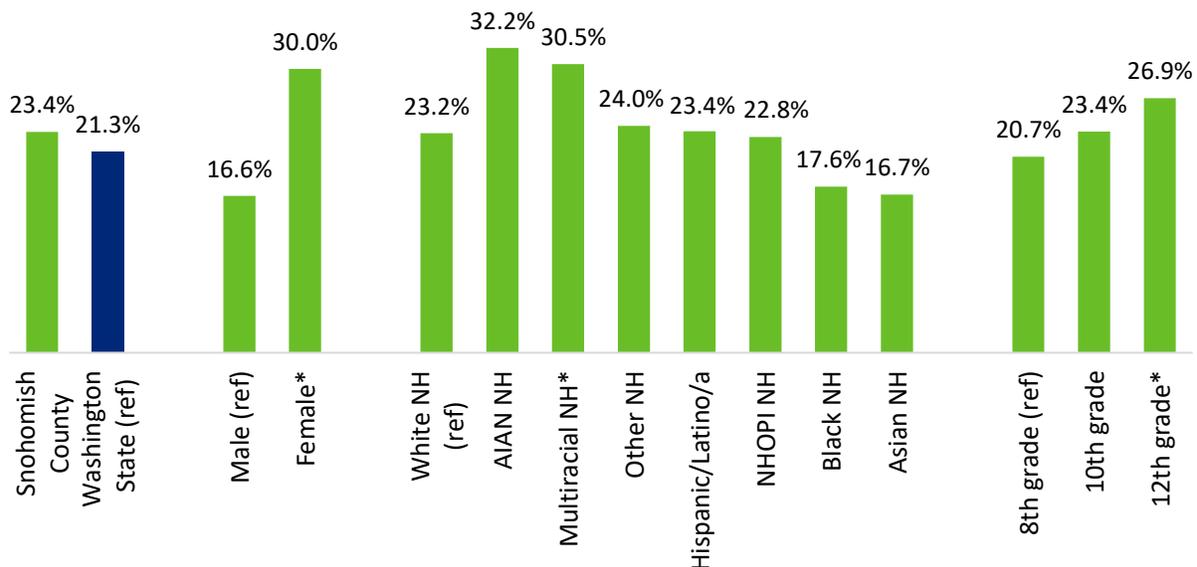
Our entire world went through a pandemic that lasted an intense amount of time. And for some of these kids, it made any [adverse] childhood experience that they were already experiencing worse. And it provided some [adverse experiences] to some families who are...not equipped. Like, this is the first struggle they've ever experienced. And so, I think that's all contributing.

- Urban school district staff



Nearly a quarter of Snohomish County students have an ACEs score of three or more (Figure 6.6). Girls were more likely to have three or more ACEs than boys, and both non-Hispanic American Indian/Alaska Native and non-Hispanic multiracial students were more likely to have a higher number of ACEs compared to non-Hispanic White students. Older students had more ACEs than their younger counterparts, however this not unexpected because older students have more lived experience and thus more opportunities for ACEs to occur. Because this was the first survey year students were asked about ACEs, there is currently inadequate historical data to assess for trends over time.<sup>8</sup>

Figure 6.6: Percent of students<sup>†</sup> in Snohomish County with an ACEs score of 3 or more by demographic characteristics, 2021



\* Indicates statistically significant difference compared to reference group (ref)

† 8<sup>th</sup> - 12<sup>th</sup> grades

Source: HYS, 2021

# Behavioral and Mental Health (cont.)

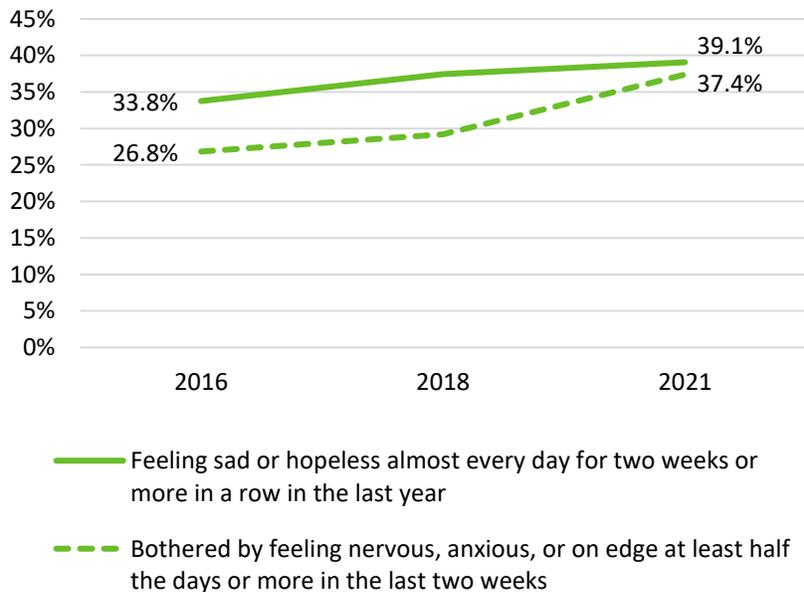
## Youth anxiety and depression

In 2021, 39.1% of students in 8<sup>th</sup> through 12<sup>th</sup> grade indicated they had felt sad or hopeless almost every day for two weeks or more in a row in the last year, and 37.4% of students reported feelings of nervousness, anxiety, and being on-edge at least half the days in the last two weeks (Figure 6.7). These two measures both increased significantly since 2016, though they are closely in line with the Washington State averages.<sup>7</sup> Among student respondents to these questions, older students were more likely to report these feelings than the younger grades.<sup>8</sup> Girls were about twice as likely to report these feelings compared to boys – a gender disparity that is seen in similar depression- and anxiety-related measures among adults (Figures 6.8 and 6.9).<sup>1,3-8</sup>

“ The acuity of some of the students that we’re dealing with has increased, but the skill level of some of the majority of our staff has not been there to be able to assist students if they do come to them. They don’t know how to hold what they’re telling them.  
- Urban school district staff ”

“ Youth mental health, child mental health is a big issue. Anxiety. That crosses economic boundaries in our area.  
- Urban school district staff ”

Figure 6.7: Percent of students<sup>†</sup> in Snohomish County who reported symptoms of depression or anxiety, 2016-2021



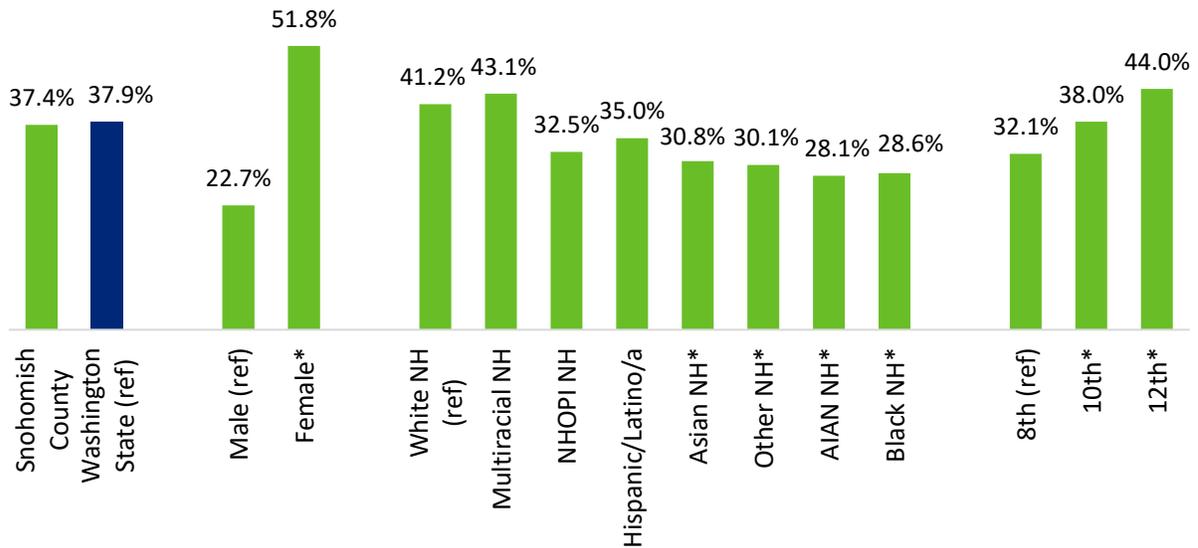
<sup>†</sup> 8<sup>th</sup> - 12<sup>th</sup> grades

Source: HYS, 2016-2021

“ I see a lot, especially women that I know...I don’t know the last woman that I talked to that doesn’t experience mental health issues. Especially my girlfriend. She experiences a lot of that. So, I just think [that] within the school, having more [mental health] resources and making sure that the kids know about it [is important] because it’s pretty serious.  
- High school student ”

# Behavioral and Mental Health (cont.)

Figure 6.8: Percent of students<sup>†</sup> in Snohomish County who reported symptoms of anxiety<sup>‡</sup> by demographic characteristics, 2021



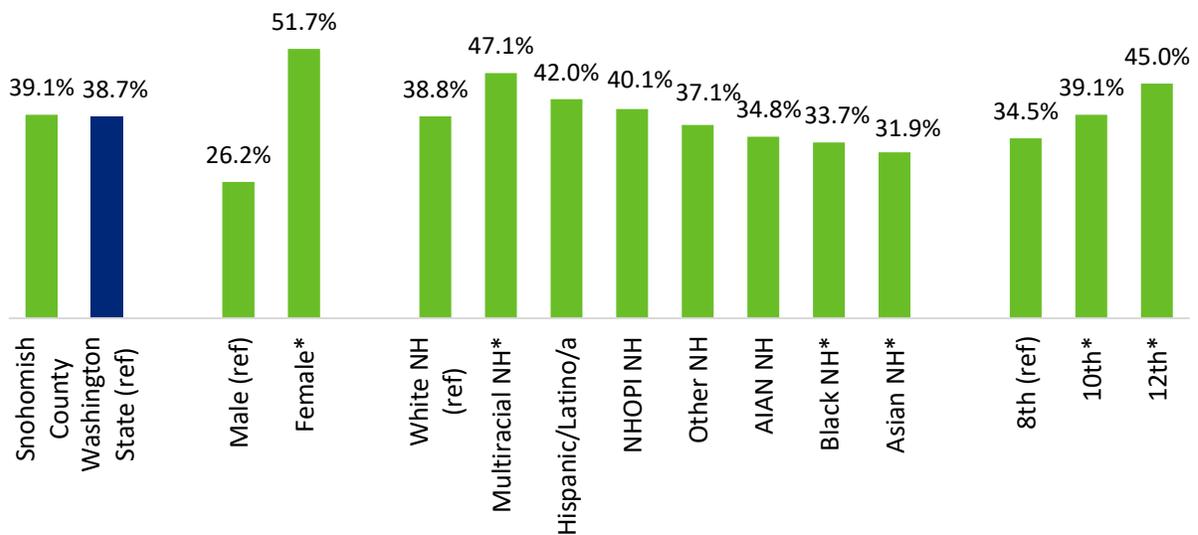
\* Indicates statistically significant difference compared to reference group (ref)

† 8<sup>th</sup> - 12<sup>th</sup> grades

‡ Bothered by feeling nervous, anxious, or on edge at least half the days or more in the last two weeks

Source: HYS, 2021

Figure 6.9: Percent of students<sup>†</sup> in Snohomish County who reported symptoms of depression<sup>‡</sup> by demographic characteristics, 2021



\* Indicates statistically significant difference compared to reference group (ref)

† 8<sup>th</sup> - 12<sup>th</sup> grades

‡ Feeling sad or hopeless almost every day for two weeks or more in a row in the last year

Source: HYS, 2021

# Behavioral and Mental Health (cont.)

## Youth bullying

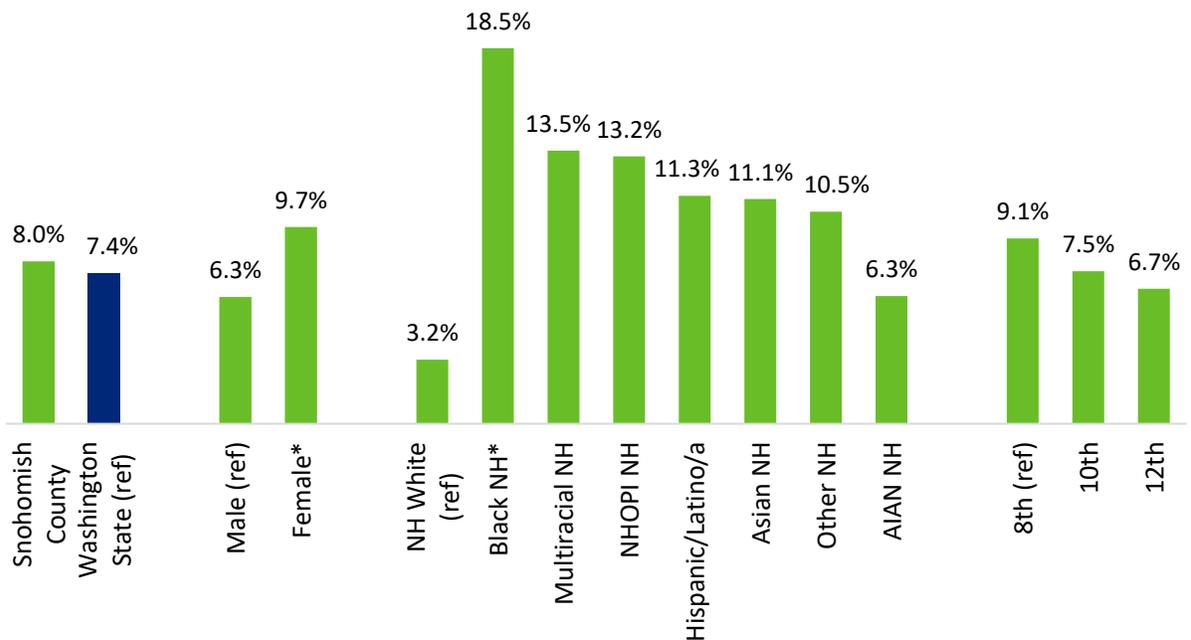
Healthy interpersonal relationships with peers are a critical part of an adolescent’s development. Among Snohomish County students in 6<sup>th</sup> through 12<sup>th</sup> grade, more than 1 in 5 students said they had experienced a form of bullying in the last 30 days.<sup>8</sup> Students in 8<sup>th</sup> through 12<sup>th</sup> grade were asked about bullying due to specific topics; 8.0% of these students said they had been bullied due to their race/ethnicity and 11.3% said they were bullied because of their sexual orientation or gender identity (SOGI; Figures 6.10 and 6.11). Girls and younger students tended to report experiences of bullying more often, particularly related to SOGI (Figures 6.10 and 6.11).

Especially notable were the racial/ethnic disparities in reports of bullying, with non-Hispanic Black students being far more likely to have been bullied due to race than other students, and non-Hispanic White students far less likely to be bullied due to race than any other group (Figure 6.10).<sup>7</sup>

“ Women and LGBTQ+ individuals who go to this school are affected a lot because it’s not the most forgiving environment...especially for the queer community because we have people that aren’t the kindest here. I’ve experienced it firsthand. And I’ve seen things that happen to trans kids that honestly shouldn’t be acceptable. ”

- High school student

Figure 6.10: Percent of students<sup>†</sup> in Snohomish County who experienced bullying in the last 30 days because of race/ethnicity by demographic characteristics, 2021



\* Indicates statistically significant difference compared to reference group (ref)

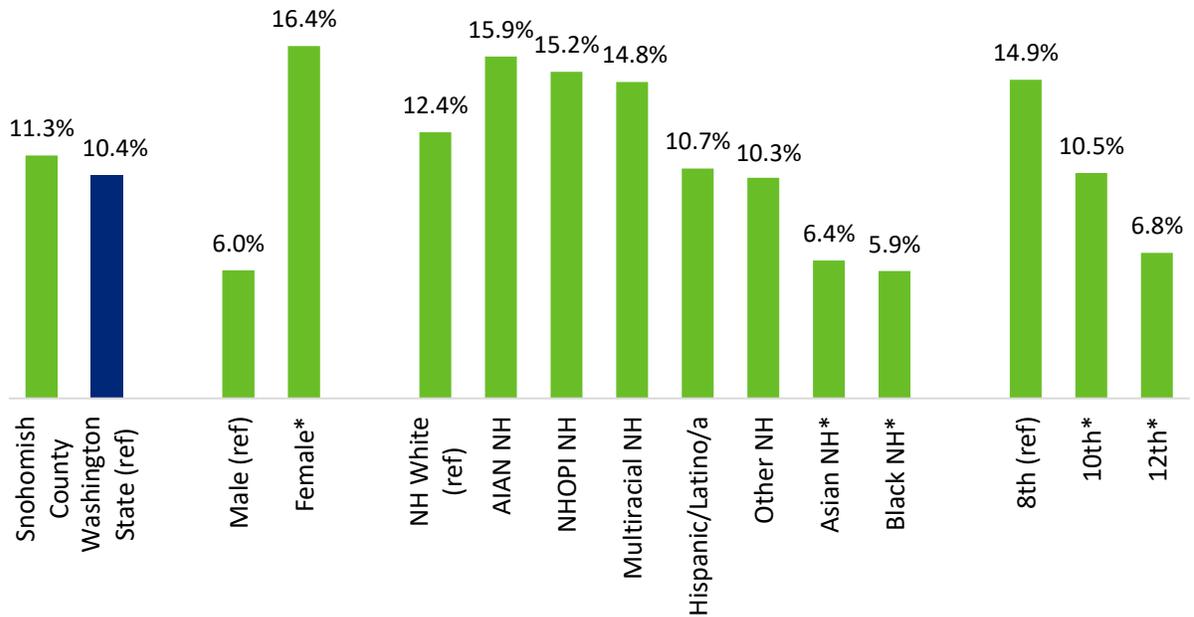
† 8<sup>th</sup> - 12<sup>th</sup> grades

Source: HYS, 2021

# Behavioral and Mental Health (cont.)

Major differences exist in racial/ethnic groups by reports of bullying due to SOGI, as well. Non-Hispanic Black students were much less likely to be bullied due to SOGI and non-Hispanic American Indian/Alaska Native students were most likely (Figure 6.11).

Figure 6.11: Percent of students<sup>†</sup> in Snohomish County who experienced bullying in the last 30 days because of sexual orientation or gender identity by demographic characteristics, 2021



\* Indicates statistically significant difference compared to reference group (ref)

† 8<sup>th</sup> - 12<sup>th</sup> grades

Source: HYS, 2021

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There can be many reasons members of a community may engage in substance use. Numerous pharmaceuticals have revolutionized the way we treat pain, disability, and psychological distress. Substance use becomes a public health concern when it leads to ill physical or mental health effects, including dependence, dangerous levels of use such as overdose and addiction, social isolation, or other potential detrimental effects. There is growing evidence that structural and community disruptions related to the COVID-19 pandemic have negatively impacted substance use trends.<sup>1-3</sup>



With addiction, it's a disease that affects the part of your brain that you need to make proper decisions...and so the impulsivity, the impatience, and the setbacks...the setbacks are especially daunting...so it's at those times when people need the bedrock support more than ever.

- Community partner, mental health and addiction treatment

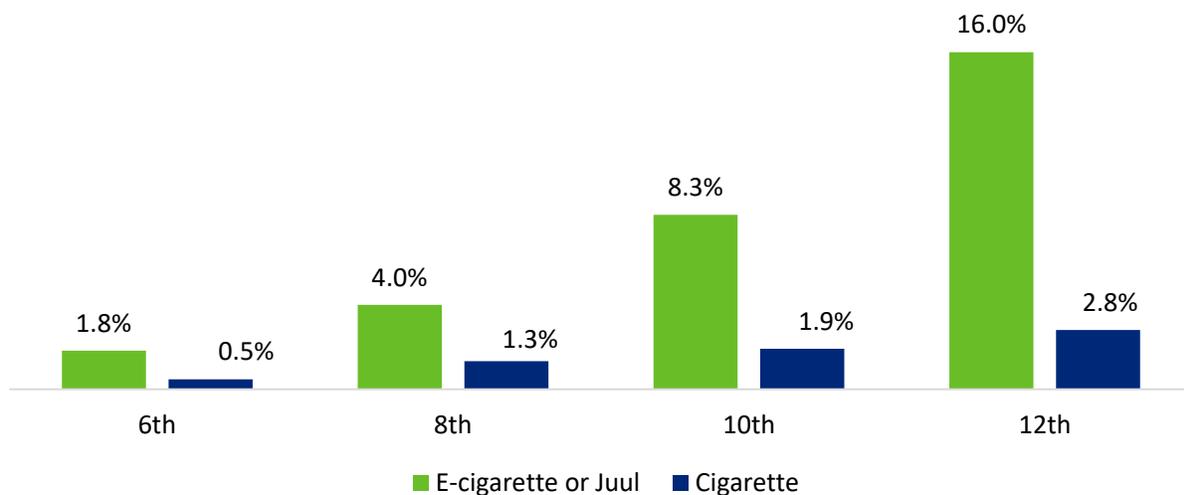


## Tobacco

Nicotine is an addictive substance found in tobacco products like cigarettes and e-cigarettes. Most adults who smoke daily begin using tobacco in their adolescence, when the developing brain is the most susceptible to nicotine addiction.<sup>4</sup>

Anti-smoking campaigns have had historical success as a public health intervention. Snohomish County is exceeding both the adult and youth-focused cigarette smoking goals put forth by HP2030.<sup>5,6</sup> Differences in cigarette smoking prevalence by race/ethnicity and gender are minimal among both youth and adults. Just in recent years in Snohomish County, adult cigarette smoking has declined 20% from 2018 to 2021 and youth cigarette smoking declined 58%.<sup>7,8</sup> Some of this reduction among youth may have been replaced by youth vaping.<sup>9</sup> Over 8% of 10<sup>th</sup> graders and 16% of 12<sup>th</sup> graders had used an e-cigarette in the last 30 days at the time of the Healthy Youth Survey in 2021 (Figure 7.1).<sup>8</sup>

Figure 7.1: Percent of students<sup>†</sup> in Snohomish County who reported using tobacco in the last 30 days, 2021



† 6<sup>th</sup> - 12<sup>th</sup> grades

Source: HYS, 2016-2021

# Substance Use (cont.)

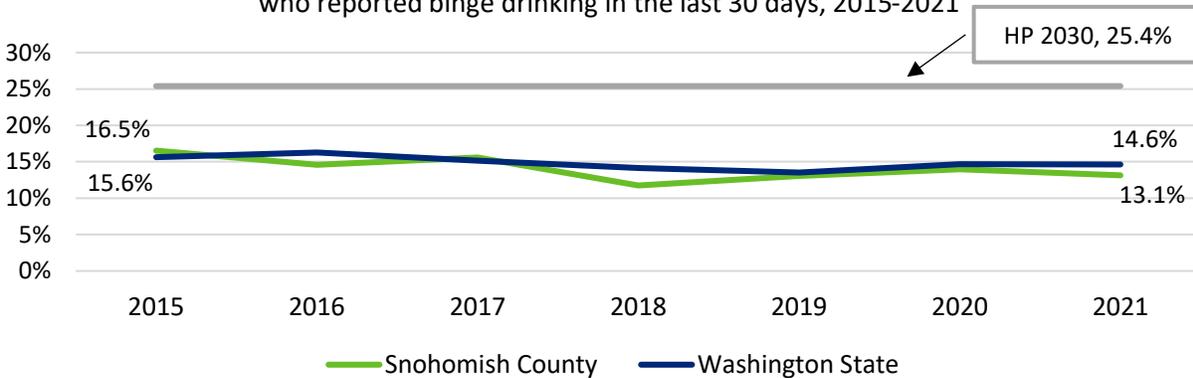
## Binge drinking

Binge drinking is defined as 5 or more drinks on an occasion for men or 4 or more drinks on an occasion for women. Binge drinking is a high-risk behavior that can lead to injuries, violence, chronic diseases, increased risk for cancers, and many other unfavorable outcomes, including death.<sup>10</sup> In 2021, the percent of adults who reported binge drinking in the last 30 days was 13.1%, which was a small decrease over some recent years (Figure 7.2). Snohomish County and Washington State both have much lower rates of binge drinking compared to the U.S. average (estimated 26.0% as of 2019) and are exceeding the Healthy People 2030 goal of less than 25.4%.<sup>11,12</sup>

“ There is such a lack of drug and alcohol programs that are supportive in terms of the queer community.  
- LGBTQIA+ community member, adult ”

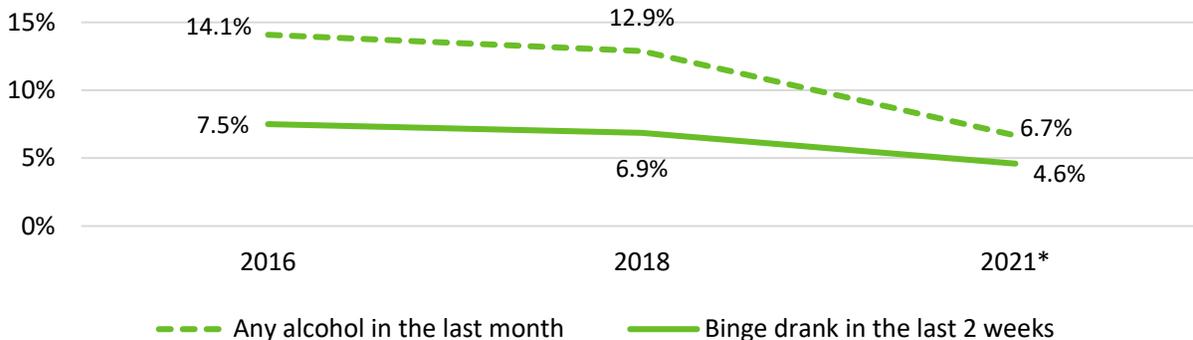
Among Snohomish County students in 6<sup>th</sup> through 12<sup>th</sup> grade, 4.6% reported binge drinking in the last two weeks, a significant decrease over recent years (Figure 7.3). However, among 12<sup>th</sup> grade students, 11.0% reported binge drinking in the last two weeks.<sup>8</sup>

Figure 7.2: Percent of adults in Snohomish County and Washington State who reported binge drinking in the last 30 days, 2015-2021



Source: BRFSS, 2015-2021; HP 2030

Figure 7.3: Percent of students<sup>†</sup> in Snohomish County who reported recent alcohol use, 2016-2021



\* Indicates statistically significant difference compared to previous years shown

† 6<sup>th</sup> - 12<sup>th</sup> grades

Source: HYS, 2016-2021

# Substance Use (cont.)

## Overdose

Overdose mortality rates for all drug types have been increasing in Snohomish County in recent years.<sup>13</sup> This increase has also been observed in statewide and nationwide average rates.<sup>13-16</sup> Snohomish County has a statistically higher overdose mortality rate in 2020 than the Washington State average and is significantly exceeding the Healthy People 2030 goal (Figure 7.4).<sup>13,17</sup>

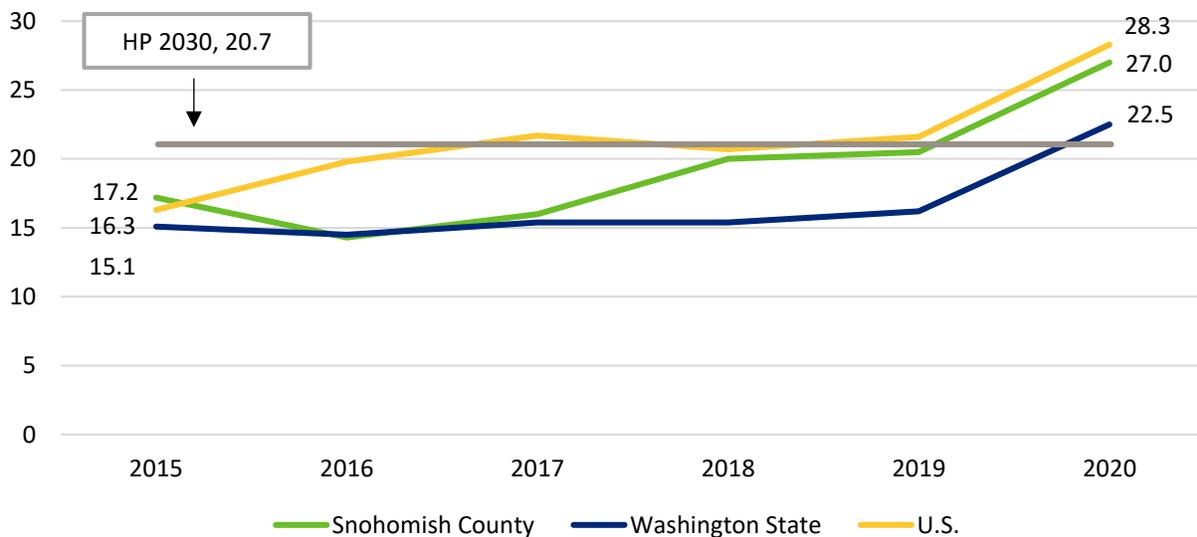
“

It’s a very real thing. Whether it’s [an] accidental or intentional overdose, each one of those situations is a missed opportunity, to say the least.

- Community partner, mental health and addiction treatment

”

Figure 7.4: Rate of overdose deaths by any drug per 100,000 in Snohomish County, Washington State, and U.S., 2015-2020



Source: WA DOH CHAT, CHS Death Certificate Data, 2015-2020; CDC WONDER 2015-2020; HP 2030

“

One of the big gaps in our community...is access to detox or [substance use] treatment. Our staff work incredibly hard to build trust and rapport with youth who are struggling with addiction, and when they get that young person [to finally agree and want to get help], and then we pick up the phone and you can’t do it. That happens. And to watch our staff sink is really tough. There’s not only a need for bigger capacity, but I think the uniqueness of young adults is they’re legally adults, but they’re a little fish in a big adult pond. They’re so vulnerable and I wish we could do a better job as a community at calling out young adults and separate [them] from the adult system.

- Community partner, works with at-risk youth and young adults

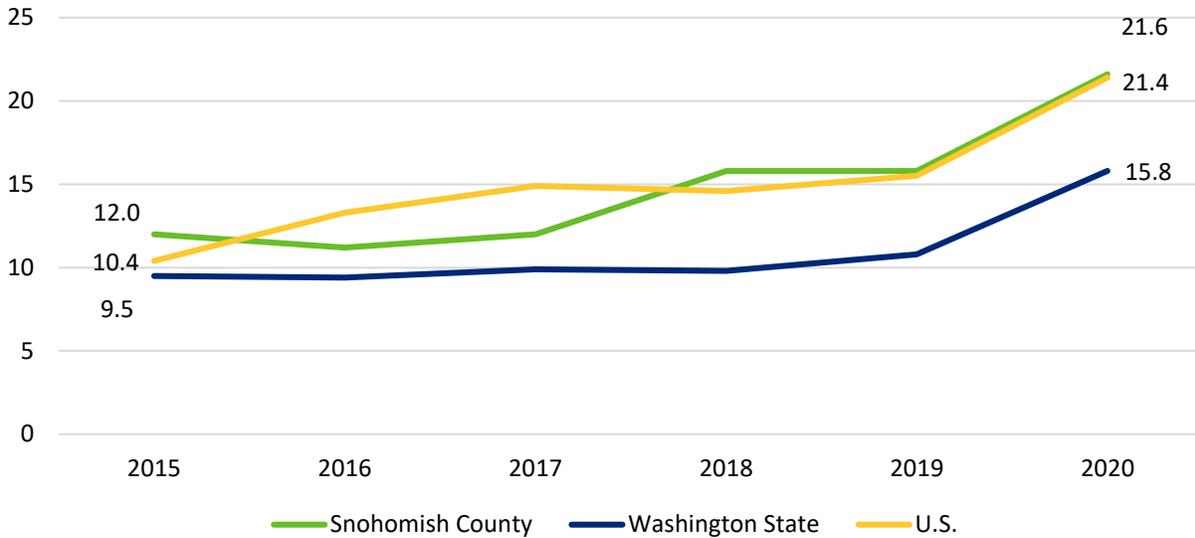
”

# Substance Use (cont.)

## Opioid overdose

In the United States in 2020, nearly 75% of drug overdose deaths involved an opioid. These overdose deaths increasingly involve synthetic opioids like fentanyl.<sup>13</sup> This nationwide trend is reflected in Snohomish County statistics.<sup>13-14</sup> In the last few years, opioid overdose mortality has nearly doubled in Snohomish County and has remained statistically higher than the statewide rate (Figure 7.5). This increase has been widely attributed to the availability and high-risk use of illicit fentanyl.<sup>18</sup>

Figure 7.5: Opioid overdose death rate per 100,000 in Snohomish County, Washington State, and U.S., 2015-2020



Source: WA DOH CHAT, CHS Death Certificate Data, 2015-2020; CDC WONDER 2015-2020

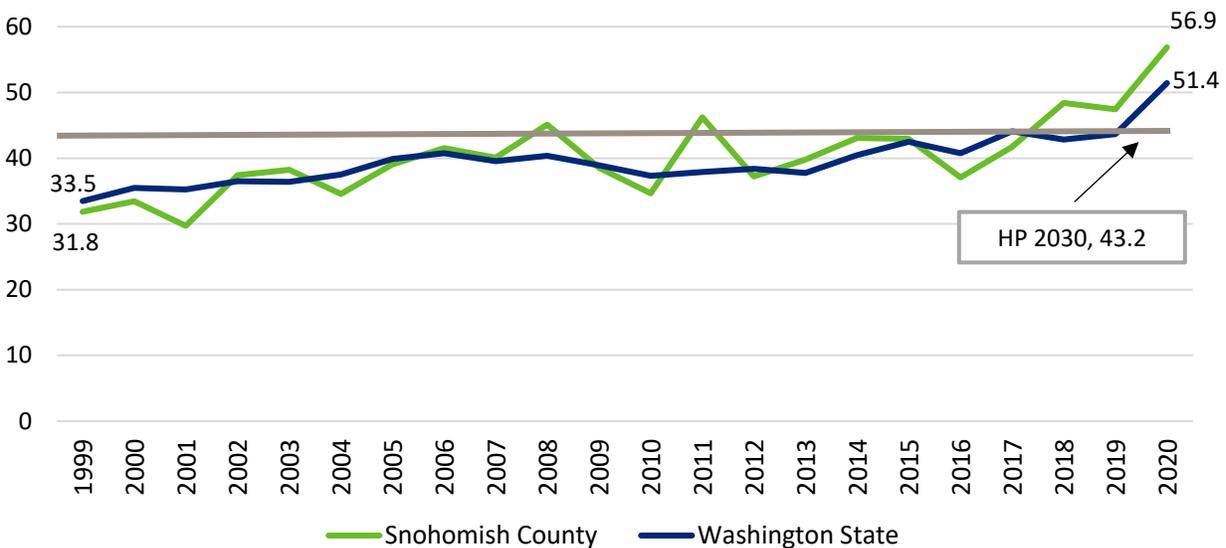
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While some accidents and injuries are not preventable, many can be avoided with appropriate health and safety behaviors. Interventions such as wearing seatbelts and helmets at the right time, learning to swim, and safe storage of firearms have been effective cornerstones of public health injury prevention for decades.<sup>1</sup>

## Unintentional injuries (accidents)

Unintentional injuries (accidents) are among the top five leading causes of death in Snohomish County and in the United States overall.<sup>2,3</sup> This category of mortality includes falls, drug overdoses, and motor vehicle crashes. In 2020, the rate of unintentional injury in Snohomish County was 56.9 per 100,000 people. This rate has been increasing slightly but steadily since at least 1999, and more acutely since 2016.<sup>2</sup> Snohomish County has continued to be statistically similar to the statewide average rate for this measure, and is not meeting the Healthy People 2030 goal of 43.2 per 100,000 (Figure 8.1).<sup>2,3</sup>

Figure 8.1: Unintentional injury death rate per 100,000 in Snohomish County and Washington State, 1999-2020



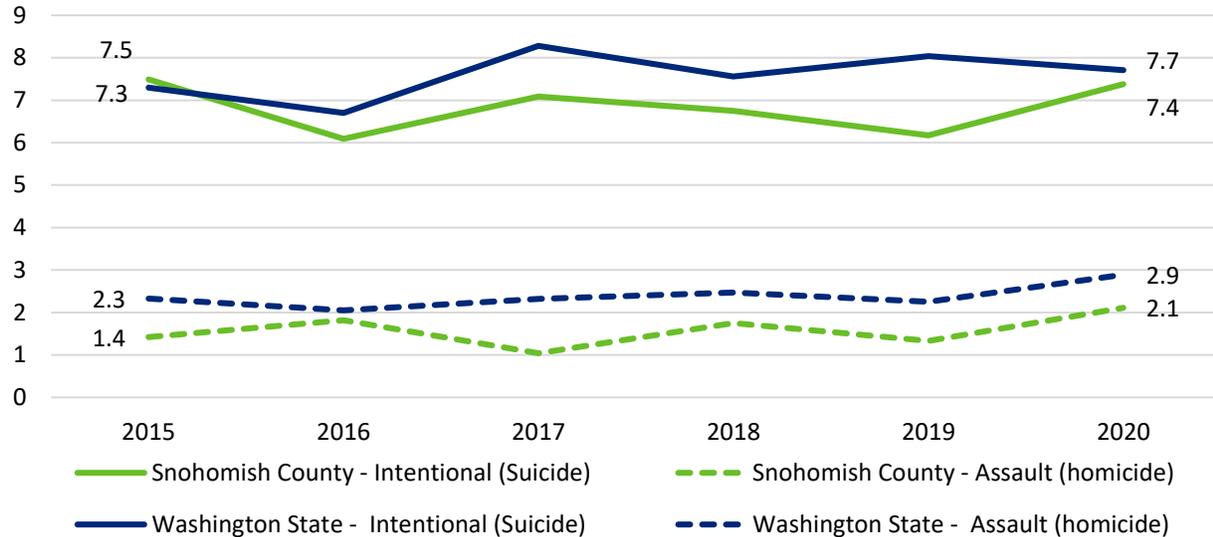
Source: WA DOH CHAT, CHS Death Certificate Data, 1999-2020; HP 2030

## Firearm-related injuries and safety

Firearm-related injuries are among the greatest contributors to the injury mortality burden in Snohomish County. In 2020, there were 9.5 firearm-related deaths for every 100,000 people in Snohomish County. Over the last several years, these rates stayed generally steady. In order of prevalence, these injuries were due to intentional injury (suicide), assault (homicide), and accidental discharge (Figure 8.2).<sup>2</sup> Accidental discharge firearm injury deaths are very rare in Snohomish County and have, therefore, been omitted from figure 8.2; however, hospitalizations due to accidental firearm discharge are more common (4.0 hospitalizations per 100,000 population in 2020).<sup>4</sup> Snohomish County met the Healthy People 2030 goal of fewer than 10.4 firearm-related deaths per 100,000 population in 2020, but not among all demographic subgroups.<sup>2,5</sup> Men and young adults are the most likely to die due to firearm injury, and Snohomish County residents are less likely to die due to a firearm injury compared to the Washington State average and the U.S. average.<sup>2,6</sup>

# Injury Prevention and Safety (cont.)

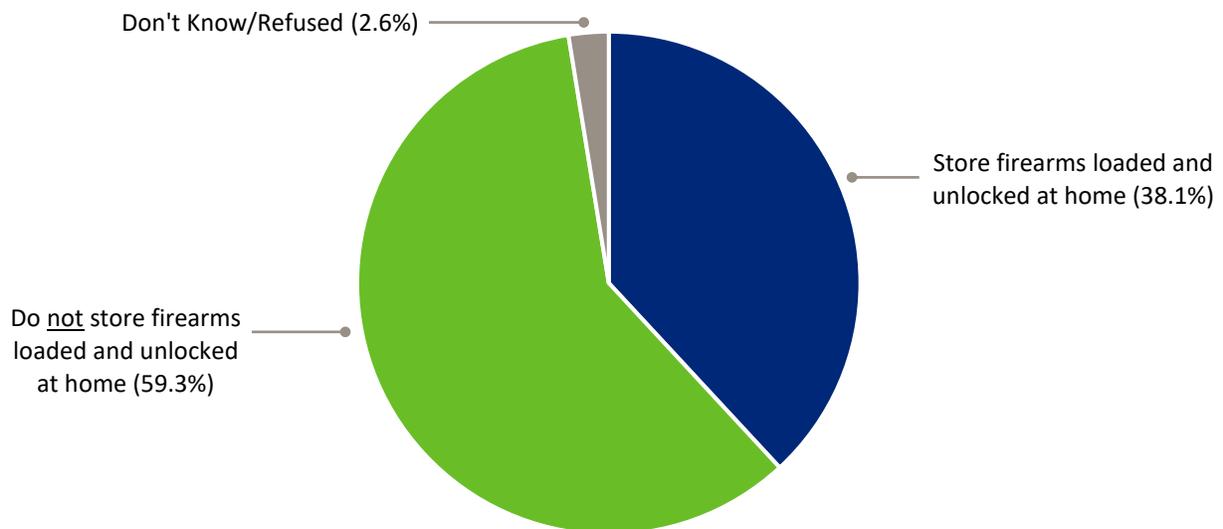
Figure 8.2: Firearm injury death rate per 100,000 in Snohomish County and Washington State by intent, 2015-2020



Source: WA DOH CHAT, CHS Death Certificate Data, 2015-2020

Safe storage of firearms is an effective mitigation measure against gun violence injury. This includes storing a firearm unloaded and locked away safely. As of 2020, an estimated 29.5% of Snohomish County adults had a firearm in their home.<sup>7</sup> Of those who have a firearm in their home, 38.1% indicated they store them loaded and unlocked (Figure 8.3).

Figure 8.3: Percent of adult gun owners in Snohomish County by reported storage of firearms in the home, 2020



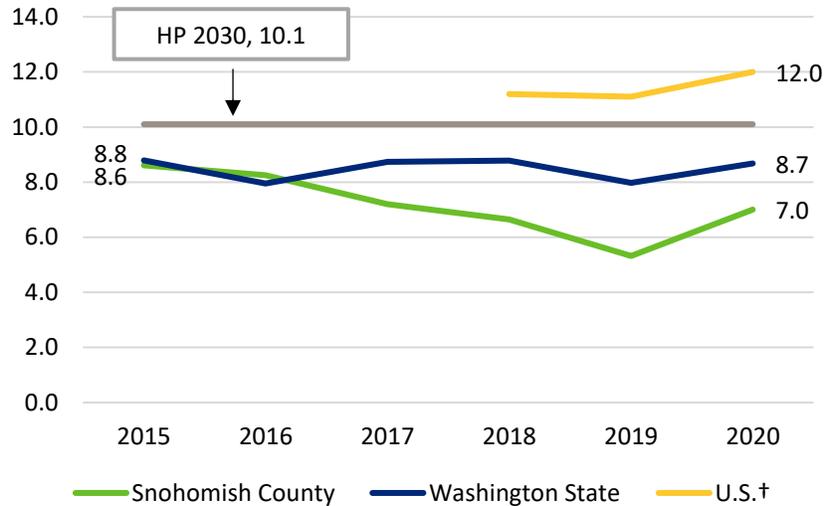
Source: BRFSS, 2020

# Injury Prevention and Safety (cont.)

## Safe driving

Motor vehicle collision-related mortality is another leading cause of preventable injury death in Snohomish County. In 2020, the rate of mortality due to motor vehicle collisions was 7.0 deaths per 100,000 population. 2020 brought the first year-over-year increase in this rate in the last several years, after declining since at least 2015.<sup>2</sup> Snohomish County has had a lower rate of motor vehicle collision-related mortality compared to statewide and national rates (Figure 8.4).<sup>2,6</sup> From 2015-2020, males had a motor vehicle collision-related mortality rate of more than twice that of females.<sup>2</sup>

Figure 8.4: Motor vehicle collision death rate per 100,000 in Snohomish County, Washington State, and the U.S., 2015-2020



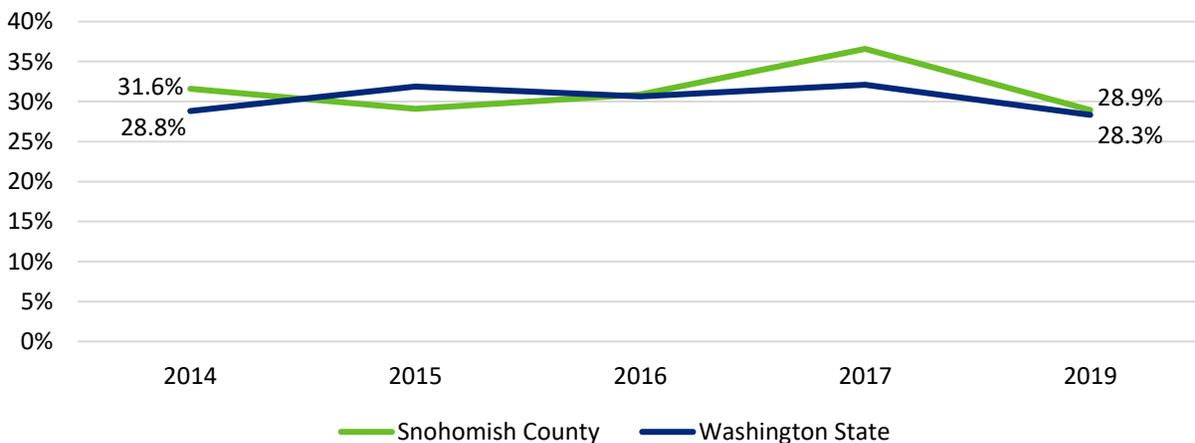
† Data unavailable prior to 2018

Source: WA DOH CHAT, Certificate Data, 2015-2020, HP2030 2018-2020

## Texting while driving

Texting while driving, driving after drinking alcohol, and driving after using marijuana are behaviors that contribute to motor vehicle crashes. From 2014-2019, the percentage of adults who reported that they had texted while driving in the last 30 days stayed steadily around 30% (Figure 8.5).<sup>7</sup>

Figure 8.5: Percent of adults in Snohomish County and Washington State who reported texting while driving in the last 30 days, 2014-2019



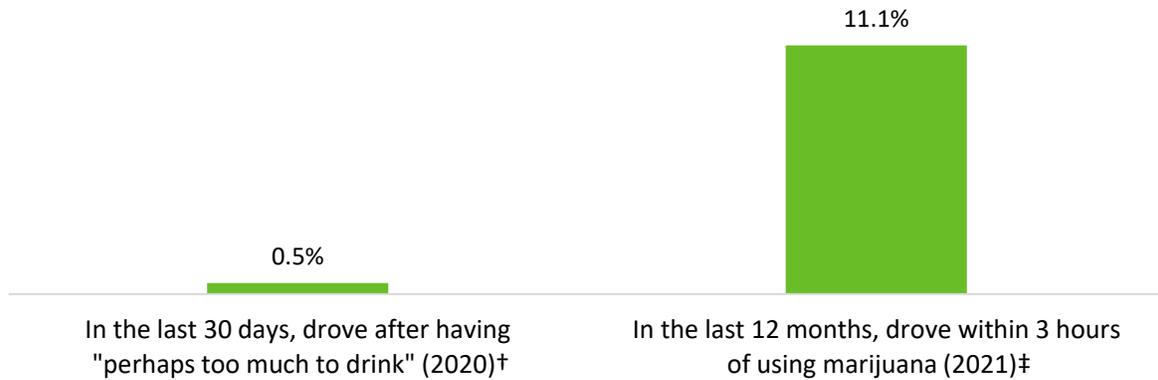
Source: BRFSS, 2014-2019

# Injury Prevention and Safety (cont.)

## Impaired driving

In 2020, 0.5% of adults surveyed indicated they had driven after drinking too much alcohol (Figures 8.6). In 2021, 0.9% of students surveyed reported they had driven after drinking alcohol (Figure 8.7). In 2021, 11.1% of adults surveyed and 2.3% of students said they had driven within 3 hours of using marijuana (Figures 8.6 and 8.7).<sup>7</sup>

Figure 8.6: Percent of adults in Snohomish County by reported impaired driving behavior, 2020<sup>†</sup> and 2021<sup>‡</sup>



Source: BRFSS, 2020, 2021

There is currently inadequate historical data to detect a trend, but Snohomish County is similar to the Washington State average for both alcohol and marijuana use behaviors.<sup>7,8</sup>

Figure 8.7: Percent of students<sup>†</sup> in Snohomish County by reported impaired driving behavior in the last 30 days, 2021



<sup>†</sup> 10<sup>th</sup> - 12<sup>th</sup> grades

Source: HYS, 2021

Communicable or infectious diseases are illnesses that are due to specific biological organisms, such as bacteria, viruses, parasites, and fungi. These organisms are transmitted to humans through a variety of ways, including human-to-human spread, from animals (zoonoses), and from our environment (food, water, air, surfaces). The communicable diseases evaluated for this community health assessment include emerging infections, vaccine preventable diseases, rates of vaccine uptake, enteric (diarrheal) illness, hepatitis, sexually transmitted diseases (STDs), and tuberculosis (TB).

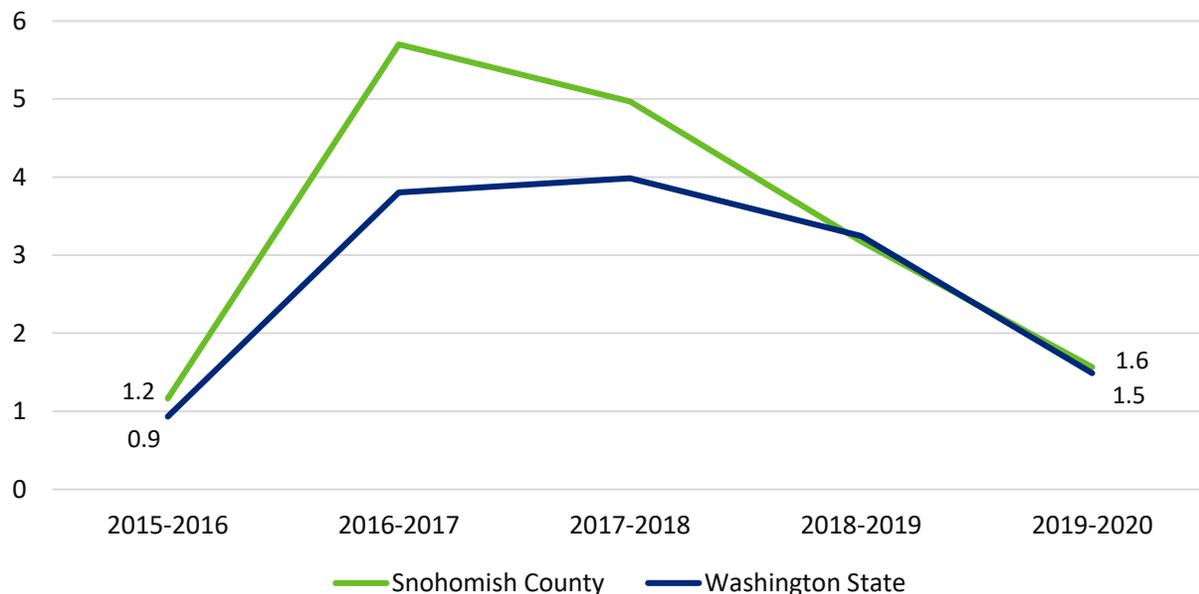
The COVID-19 pandemic had, and continues to have, a significant impact on other communicable diseases.<sup>1,2</sup> Disease control measures put in place for COVID-19 (social distancing, masking) also impact the spread of other illnesses. The impact of COVID-19 on other communicable diseases was considered when reviewing communicable disease data indicators.

“ [COVID is] still having its toll and it’s still having an impact.  
- Community partner,  
public service and community resource center ”

## Influenza (flu)

Rates of vaccine preventable diseases have dropped dramatically since the beginning of the COVID-19 pandemic in 2020.<sup>3,4</sup> Influenza-related deaths, during the reporting time period, were much lower compared to previous seasons (Figure 9.1).<sup>3</sup> This is likely due to COVID-19 control measures. Influenza vaccination rates are below the national goal and need improvements to prevent future spread of influenza in our community.<sup>3,5-7</sup>

Figure 9.1: Influenza-related deaths per 100,000 in Snohomish County and Washington State, 2015-2016 to 2019-2020 season



Source: WA DOH CHAT, 2015-2020

# Communicable Disease (cont.)

## Child immunizations

The impact of the pandemic on school immunization rates is still being evaluated. Pre-pandemic, overall school immunization rates were near 90% completion for all immunizations. However, there are some disparities between rural and urban school districts in Snohomish County, with higher exemption rates seen in rural school districts (Figure 9.2).<sup>8</sup>

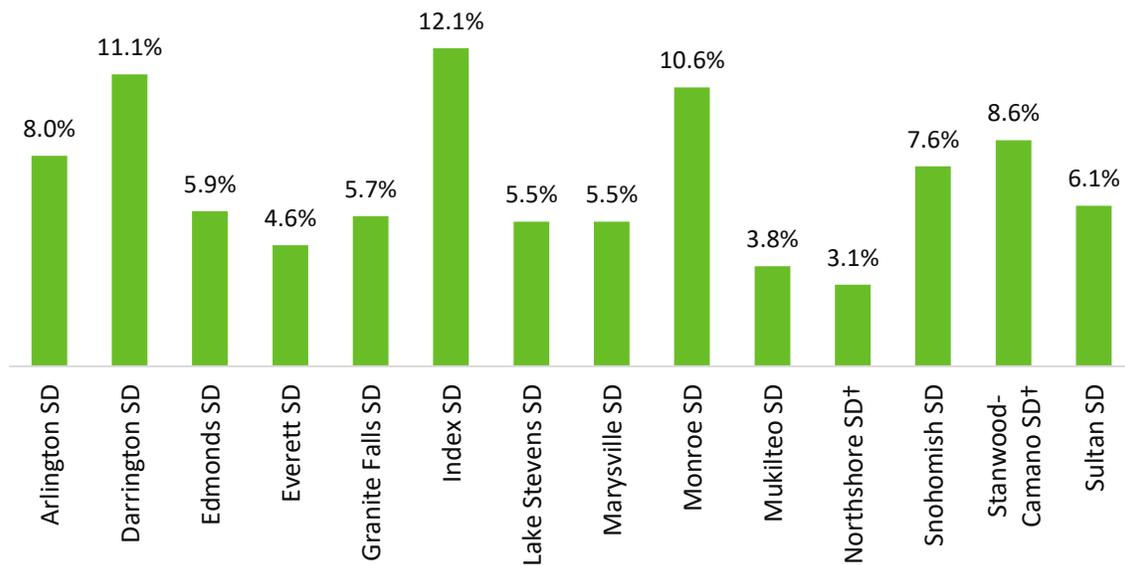


It's been pretty alarming that we have...a misinformed public [regarding vaccinations]...I don't think the answer to the disinformation is ignoring it. That's not working. It's getting worse. I think that it really needs to be a big strategy. Because these kids, they need their vaccines. And we went into it before COVID already with MMR. A lot of educated people choosing not to get their kids vaccinated. And then it got even worse with COVID.

- Immunocompromised and disabled community



Figure 9.2: Percent of immunization exemptions in Snohomish County by school district (SD), 2018-2019 school year



† School district includes schools from Snohomish County and neighboring county

Source: WA IIS, School District Immunization Dashboards, 2018-2019 school year

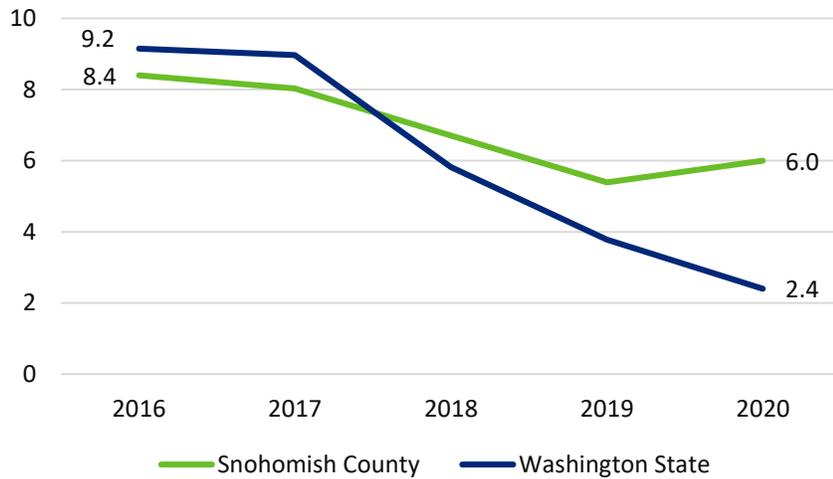
# Communicable Disease (cont.)

## Enteric illness

The overall rates of enteric (diarrheal) illnesses have remained stable in Snohomish County. [3,4,9-11](#)

One exception is the rates of giardiasis. Giardia is a single-celled parasite. People are infected through contaminated water, food, contact with infected animals, and from other people. In 2020, the rate of giardiasis in Snohomish County was significantly higher than the rate seen in Washington State as a whole (Figure 9.3).

Figure 9.3: Giardiasis case rate per 100,000 in Snohomish County and Washington State, 2016-2020

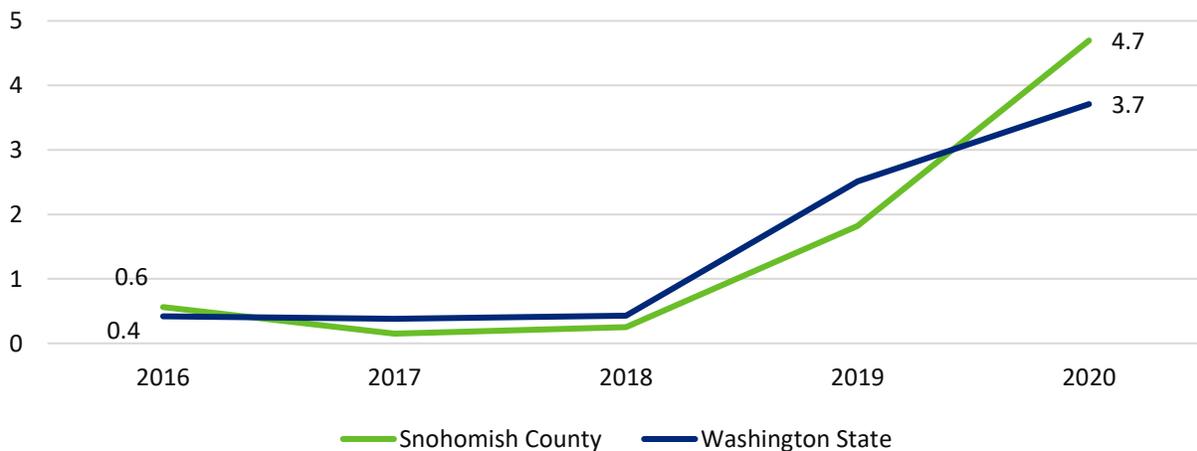


Source: WA DOH CHAT, 2016-2020

## Hepatitis A

Viral hepatitis can cause both acute and chronic illnesses. In 2019 and 2020 there was a significant increase in hepatitis A cases compared to the state (Figure 9.4). [3,4,12-14](#) During this time there was an ongoing outbreak of hepatitis A amongst people who inject drugs (PWID). Injecting non-prescription drugs is a known risk factor for hepatitis A. While hepatitis A is vaccine-preventable, the PWID population often does not have access to or receive preventative, primary health care. Vaccinating this group was a central part of the outbreak response efforts.

Figure 9.4: Hepatitis A case rate per 100,000 in Snohomish County and Washington State, 2016-2020



Source: WA DOH CHAT, 2016-2020

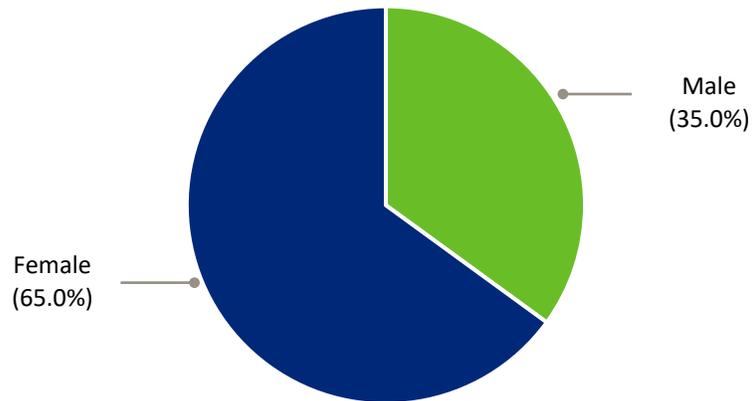
# Communicable Disease (cont.)

## Sexually transmitted diseases (STDs)

Sexually transmitted diseases account for the highest number of communicable diseases in Snohomish County.<sup>3,4,15-18</sup> While local rates of new HIV infections have lowered, the rate of chlamydia in Snohomish County is higher than that of Washington State. Chlamydia has a greater impact on women than men, with women making up almost two-thirds of all cases in 2020 (Figure 9.5).

[Recent syphilis trends](#) since 2020 in Snohomish County and Washington State are showing increased cases among heterosexual women, including during pregnancy. A special project looking further into this trend will be completed.

Figure 9.5: Percent of chlamydia cases in Snohomish County by gender, 2020

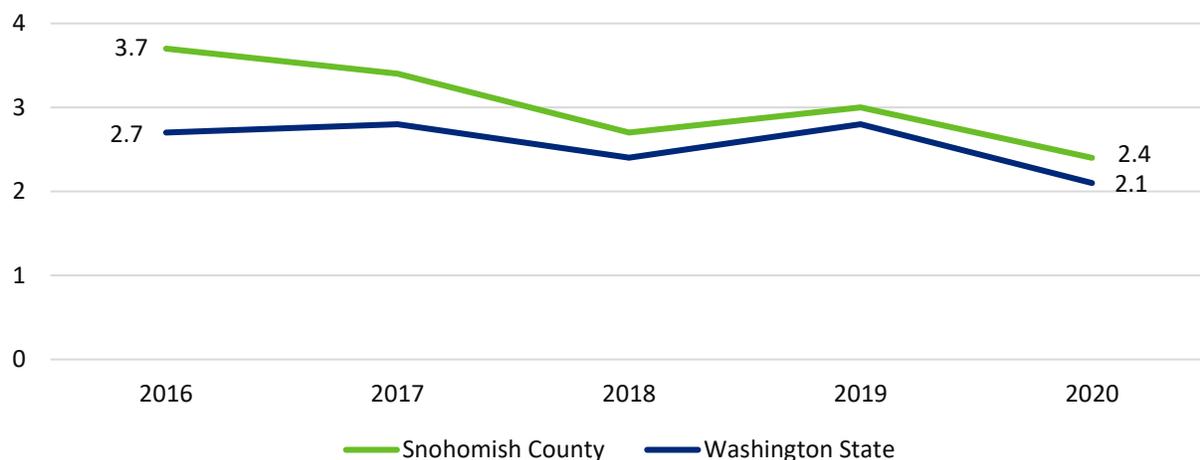


Source: WA DOH CHAT, 2020

## Tuberculosis (TB)

Snohomish County has the 2<sup>nd</sup> highest rate of tuberculosis (TB) in Washington State. Tuberculosis is highly infectious and can have devastating consequences if left untreated. The rate of TB has gone down in Snohomish County between 2016 and 2020 (Figure 9.6).<sup>3,4,17</sup> This downward trend may be an artifact of the COVID-19 pandemic. Many people delayed medical care during 2020 and 2021 and as a result delayed TB diagnosis and treatment. Asian and Pacific Islanders who were born in other countries are the most impacted groups in Snohomish County. More needs to be done with these communities to detect, treat, and prevent the spread of TB.

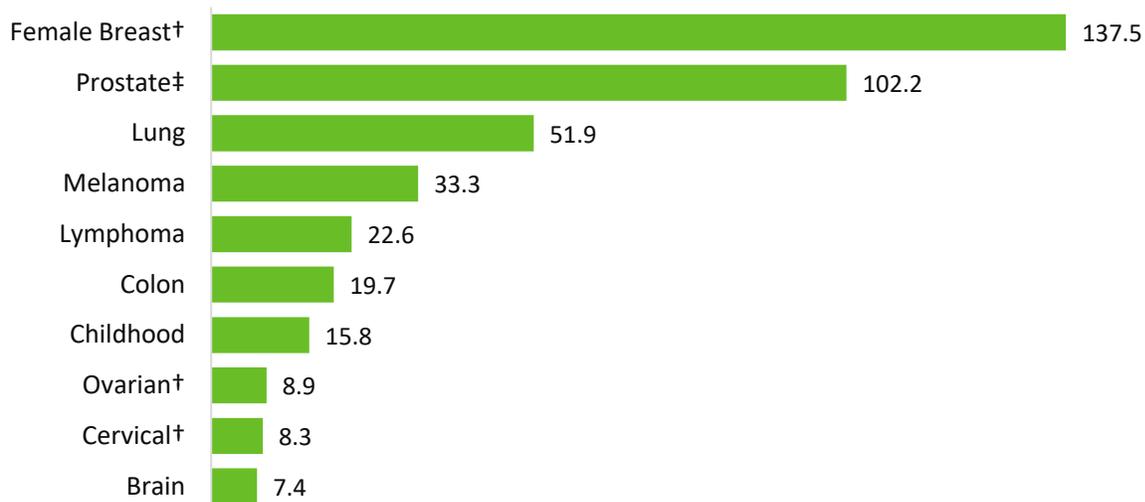
Figure 9.6: Tuberculosis case rate per 100,000 in Snohomish County and Washington State, 2016-2020



Source: WA DOH CHAT, 2016-2020

Cancer is a group of diseases characterized by the uncontrolled growth of abnormal cells in the body. Cancer, if not caught early, can cause significant illness, loss of quality of life, and death. Regular cancer screenings are important to detect and treat cancer in its early stages. The top four cancers in Snohomish County are female breast cancer, prostate cancer, lung cancer, and melanoma (Figure 10.1).<sup>1</sup>

Figure 10.1: Top 10 cancer rates per 100,000 in Snohomish County, 2019



† Denominator is female population only

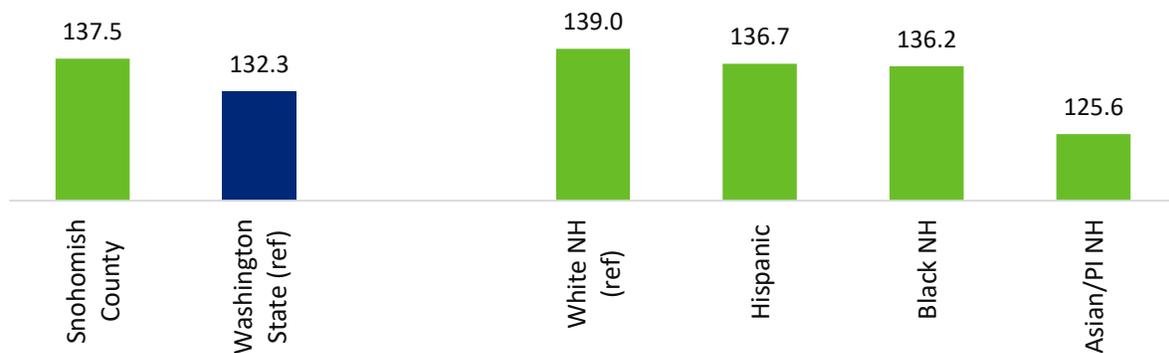
‡ Denominator is male population only

Source: WA DOH CHAT, WSCR, 2019

## Breast cancer

Female breast cancer incidence was steady from 2015 through 2019. There was a slight increase in breast cancer rates in 2017 which fell in subsequent years. Snohomish County and Washington State have similar rates, and there were no statistical differences seen amongst different racial/ethnic groups (Figure 10.2).

Figure 10.2 Breast cancer rate per 100,000 women in Snohomish County by race/ethnicity, 2019<sup>†</sup>



No statistically significant differences were detected compared to reference group (ref)

† AIAN NH sample size too small to display

Source: WA DOH CHAT, WSCR, 2019

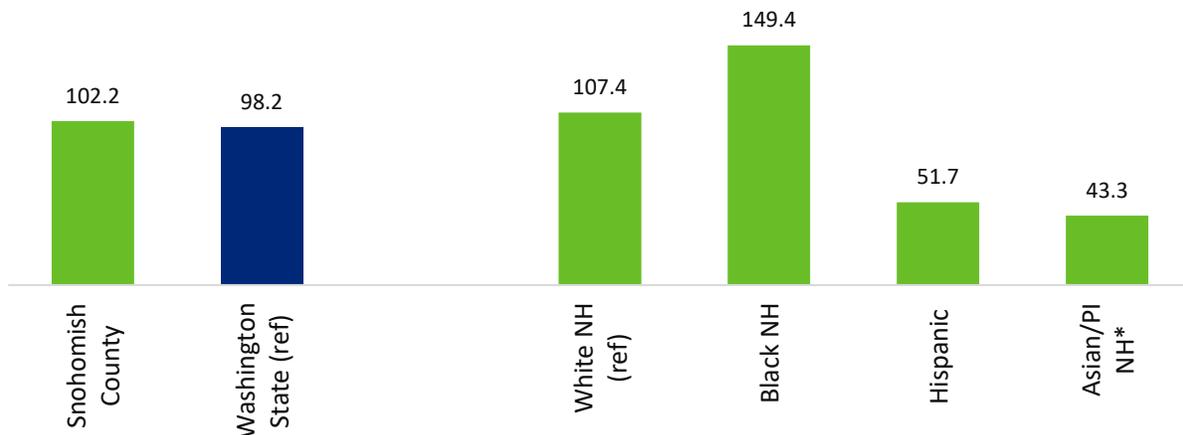
Early detection of female breast cancer can help mitigate the need for more aggressive treatment, which preserves quality of life and reduces mortality from breast cancer. Until May of 2023, the CDC and United States Preventive Services Task Force (USPSTF) recommended that women aged 50 to 74 years undergo screening for breast cancer every two years.<sup>2</sup> According to the most recent BRFSS data, in 2020, 69.2% of Snohomish County women, aged 50 to 74 years old, reported that they had a mammogram in the last two years. BIPOC women reported getting a mammogram in the past two years less frequently than non-Hispanic White women (62.4% vs. 70.6% in 2020).<sup>3</sup> In the future, data from the BRFSS survey will provide insights into the percentage of women in Snohomish County who adhere to the anticipated updated USPSTF recommendation, which suggests that women aged 40 to 74 years should undergo screening for breast cancer every two years.<sup>4</sup>

## Prostate cancer

In Snohomish County, prostate cancer incidence has remained mostly steady with a slight increase from 98.7 cases per 100,000 in 2015 to 102.2 per 100,000 in 2019. Snohomish County rates are similar to the rates seen in Washington State (Figure 10.3).<sup>1</sup>

The non-Hispanic Black population in Snohomish County had the highest rate of prostate cancer at 149.4 cases per 100,000 when compared to other groups. This is a meaningful but not statistically significant disparity (Figure 10.3).<sup>1</sup> Overall, Black or African American men are known to have a higher risk of developing prostate cancer compared to other racial groups.<sup>5</sup> Non-Hispanic Asians and Pacific Islanders had a statistically lower rate of prostate cancer when compared to non-Hispanic Whites.

Figure 10.3: Prostate cancer rate per 100,000 men in Snohomish County by race/ethnicity, 2019



\* Indicates statistically significant difference compared to reference group (ref)

† AIAN NH sample size too small to display

Source: WA DOH CHAT, WSCR, 2019

Prostate cancer screening guidelines have changed over the years. Currently, screening is based on individual risk factors, and men aged 55 to 69 years should discuss their risks with their doctor to determine if screening is appropriate for them. Many men with prostate cancer, especially those with localized disease, die from other causes without ever having any symptoms from the cancer.<sup>6</sup> In 2020 in Snohomish County, 20.1% of men aged 40 and older had a PSA test in the last 2 years.<sup>3</sup> There were no significant differences in PSA screening amongst racial and ethnic groups.

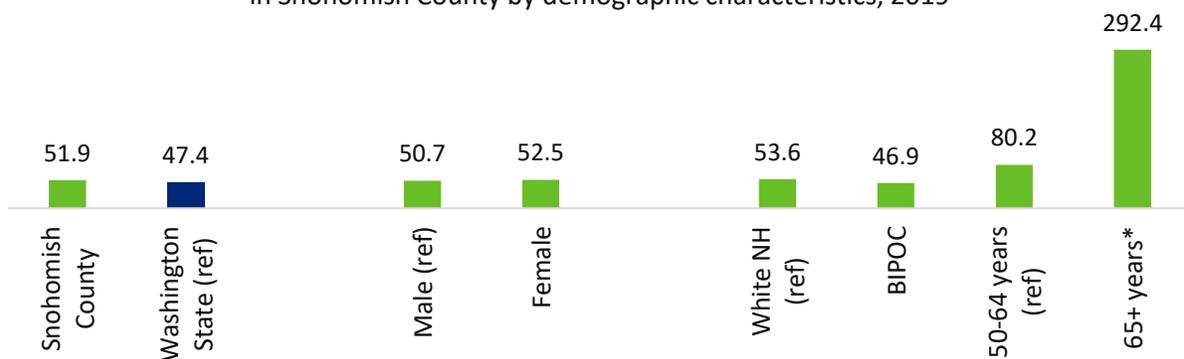
# Cancer (cont.)

## Lung cancer

Lung cancer is the leading cause of cancer death in the U.S., and it is the third most common cancer within Snohomish County.<sup>7</sup> In 2020, there were nearly 26 deaths due to lung cancer per 100,000 people in Snohomish County.<sup>8</sup> Lung cancer rates are similar in Snohomish County when compared to Washington State (Figure 10.4).<sup>1</sup>

Hispanic populations had the highest rate of lung cancer, at 78.5 cases per 100,000. Lung cancer in Snohomish County is mostly isolated to populations aged 65 years and older (Figure 10.4).<sup>1</sup> The top risk factors for lung cancer are cigarette smoking and secondhand smoke exposure. More research is needed on the association between other forms of smoking, such as vaping or cannabis, and lung cancer.<sup>9</sup>

Figure 10.4: Lung (and bronchus) cancer rate per 100,000 in Snohomish County by demographic characteristics, 2019



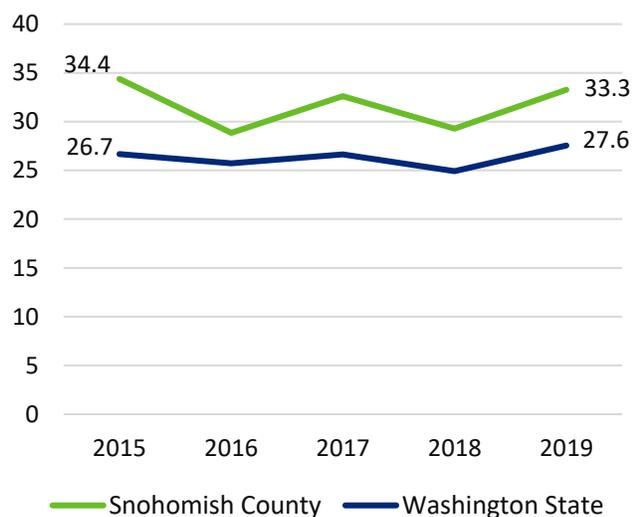
\* Indicates statistically significant difference compared to reference group (ref)

Source: WA DOH CHAT, WSCR, 2019

## Melanoma

Melanoma is a type of skin cancer that begins in the cells (melanocytes) that produce pigment in the skin. Melanoma incidence has remained steady since 2015 with 32.7 cases per 100,000 people in 2019. Snohomish County has a statistically higher rate of melanoma than Washington State (Figure 10.5). Melanoma was almost exclusively diagnosed in non-Hispanic White individuals. The higher incidence among non-Hispanic White individuals reflects what is seen nationally, though this disparity may be in part due to differences in screening practices and disparities in access to care among different racial/ethnic groups. Most other racial/ethnic groups either had no reported incidents or had case numbers too low to display in this report.<sup>1</sup>

Figure 10.5: Melanoma rate per 100,000 in Snohomish County and Washington State, 2015-2019



Source: WA DOH CHAT, WSCR, 2015-2019

A chronic disease is defined as a health condition that lasts for one or more years and requires ongoing medical attention, limits activities of daily living, or both. Chronic diseases are the leading cause of death and disability in the U.S. They are the leading cause of health care costs across the country.<sup>1</sup>

Chronic diseases in Snohomish County and Washington State that often lead to hospitalization are asthma, chronic obstructive pulmonary disease (COPD), and cardiovascular disease, including heart attack, hypertension, and stroke. It should be noted that chronic diseases may have been impacted by COVID-19 and the available data may not accurately reflect more recent trends. Additionally, racial/ethnic data are limited or not available at the local level for some chronic disease indicators. Efforts will be made in future iterations to identify data sources that include more comprehensive data, as there is potential for disproportionate impact among different racial/ethnic groups.

“

The [people who I see as most vulnerable are] middle aged, immigrants, low-income people because they already have a lot of barriers as it is – people who don't speak English. So, you have that language barrier there...These people who have kids already who are working full time. They don't have time [to seek out or find resources]...So those are the people that we see with a lot more chronic issues, a little bit more intense, because they don't have the time to really resolve those until it becomes something bigger.

- *Community partner,  
Latino community*

”

## Asthma

Asthma is a chronic disease that affects the lungs and makes it difficult to breathe. In recent years, self-reports of current asthma diagnoses have decreased significantly among Snohomish County students (10.1% in 2016 vs. 7.2% in 2021). In 2021, 7.2% of Snohomish County students in 6<sup>th</sup> through 12<sup>th</sup> grades reported they currently have asthma. With the exception of non-Hispanic multiracial and Asian students, most racial ethnic groups do not differ statistically from non-Hispanic White students (Figure 11.1).<sup>2</sup> In the same year of the BRFSS survey, 10.0% of Snohomish County adults reported that they currently have asthma, mirroring what was seen statewide (10.5%). Data was insufficient to reliably perform significance testing among adult sub-population<sup>3</sup>

Local asthma hospitalization rates have decreased in recent years to 29.8 per 100,000 in 2019.<sup>4</sup> Hospitalization rates varied for both gender and age, with females seeing hospitalizations at 41.8 per 100,000. This was more than double the rate of males (17.5 per 100,000). Children aged 0 to 4 years and adults 65 years and older had the highest rates of hospitalizations due to asthma. Infants to 4-year-olds saw the highest rates at 74.9 per 100,000 people (Figure 11.2).<sup>4</sup> Data for asthma hospitalizations by race/ethnicity were unavailable for this analysis.

# Chronic Disease (cont.)

Figure 11.1: Percent of students† in Snohomish County who reported they currently have asthma by demographic characteristics, 2021



\* Indicates statistically significant difference compared to reference group (ref)

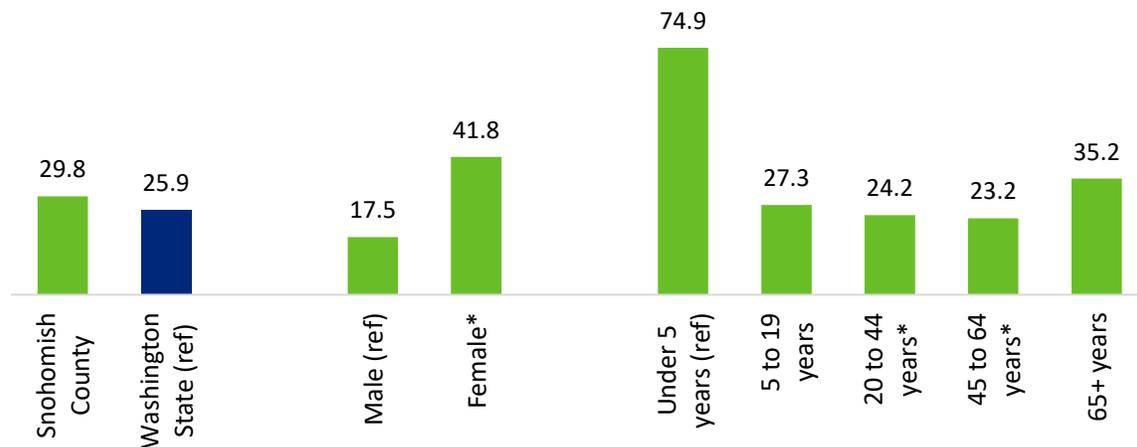
† 6th - 12th grades

‡ Small sample size and/or RSE greater than 25%. Unable to assess for significant differences.

Interpret sub-population estimates with caution.

Source: HYS, 2021

Figure 11.2: Asthma hospitalization rate per 100,000 in Snohomish County by demographic characteristics, 2019



\* Indicates statistically significant difference compared to reference group (ref)

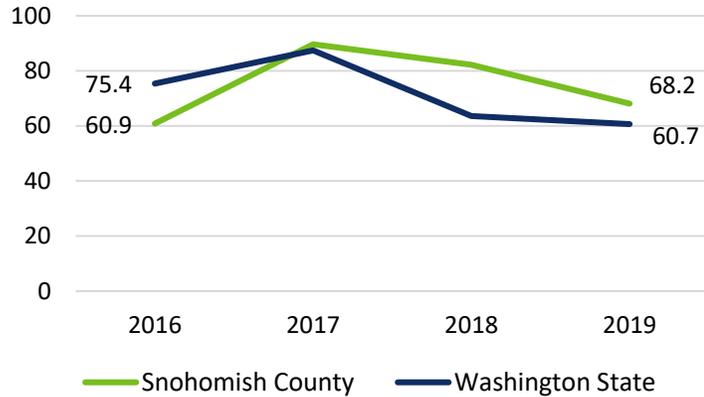
Source: WA DOH CHAT, CHARS, 2019

# Chronic Disease (cont.)

## Chronic Obstructive Pulmonary Disease (COPD)

Chronic obstructive pulmonary disease (COPD) refers to a group of diseases that cause breathing problems and airflow blockage.<sup>5</sup> COPD hospitalizations have decreased after peaking in 2017 (Figure 11.3).<sup>4</sup> In 2019, there were 68.2 COPD hospitalizations per 100,000. The local rate of COPD hospitalizations remains similar to that of Washington State. COPD hospitalizations are more common among females than males, and the most impacted age group are those aged 65 years and older.<sup>4</sup> Data for COPD hospitalizations by race/ethnicity were unavailable.

Figure 11.3: Chronic obstructive pulmonary disease rate per 100,000 in Snohomish County and Washington State, 2016-2019



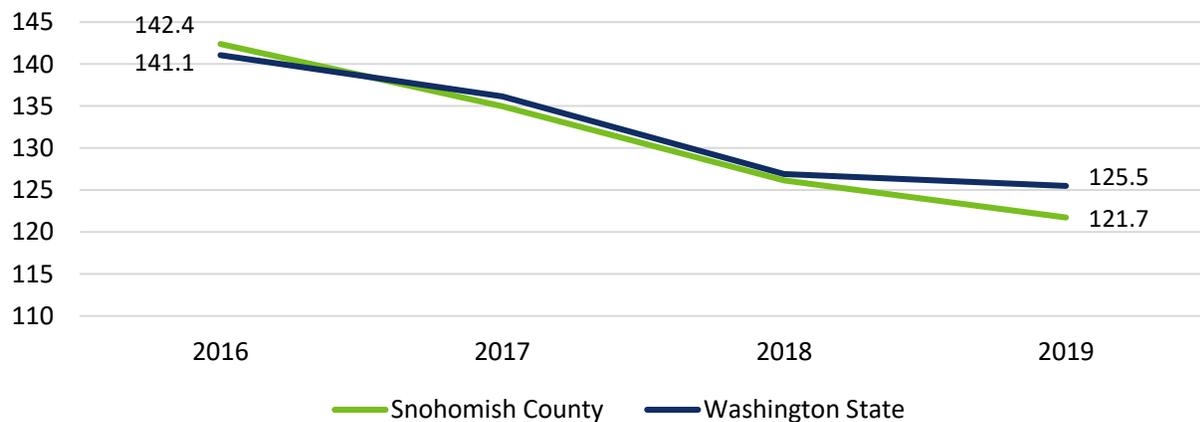
Source: WA DOH CHAT, CHARS, 2016-2019

## Heart attack (myocardial infarction)

Someone in the U.S. has a heart attack every 40 seconds. Coronary artery disease (CAD) is a chronic disease of the arteries that supply blood to the heart. A heart attack (myocardial infarction) happens when a part of the heart muscle doesn't get enough blood. CAD is the main cause of heart attacks.<sup>6</sup>

Over time, Snohomish County's rate of heart attack hospitalizations has declined from 142.4 per 100,000 people in 2016 to 121.7 per 100,000 in 2019 (Figure 11.4). There is a large difference between males and females. Males had nearly double the rate of hospitalization as females in 2019: 161.5 per 100,000 and 85.5 per 100,000, respectively.<sup>4</sup> Data for COPD hospitalizations by race/ethnicity were unavailable.

Figure 11.4: Heart attack hospitalization rates per 100,000 in Snohomish County and Washington State, 2016-2019



Source: WA DOH CHAT, CHARS, 2016-2019

# Chronic Disease (cont.)

## Diabetes

Diabetes is a chronic disease that affects a hormone in the body called insulin. The digestive system takes food and turns it into energy the body can use in the form of glucose (sugar). Insulin helps take glucose out of the blood and puts it into the body's cells. When a person has diabetes the body either can't make enough insulin or can't use insulin properly, which leads to high levels of glucose in the blood.<sup>7</sup>

According to the American Diabetes Association, the total cost of diabetes care in the U.S. for 2017 was about \$327 billion with the average medical expenses being \$16,752 per person.<sup>8,9</sup> Diabetes can increase an individual's risk for other health conditions including heart attack, stroke, kidney disease, and infectious diseases such as tuberculosis.<sup>9,10</sup>



Diabetes is a really big thing in minority groups, specifically Black and Hispanic. I see it a lot because my mom's diabetic. I have a lot of family who's diabetic...The ability to, one, get insurance for insulin and [with] the price increase in insulin and, [two,] not knowing if you're going to be able to get insulin on a weekly basis...is absolutely terrifying because I don't know if my mom's going to be able to take care of herself. And it's already so hard for her because she pushes herself so much.

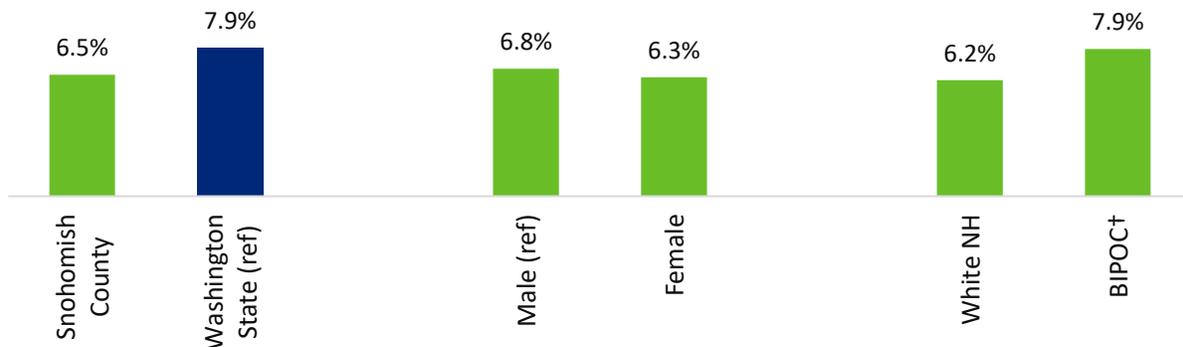
- High school student



In 2019, there were 107 hospitalizations due to diabetes for every 100,000 people in Snohomish County.<sup>4</sup> This was down from a rate of 123.6 per 100,000 in 2016. During this timeframe, local rates closely matched statewide rates. No statistically significant differences were identified by reported gender. Due to small sample sizes, BIPOC racial/ethnic subpopulations were combined. Racial/ethnic data was insufficient to reliably perform significance testing among racial/ethnic sub-populations.

The Behavioral Risk Factor Surveillance System (BRFSS) data show trends in self-reported diabetes diagnosis. In 2021, 6.5% of Snohomish County respondents reported that they have been diagnosed with diabetes (Figure 11.5).<sup>3</sup>

Figure 11.5: Percent of adults in Snohomish County who reported ever having been diagnosed with diabetes by demographic characteristics, 2021



No statistically significant differences were detected compared to reference group (ref)

† Small sample size and RSE greater than 25%. Unable to assess for significant differences. Interpret sub-population estimates with caution.

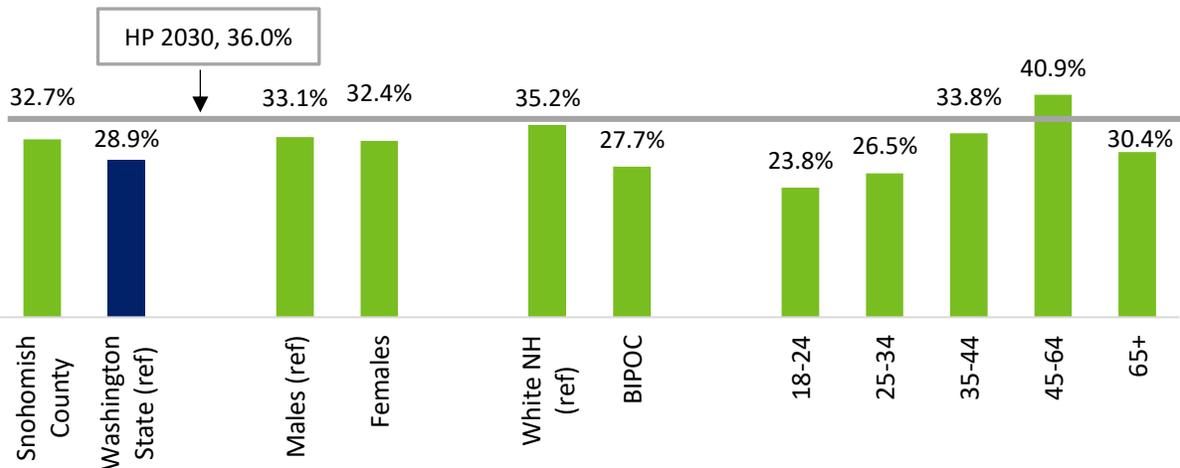
Source: BRFSS, 2021

# Chronic Disease (cont.)

## Obesity

Obesity is when a person has excess body fat. It is linked to many chronic illnesses such as cardiovascular disease, type 2 diabetes, and many cancers.<sup>11</sup> Body Mass Index (BMI) is a screening tool for obesity. Individuals with a BMI score of 30.0 or higher are considered obese. It is not a diagnostic tool for individual health but can still be a useful population-level indicator of health.<sup>12</sup> The rate of obesity in Snohomish County has increased steadily over time (29.4% in 2011 to 32.7% in 2021). This is meaningfully, but not statistically, higher than the rate of obesity statewide (Figure 11.6).<sup>3</sup>

Figure 11.6: Percent of adults in Snohomish County who are obese (BMI 30+) by demographic characteristics, 2021



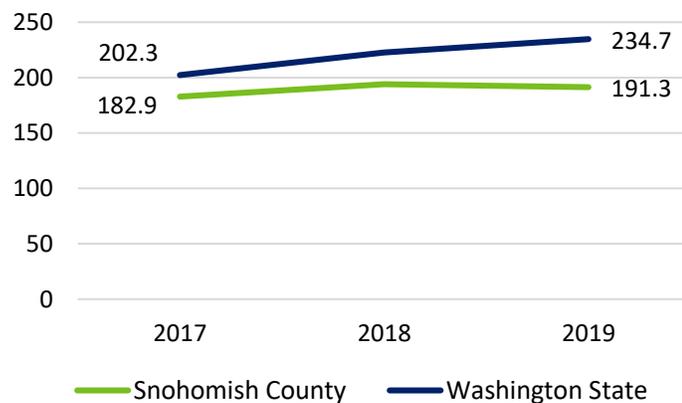
\* Indicates statistically significant difference compared to reference group (ref)

Source: BRFSS, 2021

## Hypertension (high blood pressure)

Blood pressure is the amount of pressure the body's blood pushes against the arteries. Hypertension, or high blood pressure, is blood pressure that is higher than normal. High blood pressure is very common, usually has no symptoms, but can increase the risk of heart disease and stroke. In 2017, the guidelines for diagnosing hypertension were updated by the American College of Cardiology and American Heart Association. These new guidelines lowered the threshold for identifying someone with hypertension. A person is considered to have high blood pressure once the readings are consistently 130/80 mmHg or higher.<sup>13</sup>

Figure 11.7: Hypertension-related hospitalization rates per 100,000 in Snohomish County and Washington State, 2017-2019



Source: WA DOH CHAT CHARS, 2017-2019

# Chronic Disease (cont.)

Hypertension-related hospitalization rates for Snohomish County have remained steady since 2017. Snohomish County residents are hospitalized for hypertension-related reasons at a lower rate than statewide residents (Figure 11.7).<sup>4</sup> Women were significantly less likely to have been hospitalized for a hypertension-related complication than men (165.9/100,000 and 220.6/100,000 respectively). Data for hypertension-related hospitalizations by race/ethnicity were unavailable.



My parents...never really went to the doctor's...Unless they had a medical issue that was urgent, they wouldn't really go checkup [on their health]...My dad ended up having diabetes, high cholesterol, high blood pressure...[He went in for a medical check-up] because of another issue that had a symptom...But until there was something that was very concerning, he didn't know that he had [those health conditions]. And that could have been prevented. He could have caught those things before they fully developed. He could have changed his lifestyle...Taking care of yourself and putting yourself first. A lot of the time for the Latino community...those three [conditions] are actually very relevant for our community.

- Community partner, Latino community

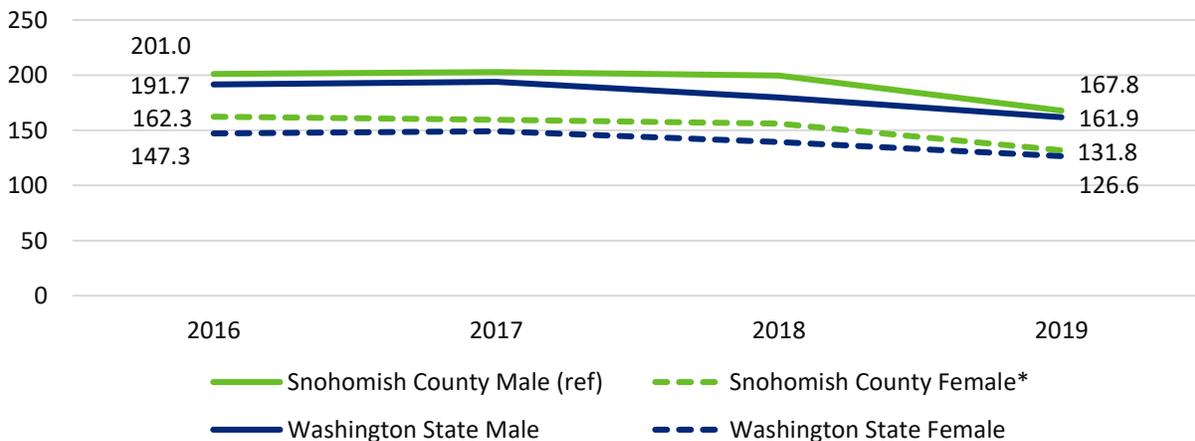


## Stroke

A stroke is when part of the brain lacks adequate blood supply. This can happen by either a blocked artery or when a blood vessel in the brain ruptures. Stroke is one of the leading causes of death in the U.S. and a major cause of serious disability in adults.<sup>14</sup>

Stroke-related hospitalization rates in Snohomish County decreased to 148.5 per 100,000 population in 2019 from 180.4 per 100,000 in 2016 (Figure 11.8).<sup>4</sup> Men were more likely to have been hospitalized due to a stroke (167.8 per 100,000) compared to women (131.8 per 100,000). Stroke-related hospitalizations were highest among people 65 years and older, compared to lower age groups. Data for stroke-related hospitalizations by race/ethnicity were unavailable.

Figure 11.8: Stroke hospitalization rates per 100,000 in Snohomish County and Washington State by sex at birth, 2016-2019



\* Indicates statistically significant difference compared to reference group (ref) in 2019

Source: WA DOH CHAT, CHARS, 2016-2019

Adults aged 65 years and older comprise 15.4% of Snohomish County’s population and 17.3% of Washington State’s population. This is the largest age group in Snohomish County and is anticipated to grow in the coming years.<sup>1</sup>



There’s a number of people here that I see all the time...[who,] even though they might be in their 60s, 70s, 80s, have become people who are not surrounded by positive or supportive relationships. And once you get to know them, you start to understand a little bit about why that is – because of some behaviors that they have adopted and probably because of a need to cope...I think that you can almost draw a line [where] the people who are able to get through adversity and be a little more resilient and have support are the folks who either have supportive family or know how to create that...I think it’s about [economic] class but it’s also about this fundamental psychological challenge that [struggling seniors] have of not being able to create positive relationships [with other adults] that are sustainable.

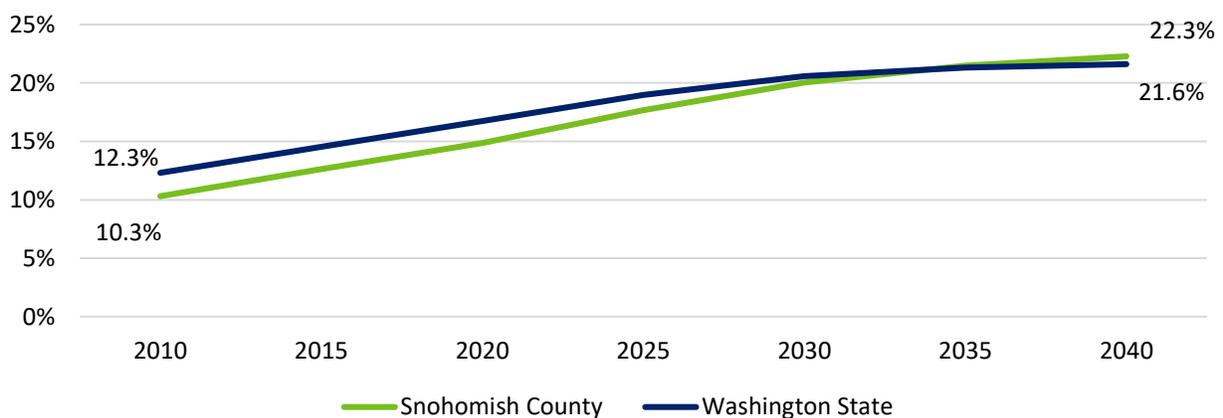
- Community partner, public service and community resource center



## Older adult population projections

The Snohomish County population is getting older. In 2017, the Office of Financial Management (OFM) projected the percentage of the population of adults who will be 65 and older for several years into the future. By these projections, adults 65 and older are anticipated to make up about 22.3% of the Snohomish County population in 2040, which is generally in line with the statewide projection (Figure 12.1).<sup>2</sup>

Figure 12.1: Projected percent of population aged 65 years and older in Snohomish County and Washington State, 2010-2040



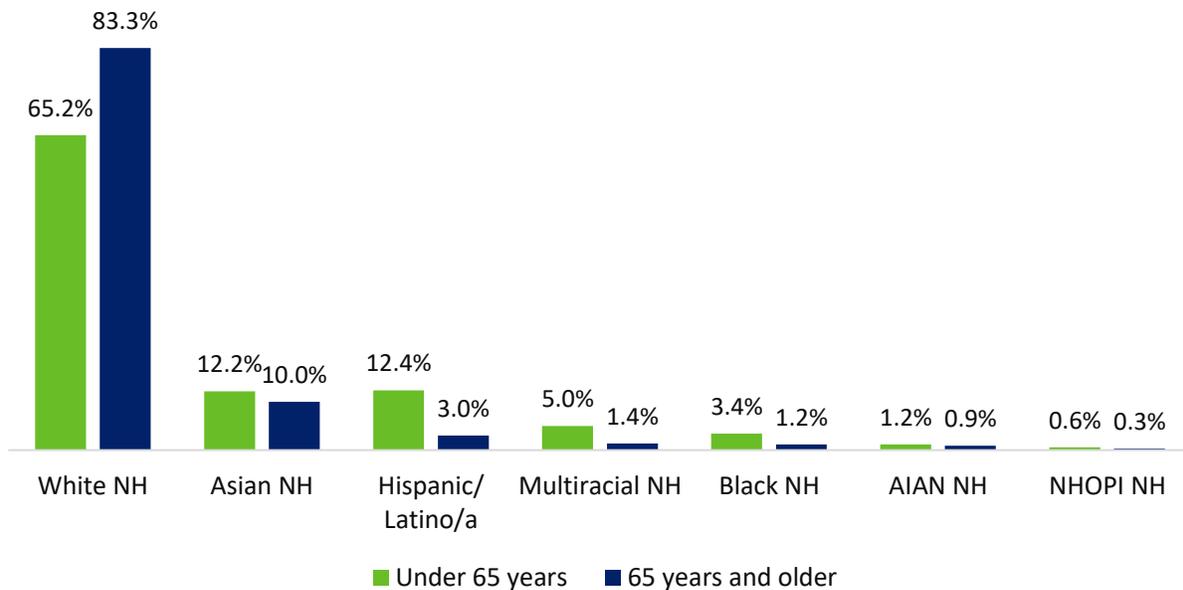
Source: OFM, Population projections ages 65 years and older, 2017 (2010-2040 projections)

# Older Adults and Healthy Aging (cont.)

## Racial/ethnic diversity among older adults

Older adults in our community tend to be less diverse than the younger age groups. Adults aged 65 years and older are predominantly non-Hispanic White (83.3%; Figure 12.2). The second largest racial/ethnic group by percentage are non-Hispanic Asian populations, which make up about 10% of Snohomish County's older adults.<sup>1</sup>

Figure 12.2: Percent of adult population in Snohomish County by age and race/ethnicity, 2020



Source: OFM, Postcensal Estimates of Population by race and Hispanic origin, 2020

“

I think [lower income individuals] are the people who are the most vulnerable. And particularly for seniors...A lot of seniors would just tell you that they feel invisible in our society. And I think, particularly if you're a poor senior, my sense is that [poor health outcomes] are exacerbated.

- Community partner, public service and community resource center

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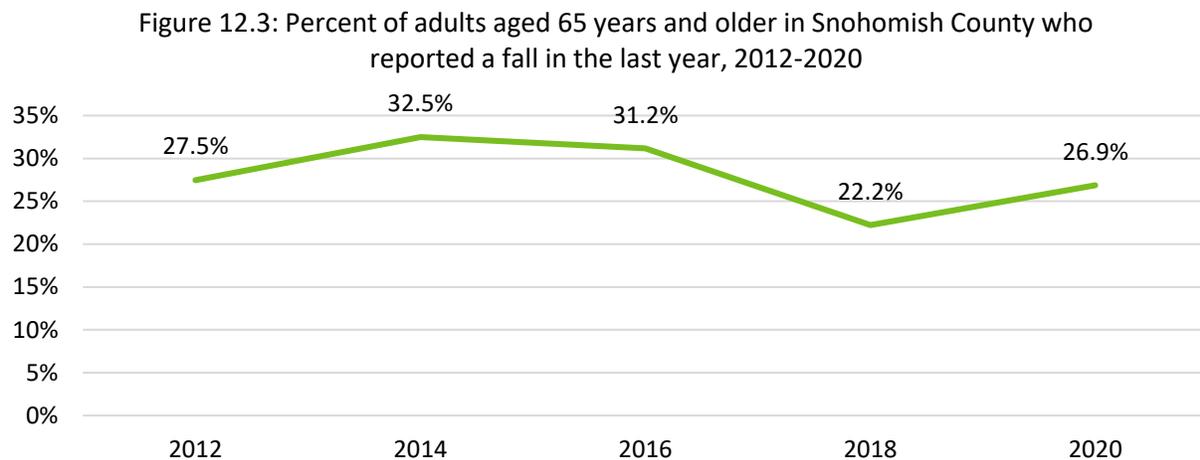
## Physical activity among older adults

The CDC recommends adults achieve at least 150 minutes of moderate physical activity and at least two days of muscle-strengthening activities per week.<sup>3</sup> Only about 20% of Snohomish County adults aged 65 and older reported that they met both recommendations in 2019. This percentage has stayed relatively steady since at least 2013 and is approximately in line with the statewide percentage (24.7%).<sup>4</sup>

# Older Adults and Healthy Aging (cont.)

## Falls among older adults

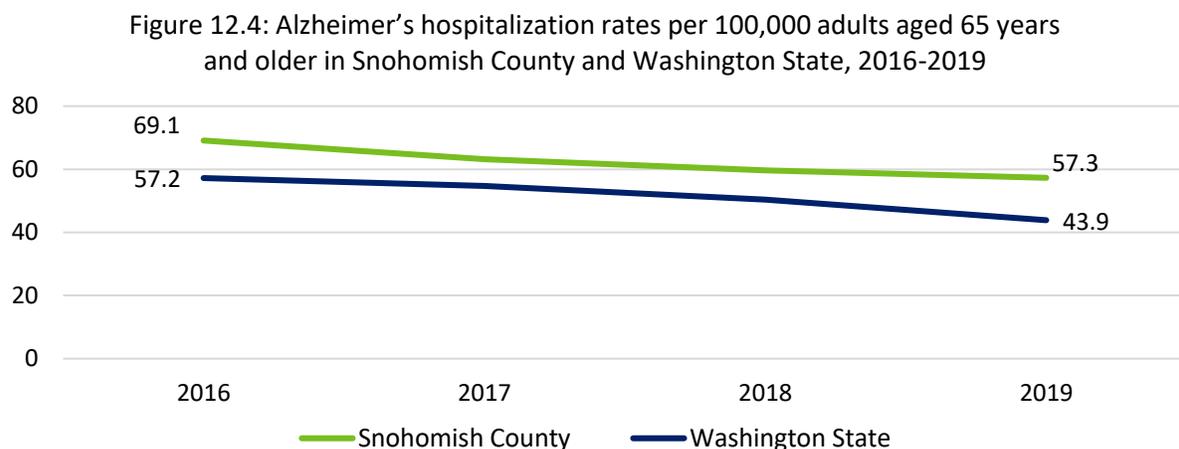
Each year, 3 million older adults are treated for fall injuries in emergency departments across the U.S. Most hospitalizations are related to head injuries and hip fractures.<sup>5</sup> In 2015, medical costs related to falls reached more than \$50 billion with 75% of this being shouldered by Medicare and Medicaid.<sup>6</sup> About 27% of BRFSS respondents aged 65 and older indicated that they suffered a fall in 2020, which was a decrease from a recent-year peak in 2014 (Figure 12.3).<sup>2</sup> In line with what is seen nationally, women tend to report falls more frequently than men in Snohomish County (31.7% vs 20.3%, respectively). Because this is self-report survey data and due to the nature of fall-related injuries, these figures may be impacted by survivor bias.



Source: BRFSS, 2012-2020

## Cognitive disorders among older adults

Hospitalization rates for Alzheimer's has been declining in recent years from 69.1 per 100,000 in 2016 to 57.3 per 100,000 in 2019. Snohomish County has consistently had a higher rate of Alzheimer's-related hospitalizations when compared to Washington State (Figure 12.4).<sup>7</sup> Data for Alzheimer's-related hospitalizations by race/ethnicity were unavailable. Efforts will be made in future iterations to identify data sources that include more comprehensive and granular data, as there is potential for disproportionate impact among different sub-population.

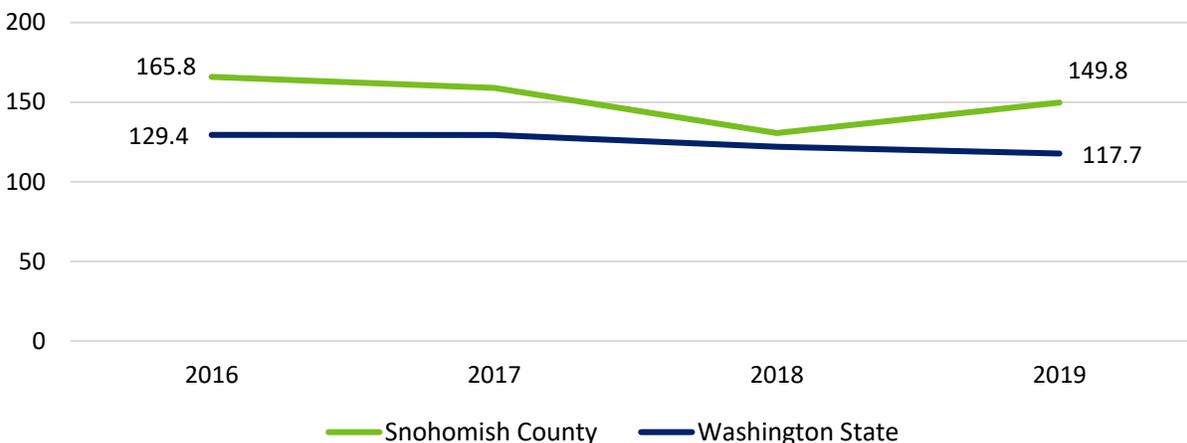


Source: WA DOH CHAT, CHARS, 2016-2019

# Older Adults and Healthy Aging (cont.)

Hospitalization rates for non-Alzheimer’s cognitive disorders have also declined slightly in recent years. In Snohomish County, there is a slightly higher rate of hospitalizations per population when compared with Washington State (Figure 12.5).<sup>2</sup> Data for non-Alzheimer’s, cognitive disorder-related hospitalizations by race/ethnicity were unavailable. Efforts will be made in future iterations to identify data sources that include more comprehensive and granular data, as there is potential for disproportionate impact among different sub-populations.

Figure 12.5: Cognitive disorder hospitalization rate per 100,000 in Snohomish County and Washington State, 2016-2019



Source: WA DOH CHAT, CHARS, 2016-2019

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Maternal, child, and family health encompasses a wide variety of health issues concerning women before, during, and after pregnancy, as well as young children and families of young children. This section uses the term “women” to refer to a diverse subset of people. The Health Department recognizes that this group extends beyond self-identified women and includes people capable of pregnancy and childbirth.

## Teen sexual health

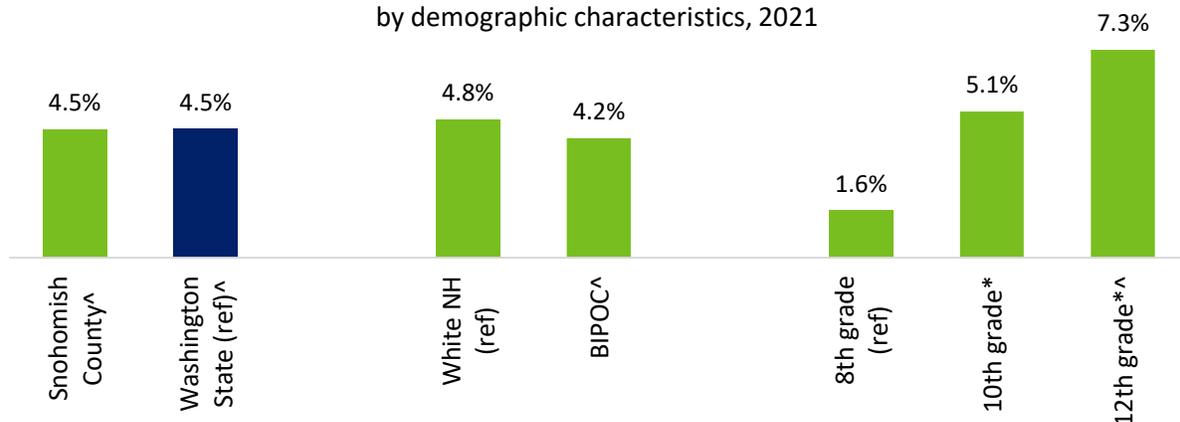
### Teen sexual behaviors

In the 2021 Healthy Youth Survey, 4.5% of Snohomish County’s older students reported that they or their partner used an inadequate birth control method the last time they had sex.<sup>†‡</sup> An inadequate birth control method for this estimate includes those that are not considered conventional methods (e.g., condom or birth control pills). The inadequate birth control methods reported included withdrawal, “some other method,” or uncertainty about which birth control method was used. Reports of inadequate birth control use increased with grade level. Due to small sample sizes, BIPOC racial/ethnic subpopulations were combined (Figure 13.1). In recent years, the percent of teens reporting they’ve ever had sex has meaningfully, but not statistically, decreased over time (25.6% of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders combined in 2017 vs. 17.8% in 2021).<sup>‡</sup>

“ I think the only lesson in family health [class] is putting a condom on a banana. How does that help you apply that to real life?...If you are pregnant as a teen, it takes a lot of resources to have or raise [a child] or even be pregnant. Like, that is a huge responsibility and people don’t often see that. ”

- High school student

Figure 13.1: Percent of students<sup>†</sup> in Snohomish County who reported using an inadequate<sup>‡</sup> birth control method the last time they had sex by demographic characteristics, 2021



\* Indicates statistically significant difference compared to reference group (ref)

^ Indicates statistically significant decrease compared to previous survey year

† 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grades

‡ Inadequate: no birth control method used, withdrawal or “some other method” used, or student who responded they were unsure of which method was used. Percentages of students who responded they’ve never had sex or who indicated at least one conventional birth control method (e.g., condom or birth control pills) are not shown. This question does not assess correct use of birth control.

Source: HYS, 2021

# Maternal, Child, and Family Health (cont.)

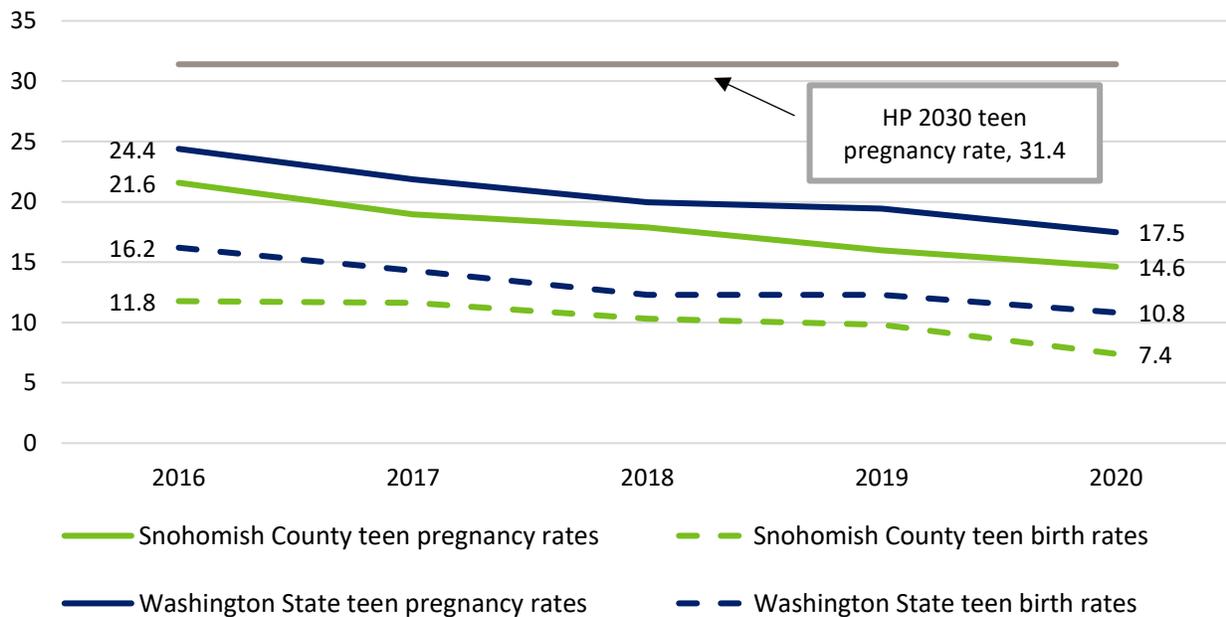
## Teen pregnancy and births

Teen pregnancy and childbearing are associated with increased socioeconomic costs through immediate and long-term effects on teen parents and their children. This includes decreased educational attainment, decreased job opportunities for teen parents, and prematurity, low birth weight, and other health problems for babies born to teen mothers.<sup>4,5</sup>

Both teen pregnancy and birth rates have decreased significantly over time, locally and statewide, and Snohomish County has consistently met the Healthy People 2030 goal (Figure 13.2).<sup>4,6-9</sup> Except for non-Hispanic Asian teens, all other racial/ethnic groups had a higher birth rate compared to non-Hispanic White teens in 2016-2020 combined. Non-Hispanic Pacific Islander, non-Hispanic American Indian/Alaska Native, and Hispanic teens in particular had birth rates that were at least three times as high as non-Hispanic White teens in this timeframe. (Figure 13.3).<sup>6</sup>

“ We have older kids that are getting pregnant again, even though we have some of the best health care options in the country. - Urban school district staff ”

Figure 13.2: Teen pregnancy<sup>†</sup> and birth<sup>‡</sup> rates per 1,000 women aged 15-19 years old in Snohomish County and Washington State, 2016-2020



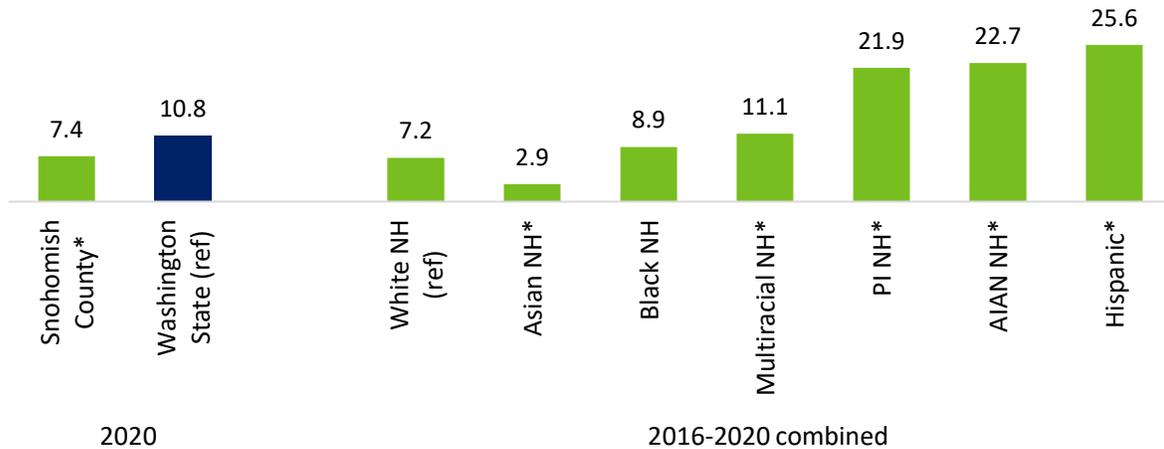
<sup>†</sup> number of births plus induced abortions and fetal deaths among women aged 15-19 years old per 1,000 women aged 15-19 years old

<sup>‡</sup> number of live births to women aged 15-19 years old per 1,000 women aged 15-19 years old

Source: WA DOH CHAT, Center for Health Statistics Birth Certificate Data, Abortion Reporting System, and Vital Statistics System, 2016-2020; Healthy People 2030

# Maternal, Child, and Family Health (cont.)

Figure 13.3: Teen birth rate<sup>†</sup> per 1,000 women aged 15-19 years old in Snohomish County by race/ethnicity, 2020 and 2016-2020 combined



\* Indicates statistically significant difference compared to reference group (ref)

† number of live births to women aged 15-19 years old per 1,000 women aged 15-19 years old

Source: WA DOH CHAT, Center for Health Statistics Birth Certificate Data, 2016-2020

## Pregnancy

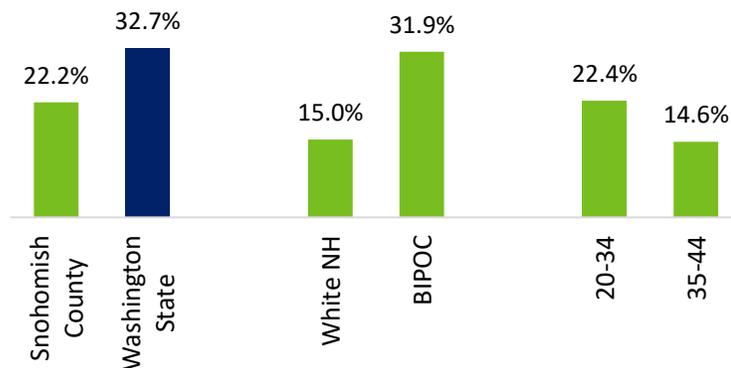
### Pregnancy rates (general population)

Mirroring statewide trends, Snohomish County has seen a steady decrease in general pregnancy rates over time among women of aged 15-44 years old (80.9 per 1,000 in 2016 to 72.3 per 1,000 in 2020).<sup>6-9</sup>

### Unintended pregnancies

An unintended pregnancy is a pregnancy that is either unwanted or is mistimed. Most unintended pregnancies are a result of not using contraception or using it incorrectly or inconsistently.<sup>11</sup> Snohomish County continues to meet the Healthy People 2030 goal of no more than 36.5% of pregnancies being unintended.<sup>12</sup> BIPOC women and women aged 20-34 years old report unintended pregnancy more commonly than non-Hispanic White women and women in older age groups, respectively. Due to small sample sizes, data was insufficient to reliably perform significance testing among sub-populations (Figure 13.4).<sup>13</sup>

Figure 13.4: Percent of women in Snohomish County who reported their most recent pregnancy was unintended, by demographic characteristics, 2020<sup>† ‡</sup>



† Small sample sizes and RSE greater than 25%. Unable to assess for significant differences. Interpret sub-population estimates with caution.

‡ <20 and 45+ year age groups not shown due to small sample size

Source: WA DOH, PRAMS, 2020

# Maternal, Child, and Family Health (cont.)

## Prenatal care

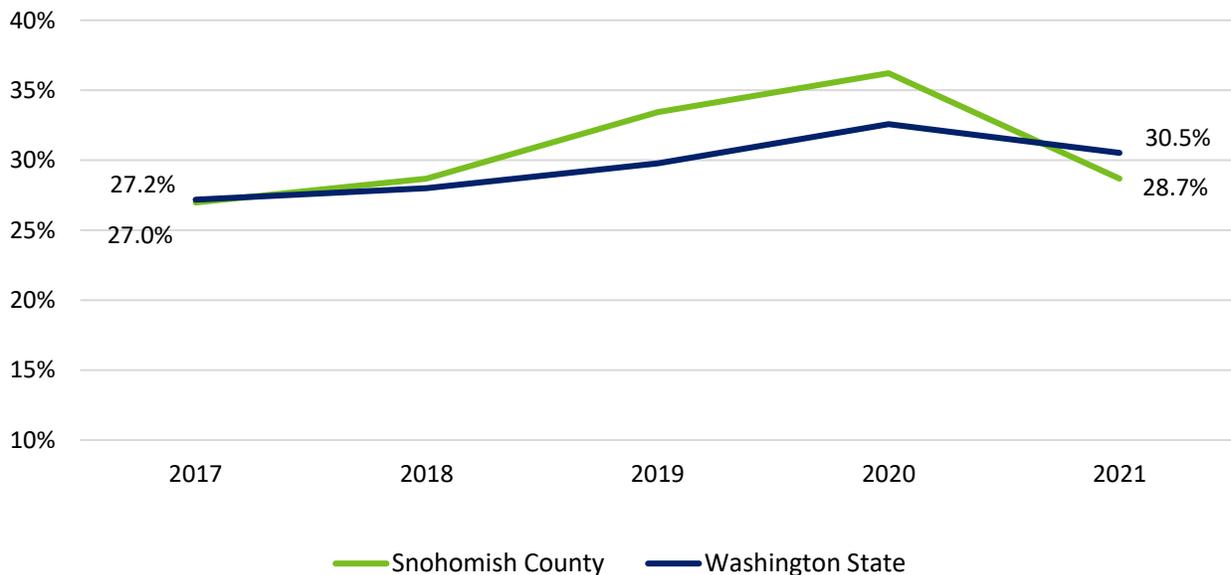
Prenatal care is health care that someone receives while they are pregnant. It's most effective when it's started early and continues regularly throughout pregnancy.<sup>14</sup> As with other areas of health care, there are a variety of barriers to a woman getting adequate prenatal care during pregnancy.

### **Adequacy of prenatal care (Kotelchuck Index)**

The Healthy People 2030 goal aims for 80.5% of pregnant women to receive early and adequate prenatal care. The Kotelchuck Index or the Adequacy of Prenatal Care Utilization (APNCU) is used to measure prenatal care adequacy. By this measure, "adequate" care is defined as having at least 80% of expected prenatal care visits, and "inadequate" care is having less than 80% of expected prenatal care visits.<sup>6</sup> This index does not consider the quality of prenatal care.

Snohomish County has mirrored statewide rates, with most women receiving adequate prenatal care (71.3% in 2021). However, nearly one in three pregnant women still receive an inadequate amount of care, which has remained relatively stable over time (Figure 13.5). In 2021, this equated to 1,668 pregnant women. Disparities also exist among some BIPOC groups and younger age groups, particularly non-Hispanic Pacific Islanders and teens aged 15 to 19 years old. (Figure 13.6).<sup>6</sup>

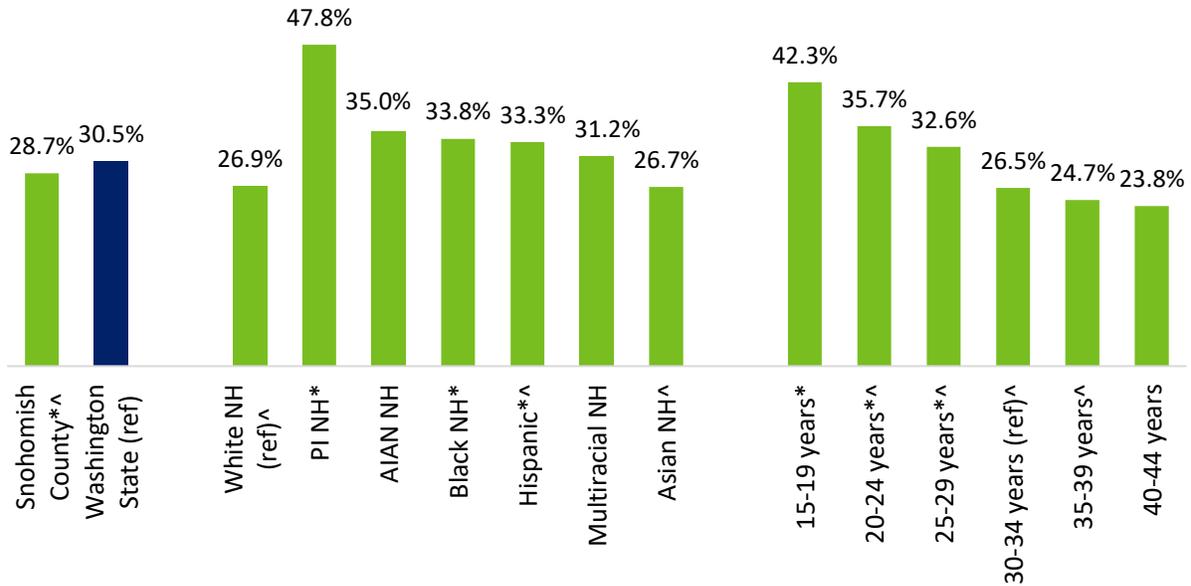
Figure 13.5: Percent of women who received inadequate prenatal care in Snohomish County and Washington State, 2017-2021



Source: WA DOH CHAT, Center for Health Statistics Birth Certificate Data, 2017-2021

# Maternal, Child, and Family Health (cont.)

Figure 13.6: Percent of women in Snohomish County who received inadequate prenatal care by demographic characteristics, 2021



\* Indicates statistically significant difference compared to reference group (ref)

^ Indicates statistically significant decrease compared to previous data year

Source: WA DOH CHAT, Center for Health Statistics Birth Certificate Data, 2021

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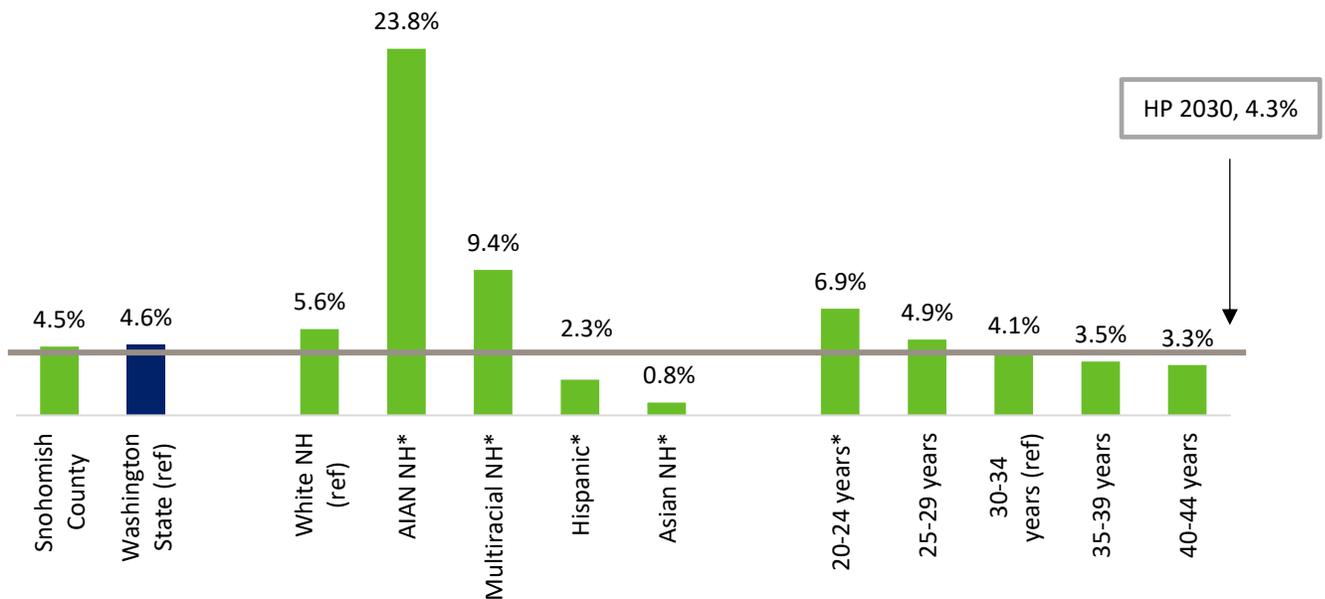
# Maternal, Child, and Family Health (cont.)

## Birth risk factors

### Smoking during pregnancy

Smoking tobacco while pregnant can cause serious health problems for both mothers and babies. Babies born to mothers who smoked during pregnancy are at risk of premature birth, low birth weight, birth defects, and sudden infant death syndrome (SIDS).<sup>15</sup> The Healthy People 2030 goal aims to increase abstinence from cigarette smoking among pregnant women to 95.7% (i.e., fewer than 4.3% of women smoking during pregnancy).<sup>16</sup> The rate of women smoking during pregnancy has decreased significantly in Snohomish County over the past five years (7.8% in 2017 vs 4.5% in 2021), though it has not yet met the Healthy People 2030 goal. Among the racial/ethnic groups, women who identify as non-Hispanic American Indian/Alaska Native, non-Hispanic multiracial, and non-Hispanic White have also not met the Healthy People 2030 goal. (Figure 13.7).<sup>6</sup>

Figure 13.7: Percent of women in Snohomish County who smoked tobacco at any point during pregnancy by demographic characteristics, 2021<sup>†</sup>



\* Indicates statistically significant difference compared to reference group (ref)

† Black NH, PI NH, and 15-19 age group not shown due to small sample size

Source: WA DOH CHAT, Center for Health Statistics Birth Certificate Data, 2021

# Maternal, Child, and Family Health (cont.)

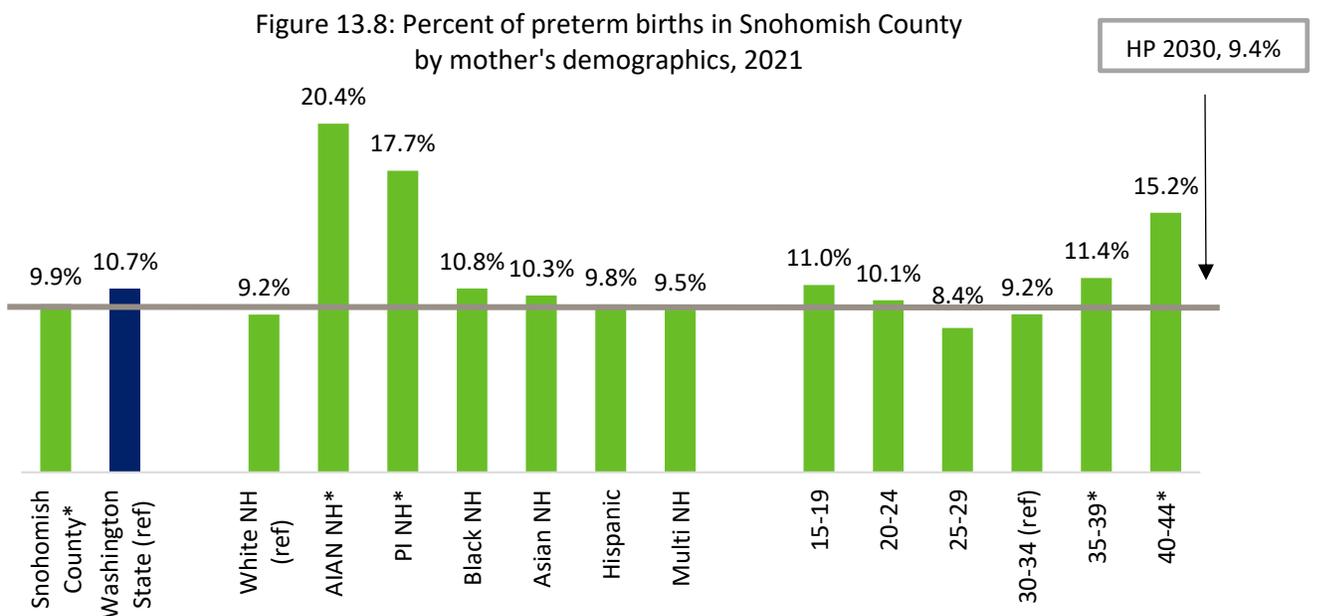
## Births

### Birth rates (general population)

Mirroring trends both state- and nationwide, Snohomish County has seen a steady decrease in general birth rates over time among women of childbearing age (68.0 per 1,000 women in 2016 vs 60.5 per 1,000 women in 2020).<sup>6,10</sup>

### Preterm births

A preterm birth is when a baby is born too early (before 37 weeks of gestation). It is closely linked to some birth risk behaviors, such as late prenatal care or smoking, as well as some birth risk outcomes, such as low birth weight. Babies born prematurely have a higher risk of health complications, developmental problems, and even death.<sup>17</sup> Preterm births have remained relatively steady in Snohomish County over the years, with about 1 in every 10 births being preterm. Among all births, the percentage of preterm births in Snohomish County is statistically lower than the statewide percentage, but nearly on par with the Healthy People 2030 goal of 9.4%.<sup>17</sup> However, preterm births occur more commonly among non-Hispanic American Indian and Alaska Native and Pacific Islander women, as well as women 35 years and older (Figure 13.8).<sup>6</sup>



\* Indicates statistically significant difference compared to reference group (ref)

Source: WA DOH CHAT, Center for Health Statistics Birth Certificate Data, 2021

## Postpartum

### Breastfeeding

Breastfeeding has many known benefits for mothers and babies and is linked to a reduced risk of several illnesses.<sup>18</sup> The Healthy People 2030 goal aims to have 42.4% of babies breastfed exclusively through 6 months of age.<sup>19</sup> Goal-comparable data do not exist locally. However, results from the most recent 2020 PRAMS survey showed that 73.4% of new mothers in Snohomish County breastfed their new baby for at least 8 weeks after giving birth.<sup>13</sup>

# Maternal, Child, and Family Health (cont.)

## Child care cost and need

While there is no single definition for what constitutes high quality child care, it often includes elements of adequate staff qualifications, age-appropriate learning environments for children, rich teacher and child interactions, and family engagement. High quality child care not only keeps children safe but also prepares them for school and beyond.<sup>20</sup> However, child care can be very costly to families. The median household income of a married couple with children in Snohomish County is about \$6,000 per month (\$72,500 per year).<sup>21</sup> Child care in Snohomish County can be as high as 26.8% of this monthly income for an infant (\$1,620 per month), or 22.6% of this monthly income for a toddler (\$1,365).<sup>21,22</sup> A higher proportion of child care needs are met among lower income families (<200% Federal Poverty Level) because there are specific subsidies and programs, such as Head Start, that are available to these families. In 2021, only 29.1% of Snohomish County’s total child care needs were met among infants, toddlers, and pre-kindergarten children (compared to 33.2% in Washington State; Figure 13.9).<sup>23</sup>

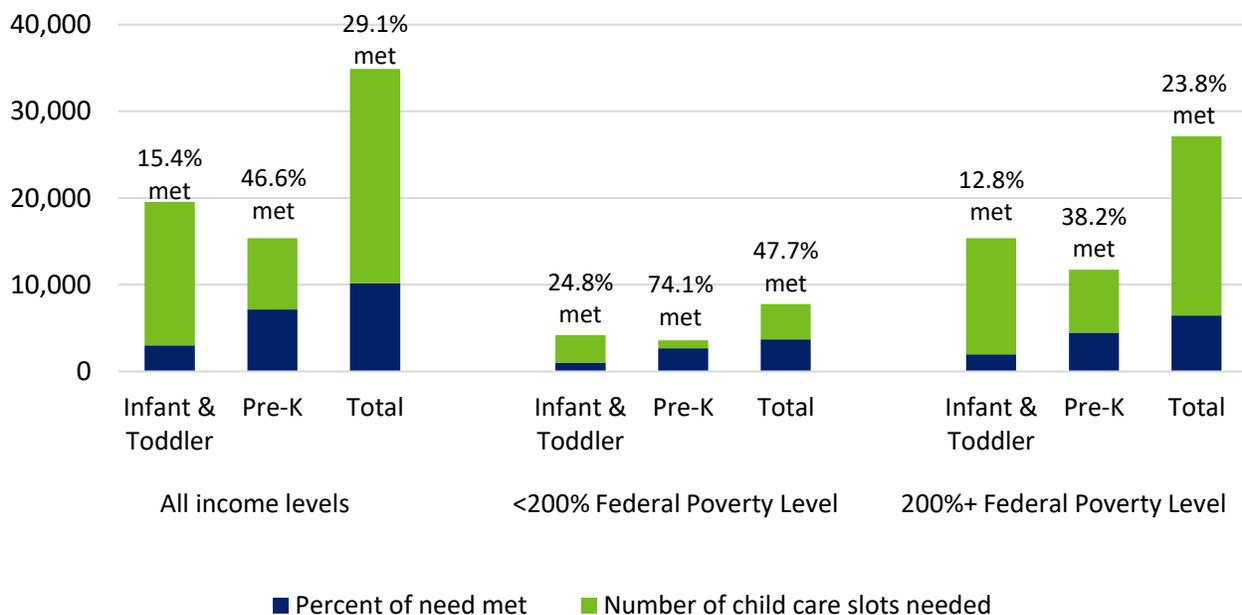
“

Suddenly everyone wants to act like the pandemic is over and there hasn’t been an economic impact but there has. And then we will still continue to have really bad resources for people who are having economic issues. So, you just have families that are drowning. And if you’re drowning, then what’s the first thing to go for some families? It’s going to be child care.

- Urban school district staff

”

Figure 13.9: Need and supply of child care slots in Snohomish County by child age group and household income level, 2021



Source: Child Care Aware of WA, Snohomish County Profile 2022

Oral health is an important aspect of overall health and well-being and encompasses more than just healthy teeth. It affects our ability to speak, eat, smile, and express our emotions. Oral health can also have impacts on a person’s self-esteem and affect a person’s attendance and performance at work or school. Dental and oral diseases such as cavities, gum disease, and oral cancer can cause a person great pain and disability. It can also be very costly to individuals, their families, and to health care systems as a whole.<sup>1</sup>

“

The last time I had a meeting with my community...they [were] concerned about medical [services] costing too much...They [have] all retired so they’re not working, so [they do] not [have] enough money for [when the] cost is too high. Dental costs too [much] and then they [don’t have] enough money for it.

- Asian and Pacific Islander  
Community member

”

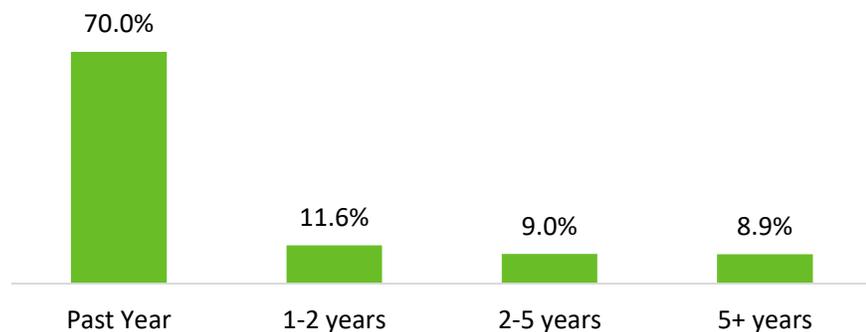
## Dentists

In 2020, Snohomish County had approximately 620 dentists or about 75 dentists per 100,000 population. This number has slowly increased since 2010 when there were about 63 dentists per 100,000 population.<sup>2</sup>

## Adult dental visits

Like other areas of health care, oral health is best addressed preventatively. The CDC recommends visiting the dentist at least once a year.<sup>2</sup> Most people in Snohomish County meet this recommendation (Figure 14.1).<sup>3</sup>

Figure 14.1: Time since last dental visit among Snohomish County adults, 2020



Source: BRFSS, 2020

Locally, adults aged 25 to 34 years are the least likely age group to meet this recommendation. In 2020, 62.9% of BRFSS survey respondents in this age group reported their last dental visit was in the past year. BIPOC adults report a dental visit in the last year at a slightly lower rate compared to non-Hispanic White adults. (Figure 14.2).<sup>4</sup>

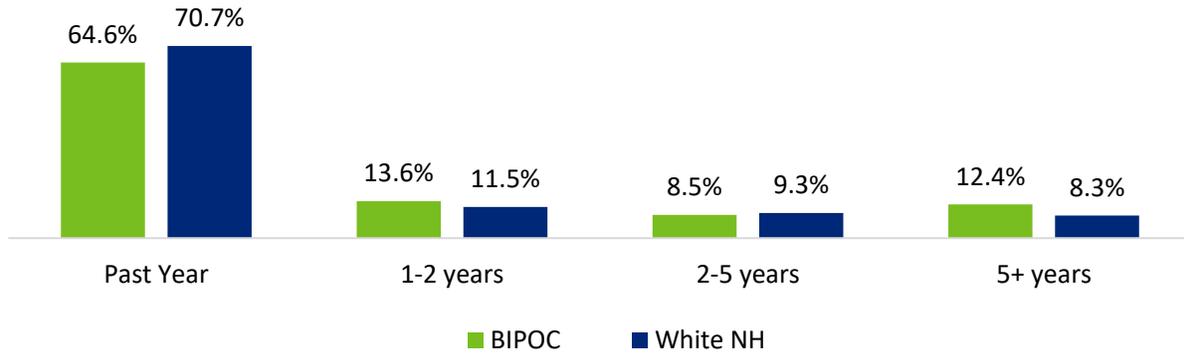
“

[A barrier to good health] is the [lack of] access to health care and dental care. And that’s everything from transportation, getting to it, to state insurance not being accepted widely.

- Community partner, public service and community resource center

”

Figure 14.2: Time since last dental visit among Snohomish County adults by race/ethnicity, 2020<sup>†</sup>



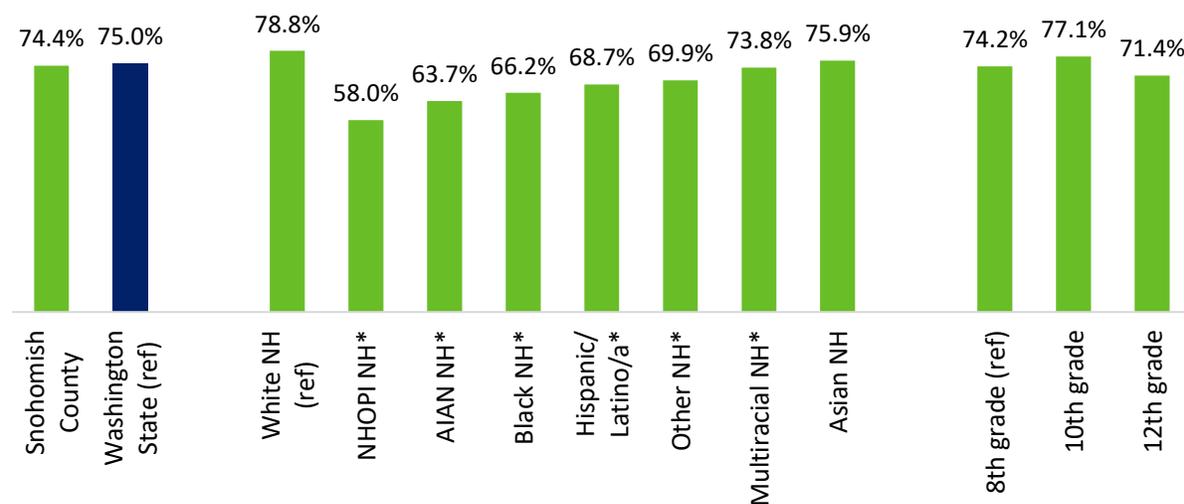
<sup>†</sup> Small sample sizes and RSE greater than 25%. Unable to assess for significant differences. Interpret sub-population estimates with caution.

Source: BRFSS, 2020

### Youth dental visits

Most youths in Snohomish County also report meeting the recommendation of visiting the dentist at least once a year (74.4% in 2021). However, this is statistically lower than in previous years by about 3%.<sup>5</sup> The CDC reports that 10% of children aged 2 to 5 years have untreated cavities, and that half of adolescents and young adults aged 12 to 19 years have had at least one cavity in their permanent teeth. This highlights the importance of ensuring routine dental visits in youth. Poor dental health can impact their ability to learn and even cause students to miss school.<sup>6</sup> With the exception of non-Hispanic Asians, BIPOC students are less likely to have a dental visit at least annually (Figure 14.3).<sup>5</sup>

Figure 14.3: Percent of students<sup>†</sup> in Snohomish County who had their last dental visit within the past year, 2021



\* Indicates statistically significant difference compared to reference group (ref)

<sup>†</sup> 8<sup>th</sup> - 12<sup>th</sup> grades

Source: HYS, 2021

## Food security

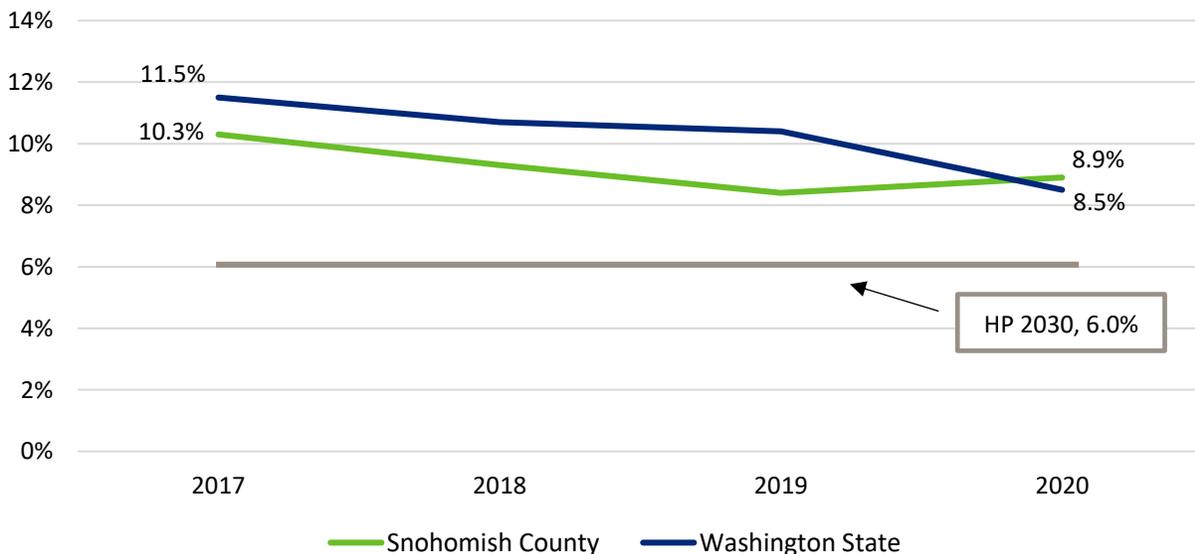
Access to healthy food is an important aspect of an individual’s overall health. Barriers to adequate and healthy food can be detrimental to health and can further complicate an individual’s ability to afford other basic necessities. Hunger can have other harmful impacts; food insecure children are at increased risk of acute and chronic illnesses such as asthma, as well as unmet health care needs.<sup>1</sup> Food insecurity is defined as “a lack of consistent access to enough food for every person in a household to live an active, healthy life.”<sup>2</sup> The Healthy People 2030 goal aims to reduce food insecurity to 6.0% of households.<sup>3</sup> Though food insecurity in Snohomish County has been trending downward in recent years, 1 in every 11 people are still food insecure locally (Figure 15.1).<sup>4</sup>

“ We don’t necessarily get the best food because it’s out of our price range. And so, we can’t afford to get good food for us. Even though we try. We try really hard, and we grow our own plants...but it’s not always enough. ”

- High school student

Data was not available from this source to disaggregate. However, based on the disproportionate number of BIPOC individuals enrolled in the [Supplement Nutrition Assistance Program](#) (SNAP/food stamps), it's reasonable to assume there are also food security disparities among racial/ethnic groups. In future iterations, efforts will be made to identify additional data sources that allow for a more comprehensive examination of health disparities (Figure 15.1).<sup>2</sup>

Figure 15.1: Percent of food-insecure population in Snohomish County and Washington State, 2017-2020



Source: Feeding America, Map the Meal Gap, food insecurity map, 2017-2020

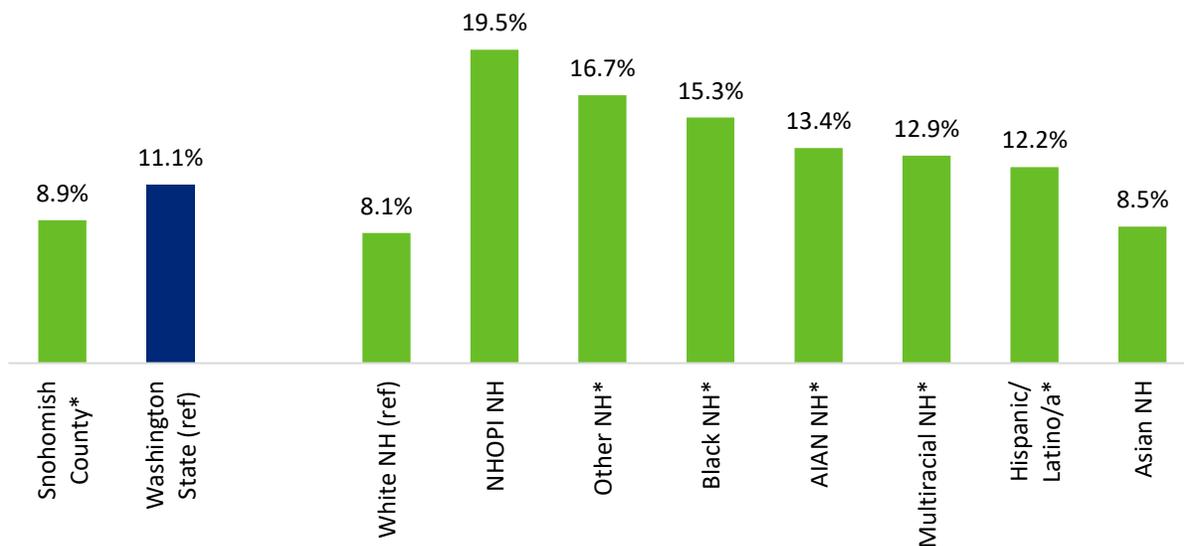
## Supplemental Nutrition Assistance Program (SNAP)

The Supplemental Nutrition Assistance Program (SNAP/food stamps) is a financial resource for lower income individuals and families to meet their food needs. In 2020, 8.9% of Snohomish County’s population was enrolled in SNAP. BIPOC residents were more commonly enrolled than non-Hispanic White residents (Figure 15.2).<sup>4</sup> Despite this, 45% of Snohomish County’s food-insecure population makes too much money to qualify for SNAP and other food assistance programs.<sup>2</sup>

“ I just learned about EBT...I no longer can apply, but earlier...I could have used that. My brother – when he was in school and I was in middle school – we could have used that. And so, we didn’t know about it, or my parents didn’t know and we didn’t get any information. Because we’re a big family but we barely reach above low income. And so, we have money, but it’s not enough to support us.

- High school student ”

Figure 15.2: Percent of households that received SNAP/food stamps by race/ethnicity of householder, Snohomish County, 2020



\* Indicates statistically significant difference compared to reference group (ref)

Source: U.S. Census Bureau ACS, 2020 5-Year estimate, table S2201

## Free and reduced-price lunch programs in schools

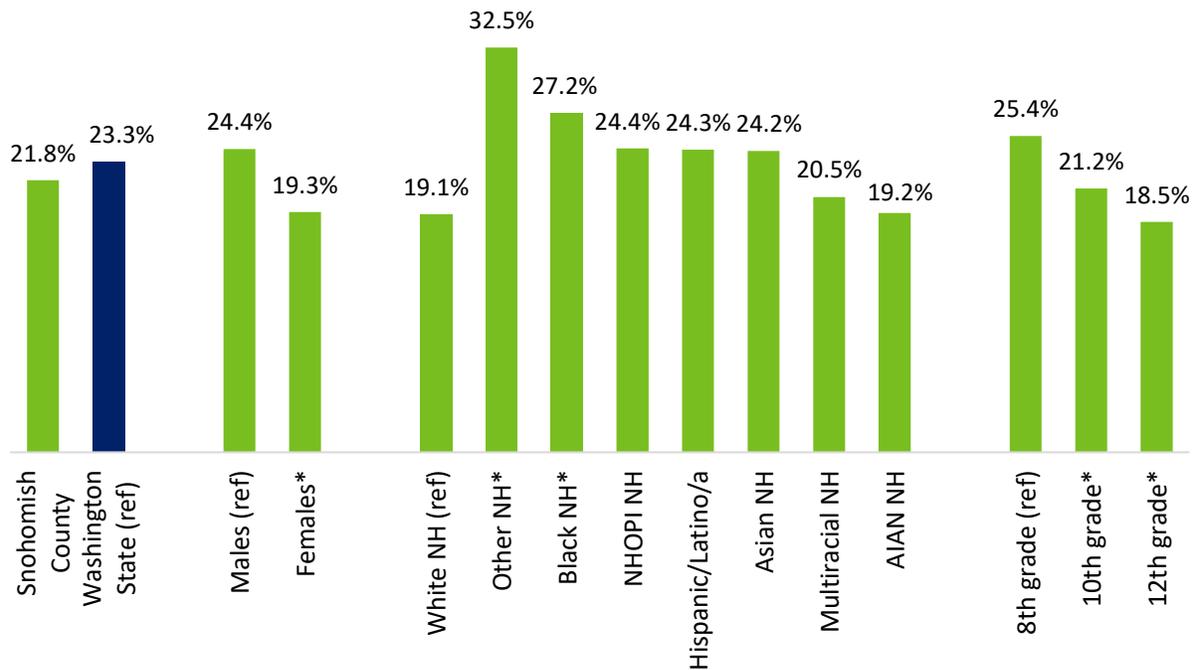
Free and reduced-price meal programs in school help mitigate food insecurity among children. In the 2021-2022 school year, 38.5% of Snohomish County students were enrolled in free and reduced-price lunch programs. Some school districts have as high as 56.4% of children on free or reduced-price lunch.<sup>5</sup> BIPOC students self-report in the Healthy Youth Survey that they receive free or reduced-price lunch more commonly than White students.<sup>6</sup>

# Food Security, Nutrition, and Physical Activity (cont.)

## Nutrition

Proper nutrition can help reduce a person’s risk for diet-related chronic illnesses. The Dietary Guidelines for Americans has variable recommendations on fruit and vegetable intake based on individual factors such as age, height, and weight. Generally, the average recommendation for adolescents and adults is to consume at least two cups of fruit and three cups of vegetables per day.<sup>7</sup> Only one in every 5 students in Snohomish County consumes at least five servings of fruits and vegetables per day (Figure 15.3).<sup>6</sup>

Figure 15.3: Percent of students<sup>†</sup> in Snohomish County who eat at least 5 servings of fruits and vegetables per day, 2021



\* Indicates statistically significant difference compared to reference group (ref)

† 8<sup>th</sup> - 12<sup>th</sup> grades

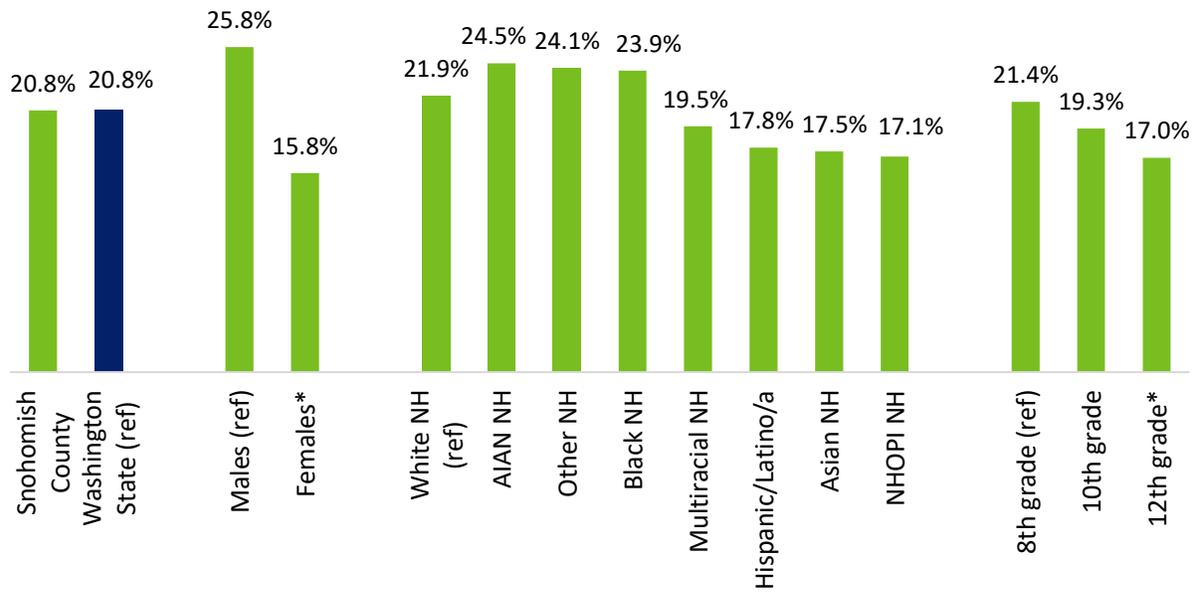
Source: HYS, 2021

## Physical activity

The CDC recommends adolescents get 60 minutes of physical activity per day, with most of the time being dedicated to aerobic activity. Over time, the percent of students who meet this recommendation has been decreasing. Girls and older students are less likely than other students to meet these recommendations (Figure 15.4).<sup>8</sup> Half of adults (49.6%) report that they meet the CDC’s recommendation of at least 150 minutes of physical activity per week.<sup>9,10</sup>

# Food Security, Nutrition, and Physical Activity (cont.)

Figure 15.4: Percent of students<sup>†</sup> in Snohomish County who meet physical activity recommendations, 2021



\* Indicates statistically significant difference compared to reference group (ref)

† 6<sup>th</sup> - 12<sup>th</sup> grades

Source: HYS, 2021

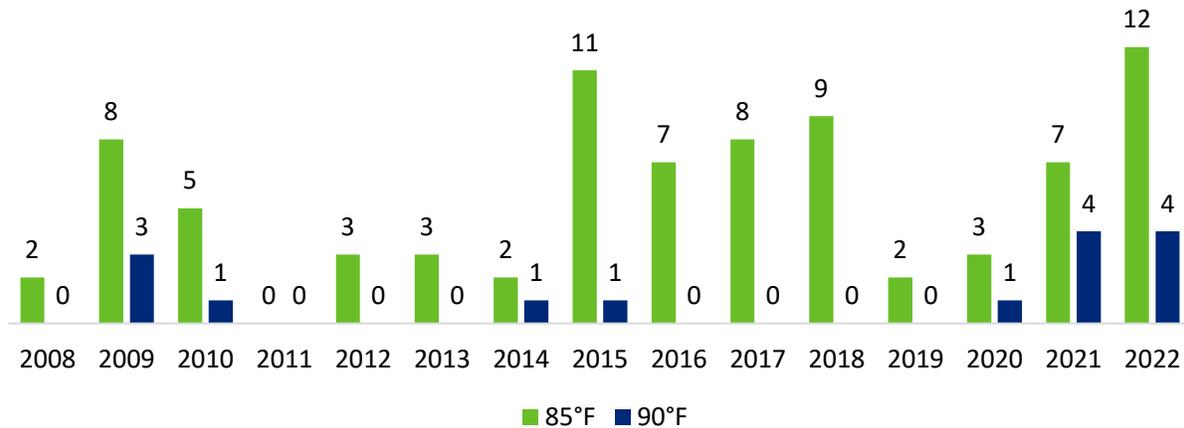
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Environmental health relates to the way human health and the natural world intersect. When people have a clean and safe space in which to live, they have more positive health outcomes. Certain aspects of the environment, including but not limited to those related to climate change, are increasingly threatening the health of the Snohomish County population. Concerns surrounding wildfire smoke exposure and extreme heat are continuing to grow in our region.<sup>1-4</sup> Other aspects of environmental health, such as the quality of Snohomish County’s public water systems, have remained excellent.<sup>5,6</sup>

## Extreme heat

The years 2021 and 2022 had more 90-degree days than other years in recent history (Figure 16.1).<sup>2</sup> With more extreme heat days such as these, risk to the population is greater.<sup>1</sup> The populations most vulnerable to high-heat days are pregnant women, young children, older adults, people who work outdoors, and people with heart or lung conditions.<sup>7</sup> Heat-related illness (HRI) hospitalization data is not yet available for 2020-2022, but from 2016-2019, there were fewer than 10 such hospitalizations in Snohomish County (<0.50 HRI hospitalizations per 100,000 population). During that same period, Washington State recorded 183 HRI hospitalization (0.57 HRI hospitalizations per 100,000 population). Nearly half of the statewide HRI hospitalizations were among adults aged 65 and older.<sup>8</sup>

Figure 16.1: Number of days with high temperatures over 85° and 90° F in Paine Field, Everett, 2008-2022



Source: National Weather Service NOWData, 2008-2022

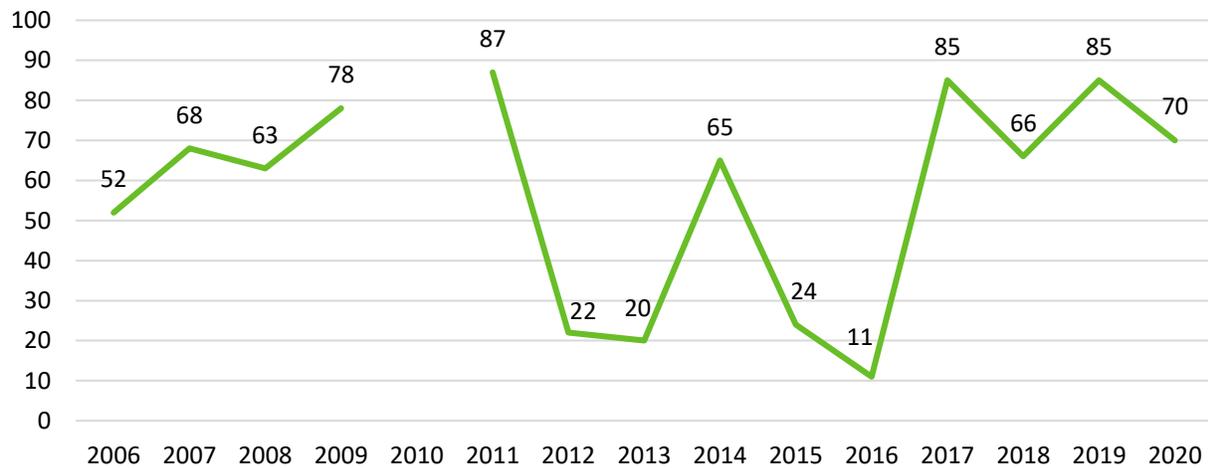
## Flooding

Snohomish County is one of many regions of Washington State that is prone to flooding. As of 2020, about 26,800 Snohomish County residents (3.2% of the entire population) lived in a 100-year flood zone. This percentage is similar to the statewide average estimate and has not changed meaningfully in recent years.<sup>4</sup> The University of Washington’s Climate Impact Group predicts that, due to climate change, flooding will become more frequent and severe in coming decades.<sup>3</sup>

## Air quality

Exposure to outdoor air pollution is the second-highest risk factor for noncommunicable diseases, according to the WHO.<sup>10</sup> A common tool for measuring harmful air pollution levels is the EPA's 24-hour PM2.5 Standard, which indicates that a 24-hour average PM2.5 over 35  $\mu\text{g}/\text{m}^3$  is harmful. In Snohomish County in 2020, 70 days did not meet the EPA's Air Quality Standard (Figure 16.2). Aside from a few exceptional years, Snohomish County has maintained a relatively steady level of poor air quality days each year. Of the 29 counties in Washington State for which average annual air quality (PM2.5 concentrations) data was available for 2020, Snohomish had the 19<sup>th</sup> best air quality average. The median average annual air quality measure was 8.85  $\mu\text{g}/\text{m}^3$  and Snohomish county's average was 11.1  $\mu\text{g}/\text{m}^3$ .<sup>9</sup>

Figure 16.2: Number of days per year the Air Quality Standard (24-hour average PM2.5 over 35  $\mu\text{g}/\text{m}^3$ ) was not met in Snohomish County, 2006-2020<sup>†</sup>



† 2010 data unavailable

Source: WA DOH WTN, 2006-2020

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Built environments are man-made or modified spaces that, collectively, are the environment where people live. This includes indoor spaces like buildings, transportation infrastructure like roads and transit, infrastructure that delivers utilities and internet, and outdoor community spaces. Built environments impact public health because they influence virtually every aspect of how a person carries out their daily lives.

Hundreds of years ago, improvements surrounding built environments focused on sanitation and hygiene. These improvements have made lasting impacts on the burden of communicable disease in most populations. In these modern times, chronic disease and isolation are some of the driving forces for improvements in our built environments.<sup>1</sup>

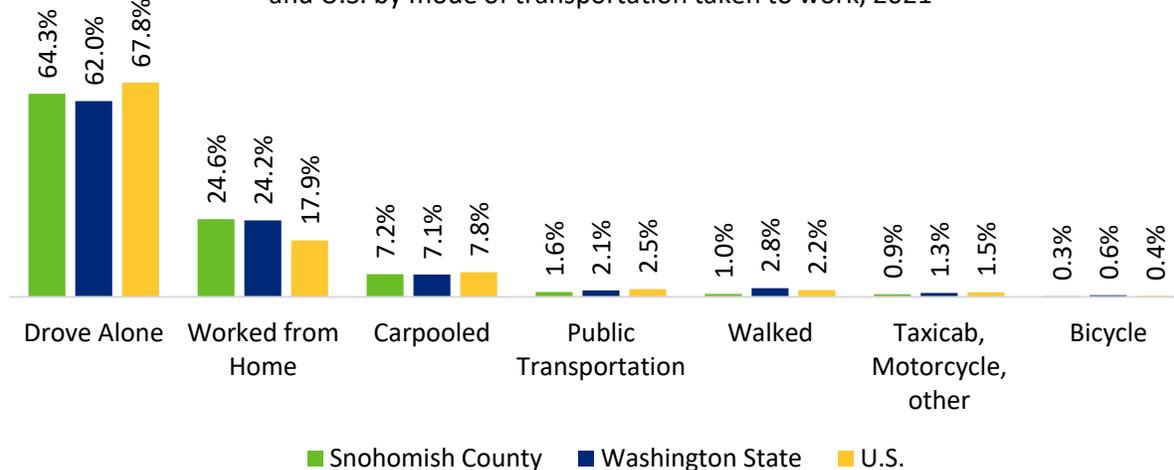
Chronic disease related to sedentary and/or isolated lifestyles are often indicated by built environment advocates as areas for improvement. A well-designed urban environment can encourage exercise, connectivity, and high-quality food without obstacles. Further, reliable internet access can more easily facilitate connection to loved ones, work, school, and doctor visits.<sup>1</sup>

## Transportation

Most Snohomish County residents drive alone to work each day (Figure 17.1). Of those who drove to work alone in 2021, nearly 45% commute over 30 minutes each way. In the years leading up to the COVID-19 pandemic, the percent of the population riding public transit to work was meeting the Healthy People 2030 goal of 5.3%. In 2021, very few people took public transit or other methods of active transportation to work in Snohomish County, Washington State, or nationwide (Figure 17.1). After 2019, the percent of the population commuting to work via public transit decreased from 5.6% in 2019 to 1.6% in 2021.<sup>2</sup> This decrease was more than matched by the spike in people who worked from home in 2021 and is primarily an artifact of the COVID-19 pandemic.<sup>2,3</sup>

“ The bus can get you anywhere you want, as long as you have the time. - Community partner, public service and community resource center ”

Figure 17.1: Percent of population in Snohomish County, Washington State, and U.S. by mode of transportation taken to work, 2021



Source: Sources: U.S. Census Bureau ACS 2021 1-Year Estimates, table S0802

# Built Environments (cont.)

## Access to green spaces

Access to outdoor green space is beneficial for physical and emotional health.<sup>5</sup> Nationally, about 55% of U.S. residents live within a 10-minute walk of a park. In Snohomish County cities, 49% to 90% of residents live within a 10-minute walk of a park, though most cities with metrics available were well above the national average of 55% (Figure 17.2).<sup>6</sup>

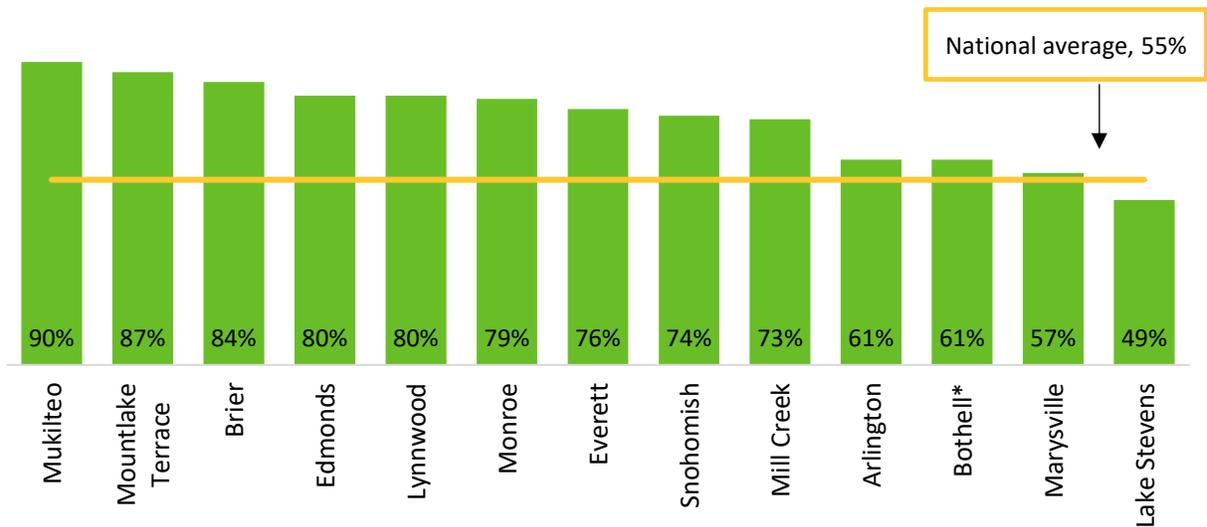


We have a gorgeous lake that, arguably, would rival Green Lake in terms of gyms and the areas that are easy to reach that...focus on [the] outdoors, and families coming together, and individuals coming together...Recognizing that we're better off by making sure that everybody is a part of that...Thinking about our connection to the environment...

- Community partner, public service and community resource center



Figure 17.2: Percent of population in Snohomish County within a 10-minute walk of a park by city of residence, 2022



\* Includes both Snohomish and King Counties

Source: Trust for Public Land, retrieved November 2022

# Built Environments (cont.)

## Access to internet

More than ever, internet access is critical for many basic life functions. A good internet connection facilitates access to accurate information, health care, economic stability and work, education, social connectedness, and many other factors that impact a person's quality of life.

The Washington State Broadband Office has declared a goal that all Washington residents have high-speed internet by 2024.<sup>7</sup> Currently, over 5% of Snohomish County residents do not have an internet subscription at home. The percent of population without internet at home has declined significantly in recent years from 12.7% in 2015 to 5.1% in 2021.<sup>8</sup> Those without internet at home are more likely to be rural and low-income compared to those with internet at home. Further descriptive characteristics are not available for this measure.<sup>7,8</sup>

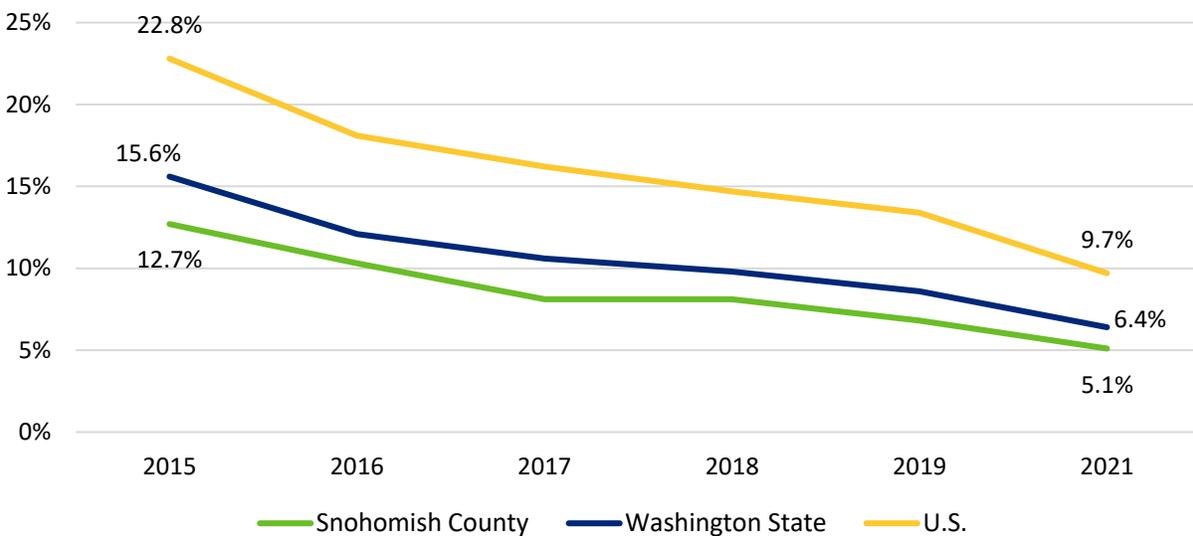
“

If there is any way to allocate funds to some sort of one-on-one advocate for an LGBTQIA+ individual seeking [resources] to see them through the full process and do the legwork. Because we're speaking [about] our community not having access to housing security or employment security, which means not having access to internet. And how are you going to do four hours of research [on resources, gender affirming care, etc.] if you don't have internet? So having somebody who knows it's their job to know these things, like insurance plans, will expedite the process exponentially.

- LGBTQIA+ community member, youth

”

Figure 17.3: Percent of population in Snohomish County, Washington State, and U.S. without an internet subscription at home, 2015-2021



Sources: U.S. Census Bureau ACS 2015- 2021 1-Year Estimates, table B28002

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# Appendix A: Abbreviations

- ACE: Adverse Childhood Experience
- ACS: American Community Survey
- AHQR: Agency for Healthcare Research and Quality
- AIAN: American Indian or Alaska Native
- BIPOC: Black, Indigenous, People of Color
- BRFSS: Behavioral Risk Factor Surveillance System
- CD: Communicable Disease
- CDC: Centers for Disease Control and Prevention
- CHA: Community Health Assessment
- CHARS: (Washington State) Comprehensive Hospital Abstract Reporting System
- CHAT: (Washington State Department of Health) Community Health Assessment Tool
- CHIP: Community Health Improvement Plan
- CHR: County Health Rankings and Roadmaps
- CHS: (Washington State Department of Health) Center for Health Statistics
- CoC: Continuum of Care
- CSSAT POC: Center for Social Sector Analytics and Technology, Partners for Our Children
- DOE: (Washington State) Department of Ecology
- DOH: (Washington State) Department of Health
- EJScreen: Environmental Justice Screening and Mapping Tool
- EPA: Environmental Protection Agency (national)
- FPL: Federal Poverty Level
- GED: General Educational Development (high school equivalency diploma)
- HHS: Department of Health and Human Services
- HP 2030: Healthy People 2030
- HUD: U.S. Department of Housing and Urban Development
- HYS: Healthy Youth Survey
- K-12: Kindergarten through 12<sup>th</sup> grade (public schools)
- Latino/a: Latino or Latina
- LGBTQIA+: Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Intersex, Asexual, and other sexual identities (e.g., pansexual or Two-Spirit)
- MIT: Massachusetts Institute of Technology
- Multiracial: racial category in which a person identifies with two or more racial categories
- N/A: Data unavailable and/or not assessed (due to unavailability, unreliability, or small numbers)
- NCHS: National Center for Health Statistics
- NH: Non-Hispanic
- NHIS: National Health Interview Survey
- NHOPI: Native Hawaiian or Other Pacific Islander
- NHSR: National Health Statistics Report
- NWS: National Weather Service
- OFM: Office of Financial Management
- OSPI: Washington State Office of Superintendent of Public Instruction
- PHIMS: Washington State Public Health Issue Management System

## Appendix A: Abbreviations (cont.)

- PI: Pacific Islander
- PIT: Annual Point-in-Time
- PRAMS: Pregnancy Risk Assessment Monitoring System
- PWID: people who inject drugs
- R/E: Race/ethnicity
- Ref: reference group for significance testing and sub-population comparisons; shown as (*ref*) in figures.
- RSE: relative standard error (provides measure of reliability for statistical estimate)
- SC: Snohomish County
- SE: Socioeconomic status
- SOGI: Sexual orientation or gender identity
- STEC: Shiga toxin-producing E. coli
- TPL: Trust for Public Land
- USPSTF: United State Preventive Services Task Force
- WA: Washington State
- WA Broadband Office: Washington State Broadband Office
- WDRS: Washington Disease Reporting System
- WA IIS: Washington State Immunization Information System
- WHO: World Health Organization
- WSCR: Washington State Cancer Registry
- WTN: Washington Tracking Network (Washington State Department of Health)
- U.S.: United States
- y.o.: Years old
- µg/dL: micrograms (of lead) per deciliter (of blood)

# Appendix B: Data Summary Tables by Topic

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate groups†	Sources
<b>Demographics</b>							
2019 <a href="#">Out-of-home child entry rate</a> (children removed from a SC home and placed into out-of-home care; includes SC children placed into out-of-home care in another county)	2.7/1K	3.3/1K	N/A	↓	No goal	R/E (AIAN, Black, NHOPI, Multiracial)‡	CSSAT POC, Child Well-Being Data Portal 2015-2019
2019 <a href="#">Out-of-home care rate</a> (children placed into out-of-home care in SC; includes children removed from another county)	3.8/1K	4.9/1K	N/A	↓	No goal	R/E (AIAN, Black, NHOPI, Multiracial)‡	CSSAT POC, Child Well-Being Data Portal 2016-2020
<b>Socioeconomic Environment</b>							
2021 Median Household Income	\$100,042 /year	\$84,247 /year	\$69,717 /year	↑	No goal	N/A	2021, 2016-2019 ACS 1 year estimates Table S1901
2020 Employment Population Ratio (percent employment among working-age population 16-64 y.o.)	64.2%	60.6%	59.6%	↔	75.0%	Gender (females), R/E (AIAN NH, PI NH)	2020 ACS 5-year Table S2301; 2021, 2016-2019 ACS 1-year estimates Table S2301; HP 2030
2020 Unemployment rate	4.1%	4.9%	5.4%	↔	No comparable goal	R/E (AIAN NH, Multiracial NH)	2020 ACS 5-year estimates Table S2301; 2021, 2016-2019 ACS 1-year estimates Table S2301
2020 Population below 100% FPL	7.2%	10.2%	12.8%	↔	8.0%	Gender (females), R/E (AIAN NH, Hispanic/Latino/a, Multiracial NH, Black NH, Asian NH), Age (<18 y.o.)	2020 ACS 5-year estimates Table S1703; 2021, 2016-2019 ACS 1-year estimates Table S1703; HP 2030

N/A: data not available or not assessed (due to unavailability, unreliability, or small numbers)

† Statistically significant disparity from reference group. Greater than 20% disparity from reference group if unable to assess for statistical significance but disaggregated data is available and reasonably reliable.

‡ Small sample size and/or RSE greater than 25%. Unable to assess for statistically significant differences. Interpret with caution.

^ Figures may be artificially low due to a large percentage of “Don’t know” or “Refused” responses. Interpret with caution.

# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Socioeconomic Environment (cont.)</b>							
2021 Population below 200% FPL	16.5%	22.6%	28.6%	↔	No comparable goal	N/A	2020 ACS 5-year estimates Table S1701; 2016-2019, 2021 ACS 1-year estimates Table S1701
2021 Children below 100% FPL	7.5%	12.0%	16.9%	↓	No comparable goal	N/A	2020 ACS 5-year estimates Table S1703; 2016-2019, 2021 1-year estimates Table S1703
2021 Children below 125%FPL	10.0%	16.0%	21.9%	↓	No comparable goal	N/A	2020 ACS 5-year estimates Table S1703; 2016-2019, 2021 ACS 1-year estimates Table S1703
2021 Single parent households below 100% FPL (of those reported in family households with female householder)	16.3%	23.8%	26.5%	↔	No goal	N/A	2020 ACS 5-year estimates Table S1703; 2016-2019, 2021 ACS 1-year estimates Table S1703
2021 Single parent households below 125% FPL (of those reported in family households with female householder)	22.2%	29%	33.1%	↔	No goal	N/A	2020 ACS 5-year estimates Table S1703; 2016-2019, 2021 ACS 1-year estimates Table S1703
2021 Families below 100% FPL	5.6%	7.8%	10.6%	↔	No goal	N/A	2020 ACS 5-year estimates Table S1703; 2016-2019, 2021 ACS 1-year estimates Table S1703
2021 Families below 125% FPL	7.5%	10.4%	14.1%	↔	No goal	N/A	2020 ACS 5-year estimates Table S1703; 2016-2019, 2021 ACS 1-year estimates Table S1703
2021 Adults 65+ below 100% FPL	7.9%	8.2%	10.3%	↔	No goal	N/A	2020 ACS 5-year estimates Table S1703; 2016-2019, 2021 ACS 1-year estimates Table S1703

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Socioeconomic Environment (cont.)</b>							
2021 Adults 65+ below 125% FPL	10.6%	11.5%	14.4%	↔	No goal	N/A	2020 ACS 5-year estimates Table S1703; 2016-2019, 2021 ACS 1-year estimates Table S1703
2022 Cost of living/self-sufficiency standard	\$44,557 /year	\$38,573/ year	N/A	N/A	No goal	N/A	MIT living wage estimate
2021 Median gross rent for 2-bedroom unit	\$1,654/ month	\$1,479/ month	\$1,185/ month	↑	No goal	N/A	2020 ACS 5-year/2021, 2019-2016 1-year estimates Table B25031
2021 Housing affordability (median gross rent)	\$1,668/ month	\$1,484/ month	\$1,191/ month	↑	No goal	N/A	2020 ACS 5-year/2021,2019-2016 1 year estimates Table B25031
2020 Housing affordability (housing cost burden/households spending 30%+ of income on housing costs)	32.0%	31.5%	30.3%	↑	25.5%	N/A	2020 ACS 5-year/2021,2019-2016 1 year estimates Table S2503; HP 2030
2021 Owner-occupied housing units	66.5%	63.7%	N/A	↔	No goal	Age (25-34 y.o.)	2021 BRFSS
2021 Renter-occupied housing units	28.2%	29.5%	N/A	↔	No goal	Age (18-24 y.o.‡, 25-44 y.o.)	2021 BRFSS
2022 Persons experiencing homelessness (point-in-time counts)	1,184	20,324	582,462	↔	No goal	N/A	2015-2022 CoC Homeless Populations and Subpopulation Reports and 2015-2022 Snohomish County PIT Estimates
2022 Students (K-12) experiencing homelessness (counts from 2021-2022 school year)	3,078	29,846	N/A	↔	No goal	N/A	2021-2022 OSPI, Report Card Enrollment

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Socioeconomic Environment (cont.)</b>							
2021 Percent students (K-12) enrolled in public schools	83.1%	82.7%	81.9%	↔	No goal	N/A	2020 ACS 5-year estimates Table S1401; 2016-2019, 2021 ACS 1-year estimates Table S1401
2021 Percent students (K-12) enrolled in private schools	16.9%	17.3%	18.1%	↔	No goal	N/A	2020 ACS 5-year estimates Table S1401; 2016-2019, 2021 ACS 1-year estimates Table S1401
2022 Kindergarten readiness	52.4%	50.8%	N/A	↑	No goal	R/E (AIAN NH, Black, Hispanic/Latino/a, PI NH)	2021-22 OSPI, Report Card WaKids
2021 High school on-time graduation rates	81.8%	82.5%	N/A	↑	90.7%	R/E (AIAN NH)	2016-2017, 2020-2021 OSPI, Report Card Graduation; HP 2030
2021 High school 4-year cohort dropout rate	7.0%	9.5%	N/A	↓	No comparable goal	R/E (AIAN NH)	2016-2017, 2020-2021 OSPI, Report Card Graduation
2021 Population 25+ y.o. with bachelor's degree	37.7%	39.0%	35.0%	↑	No goal	N/A	2020 ACS 5-year estimates Table S1501; 2016-2019, 2021 ACS 1-year estimates Table S1501

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>General Health</b>							
2020 Life expectancy (at birth)	80.5 years	79.9 years	77.0 years	↓	No goal	Gender (males), R/E (Black NH, PI NH)	CHAT CHS Death Certificate Data 2016-2020; CDC NCHS Brief No. 427, 2021
2020 Death rate (total population)	663.9/100K	697.6/100K	835.4/100K	↑	No goal	None detected (none statistically higher than reference group)	CHAT CHS Death Certificate Data 2016-2020; CDC NCHS Brief No. 427, 2021
2020 Infant death rate (<1 y.o.)	3.4/1K	4.5/1K	5.4/1K	↓	5.0/1K	N/A	CHAT CHS Death Certificate Data 2016-2020; CDC NCHS Brief No. 427, 2021
2016-2020 Combined years child death rate (1-4 y.o.)	16.3/100K	17.3/100K	22.7/100K (2020)	↔	No goal	N/A	CHAT CHS Death Certificate Data 2016-2020; CDC WONDER, National Vital Statistics System, 2020
2016-2020 Combined years child death rate (5-14 y.o.)	10.7/100K	10.8/100K	13.7/100K	↔	No goal	N/A	CHAT CHS Death Certificate Data 2016-2020; CDC WONDER, National Vital Statistics System, 2020

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Access to Care</b>							
2019 Primary care physicians in SC	51.8/ 100K	84.7/ 100K	76.3/ 100K	↔	No goal	N/A	CHR 2022
2021 Mental health providers in SC	357.1/ 100K	434.8/ 100K	285.7/ 100K	↑	No goal	N/A	CHR 2022
2020 Uninsured population	6.1%	6.2%	8.7%	↓	7.6% (inverse)	Gender (females)‡, R/E (BIPOC)‡, Age (19-44 y.o.)‡	U.S. Census Bureau, ACS 2020; HP 2030
2021 Last routine medical visit within the past year (adults)	62.2%	64.5%	N/A	↑	No goal	Age (65+ y.o.)	BRFSS 2021
2021 Last routine medical visit within the past year (youth)	64.8%	66.6%	N/A	↔	82.6% (preventive health care visit, 12-17 y.o.)	R/E (BIPOC)	HYS 2021; HP 2030
2019 Medical care delayed: unable to get timely appointment	11.5%	11.0%	N/A	↑	No goal	N/A	BRFSS 2019
<b>Behavioral and Mental health</b>							
2021 Poor Mental Health Days: >14 out of the last 30 days	16.3%	15.8	N/A	↑	No goal	Gender (females), R/E (white), Age (younger adults)	BRFSS 2017-2021

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Behavioral and Mental health (cont.)</b>							
2020 <a href="#">Serious Mental Illness</a>	5.8%	3.8%	5.6%	↑	No goal	Gender (females), Age (younger adults)‡	BRFSS 2015-2020
2021 Adults ever diagnosed with depression	26.6%	23.8%	N/A	↔	No goal	Gender (females), R/E (white), Age (younger adults)‡	BRFSS 2019-2021
2020 Suicide death rate	14.1/ 100K	15.4/ 100K	13.5/ 100K	↔	12.8/100K	Gender (males)	CHS death certificate data 2015-2020; HP2030
2021 Students with anxiety symptoms (grades 8-12)	37.4%	37.9%	N/A	↑	No goal	Gender (females), Age (older students)	HYS 2016-2021
2021 Students with depression symptoms (grades 8-12)	39.1%	38.7%	N/A	↑	No goal	Gender (females), R/E (Multiracial NH), Age (older students)	HYS 2016-2021
2021 Adults seriously thinking about suicide	3.2%	3.3%	N/A	N/A	No goal	Age (younger adults)‡	BRFSS 2018-2021
2021 Students seriously considered suicide (grade 6)	20.3%	19.7%	N/A	↔	No comparable goal	Gender (females)	HYS 2016-2021
2021 Students planned suicide (grades 8-12)	16.0%	15.7%	N/A	↓	No comparable goal	Gender (females), R/E (Multiracial NH)‡	HYS 2016-2021
2021 Adults with 3+ Adverse Childhood Experiences (ACEs)	29.7%	31.0%	N/A	↔	No goal	R/E (White NH)	BRFSS 2019-2021

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Behavioral and Mental health (cont.)</b>							
2021 Students with 3+ Adverse Childhood Experiences (ACEs; grades 8-12)	23.4%	21.3%	N/A	N/A	No goal	Gender (females), R/E (Multiracial NH), Age (older students)	HYS 2021
2021 Students bullied (grades 6-12)	20.7%	20.4%	N/A	N/A	No comparable goal	Gender (females), R/E (AIAN NH, Multiracial NH, Other NH) Age (younger students)	HYS 2021
2021 Students bullied based on race/ethnicity (grades 8-12)	8.0%	7.4%	N/A	N/A	No goal	Gender (females), R/E (Black NH, Multiracial NH, NHOPI NH, Hispanic/Latino/a, Asian NH, AIAN NH), Age (younger students)‡	HYS 2021
2021 Students bullied based on sexual orientation/gender identity (grades 8-12)	11.3%	10.4%	N/A	N/A	25.1% (sexual orientation only)	HYS Gender (females), R/E (AIAN NH, NHOPI NH)‡, Age (younger students)	HYS 2021; HP 2030
2021 Students learned about healthy relationships (grades 8-12)	53.1%	53.9%	N/A	N/A	No goal	None detected	HYS 2021
2021 Students felt limited or unsafe due to a romantic partner (grades 8-12)	6.3%	6.0%	N/A	N/A	No goal	Gender (females)‡, Age (older students)‡	HYS 2021
2021 Students were physically hurt on purpose by a romantic partner (grades 8-12)	3.2%	2.8%	N/A	N/A	No goal	Gender (females)‡, Age (older students)‡	HYS 2021

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Substance Use</b>							
2021 Adults binge drinking	13.1%	14.6%	26.0 (2019)	↔	25.4%	Gender (females), Race (White NH)	BRFSS 2011-2021; HP2030
2021 Students binge drinking (grades 6-12)	4.6%	5.2%	N/A	↓	No goal	R/E (White NH and Hispanic/Latino/a), Age (older students)	HYS 2016-2021
2021 Students drinking in the past 30 days (grades 6-12)	6.7%	7.7%	9.4% (2019)	↓	6.3%	Age (older students), R/E (White NH)	HYS 2016-2021; HP2030
2020 Alcohol-related death rate	17.3/100K	16.6/100K	N/A	↑	No goal	Gender (males), R/E (AIAN NH)	CHAT CHS death certificate data 2011-2020
2021 Adults cigarette smoking	9.1%	10.2%	11.7%	↓	6.1%	Age (35-44 y.o.)	BRFSS 2011-2021, HP2030
2021 Adult vaping	6.2%	6.4%	N/A	N/A	No goal	R/E (White NH)	BRFSS 2021
2021 Students cigarette smoking (grades 6-12)	1.6%	1.8%	3.3% (2020)	↓	3.4%	N/A	HYS 2016-2021; HP2030
2021 Students vaping (grades 6-12)	7.0%	7.0%	13.1% (2020)	N/A	10.5%	Gender (females), age (older students)	HYS 2021; HP2030
2021 Adult cannabis use in the last 30 days	17.9%	17.8%	N/A	↑	No goal	Gender (males)	BRFSS 2011-2021

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Substance Use (cont.)</b>							
2021 Students cannabis use in the last 30 days (grades 6-12)	5.9%	6.1%	7.4% (2019)	↓	5.8% (12-17 y.o)	Age (older students)	HYS 2016-2021; HP 2030
2021 Students using painkillers to get high in the last 30 days (grades 8-12)	1.0%	1.1%	N/A	N/A	No goal	N/A	HYS 2021
2021 Students ever trying methamphetamine (grades 8-12)	0.7%	0.8%	N/A	N/A	No goal	N/A	HYS 2021
2021 Students ever trying Heroin (grades 8-12)	0.4%	0.5%	N/A	N/A	No goal	N/A	HYS 2021
2020 Rate of all drug overdose death	27.0/100K	22.5/100K	28.3/100K	↑	20.7/100K	Gender (males)	CHAT CHS death certificate data 2017-2021; CDC WONDER 2020; HP2030
2020 Rate of psychostimulant overdose deaths	10.3/100K	9.4/100K	7.5/100K	↑	No goal	Gender (males)	CHAT CHS death certificate data 2017-2021; CDC WONDER 2017-2021
2020 Rate of cocaine overdose deaths	2.0/100K	2.4/100K	6.0/100K	↔	No goal	Gender (males)	CHAT CHS death certificate data 2017-2021; CDC WONDER 2017-2021
2020 Rate of opioid overdose deaths	21.6/100K	15.8/100K	21.4/100K	↑	13.1/100K	Gender (males)	CHAT CHS death certificate data 2017-2021; CDC WONDER 2017-2021, HP2030
2021 Rate of opioid overdose deaths – fentanyl-involved	18.5/100K	13.9/100K	17.8/100K (2020)	↑	8.9/100K	Gender (males)	CHAT CHS death certificate data 2017-2021; CDC WONDER 2017-2021; HP2030

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Substance Use (cont.)</b>							
2021 Rate of opioid overdose deaths – heroin-involved	4.7/100K	4.0/100K	4.1/100K (2020)	↓	4.2/100K	Gender (males)	CHAT CHS death certificate data 2017-2021; CDC WONDER 2017-2021; HP2030
<b>Injury Prevention and Safety</b>							
2020 Unintentional injury death rate	56.9/100K	51.4/100K	61.0/100K	↑	43.2/100K	Age (older adults)	CHAT CHS 1999-2020; CDC WONDER 2020; HP2030
2019 Unintentional injury hospitalization rate	601.4/100K	574.4/100K	N/A	↔	No goal	Gender (males), Age (<1 y.o. and older adults)	CHAT CHARS 2016-2019
2019 Assault injury hospitalization rate	14.7/100K	17.2/100K	N/A	↔	No goal	Gender (males)	CHAT CHARS 2016-2019
2020 Motor vehicle collision related death rate	7.0/100K	8.7/100K	12.0/100K	↔	10.1/100k	Gender (males)	CHAT CHS 2016-2020; HP2030
2019 Motor Vehicle Injury Hospitalization Rates	49.4/100K	48.0/100K	N/A	↔	N/A	Gender (males)	CHAT CHARS 2019
2020 Firearm injury death rate	9.5/100K	10.7/100K	13.6/100K	↔	10.7/100K	Gender (males)	CHAT CHS 2015-2020; HP2030
2019 Firearm injury hospitalization rate	5.5/100K	6.9/100K	N/A	↔	No goal	Gender (males), Age (young adults)	CHAT CHARS 2016-2019

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Injury Prevention and Safety (cont.)</b>							
2020 Gun owners who store their firearms loaded and unlocked in their home	38.1%	40.3%	N/A	↔	No goal	None detected	BRFSS 2015-2020
2021 Students who text and drive (grades 8-12)	28.2%	26.1%	N/A	N/A	No goal	None detected	HYS 2021
2019 Adults who text and drive	28.9%	28.3%	N/A	↔	No goal	None detected	BRFSS 2014-2019
2021 Students who drink and drive (grades 8-12)	0.9%	1.0%	N/A	N/A	No goal	None detected	HYS 2021
2021 Students who use marijuana and drive (grades 8-12)	2.3%	2.2%	N/A	N/A	No goal	None detected	HYS 2021
2020 Adults who drink and drive	0.5%	2.0%	N/A	N/A	No goal	N/A	BRFSS 2016-2020
2021 Adults use marijuana and drive	11.1%	16.6%	N/A	↓	No goal	N/A	BRFSS 2018-2021
2020 Adults always or almost always wear a seatbelt	88.5%^	88.9%^	N/A	↔	No goal	None detected	BRFSS 2011-2021
2021 Students taken formal swimming lessons (grades 6-12)	56.2%	53.8%	N/A	↔	No goal	R/E (Black NH, AIAN NH, 'Other' NH, Hispanic/Latino/a)	HYS 2016-2021

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Injury Prevention and Safety (cont.)</b>							
2021 Students good at swimming (grades 6-12)	46.3%	47.9%	N/A	↓	No goal	R/E (Black NH, Hispanic/Latino/a)	HYS 2016-2021
2021 Students most of the time or always wear a helmet (grade 6)	45.7%	41.6%	N/A	N/A	No goal	R/E (Black NH, Hispanic/Latino/a)	HYS 2021
<b>Communicable Disease</b>							
2020 Influenza death rate	1.6/100K	1.5/100K	N/A	↔	No goal	Age (older adults)	CHAT CHS 2020; DOH CD 2020 Surveillance Report
2020 Mumps cases	No cases	4 cases	616 cases	↔	No goal	N/A	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report; CDC 2020
2020 Pertussis rate	1.2/100K	3.2/100K	5.7/100K (2019)	↓	Reduce cases of pertussis in infants	N/A	CHAT PHIMS & WDRS 2016-2020; DOH 2020 Surveillance Report; HP 2030
2021 Influenza vaccination rates	49.2%	46.7%	35.9%	↔	70.0%	Gender (males), Age (younger adults)	BRFSS 2021; CDC fluvaxview 2021; HP 2030
2018-2019 school year K-12 immunization status: overall complete immunization compliance	88.9%	88.8%	N/A	↑	No goal	Rural school districts (higher exemption rates)	WA IIS, DOH School Immunization Dashboard
2020 Giardiasis rate	6.0/100K	2.4/100K	5.6/100K (2019)	↓	No goal	Age (middle aged adults)	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report; CDC Report on Giardiasis 2019

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Communicable Disease (cont.)</b>							
2020 Campylobacteriosis rate	16.9/100K	21/100K	14.4/100K	↓	No goal	None detected	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report, CDC Food Net Fast
2020 Cryptosporidiosis rate	1.7/100K	2.2/100K	3.0/100K	↑	No goal	N/A	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report, CDC Report on Cryptosporidiosis 2019
2020 Salmonellosis rate	9.5/100K	9.2/100K	13.3/100K	↔	No goal	Gender (females)	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report, CDC Food Net Fast
2020 Shigellosis rate	2.4/100K	2.9/100K	3.1/100K	↔	No goal	None detected	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report, CDC Food Net Fast
2020 STEC rate	4.7/100K	4.0/100K	3.6/100K	↔	No goal	None detected	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report, CDC Food Net Fast
2020 Vibriosis rate	1.6/100K	1.2/100K	0.7/100K	↔	No goal	N/A	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report, CDC Food Net Fast
2020 Hepatitis A rate	4.7/100K	3.7/100K	5.7/100K	↑	Reduce infections >40% by 2025	None detected	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report, National Viral Hepatitis Progress Report
2020 Acute Hepatitis B rate	0.2/100K	0.5/100K	1/100K (2019)	↔	Reduce infections >20% by 2025	N/A	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report, National Viral Hepatitis Progress Report

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## Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Communicable Disease (cont.)</b>							
2020 Acute Hepatitis C rate	1.2/100K	1.6/100K	1.3/100K (2019)	↔	Reduce infections >20% by 2025	N/A	CHAT PHIMS & WDRS 2016-2020; DOH CD 2020 Surveillance Report, National Viral Hepatitis Progress Report
2020 Chronic Hepatitis B rate	20.6/100K	18/100K	N/A	↔	No goal	N/A	DOH CD 2020 Surveillance Report
2020 Chronic Hepatitis C rate	47.1/100K	58.4/100K	N/A	↓	No goal	N/A	DOH CD 2020 Surveillance Report
2020 Chlamydia rate	352.4/100K	320.1/100K	481.3/100K	↔	No goal	Gender (females), Age (teens and young adults)	CHAT PHIMS & WDRS 2016-2020; CDC 2020
2020 Gonorrhea rate	106.4/100K	160.5/100K	207/100K	↔	200/100K	Gender (males), Age (young adults)	CHAT PHIMS & WDRS 2016-2020; CDC 2020
2020 Newly Diagnosed HIV rate	2.8/100K	4.7/100K	10.9/100K	↓	75% reduction	N/A	DOH CD 2020 Surveillance Report
2020 Primary/Secondary Syphilis rate	7.7/100K	11.4/100K	12.7/100K	↔	12.2/100K	Gender (males), Age (young adults)	CHAT PHIMS & WDRS 2016-2020; CDC 2020

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## Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Communicable Disease (cont.)</b>							
2021 Percent of adults ever had HIV test	39.6%	38.0%	N/A	↔	No comparable goal	N/A	BRFSS 2021
2020 Tuberculosis (TB) rate	2.4/100K	2.1/100K	2.2/100K	↓	1.4/100K	N/A	CHAT PHIMS & WDRS 2016-2020; HP 2030
September 2022 COVID-19 rate (preliminary)	411/100K	397/100K	N/A	N/A	No goal	N/A	DOH COVID-19 Data Dashboard
<b>Cancer</b>							
2020 Women who received mammogram in past 2 years (50-74 y.o.)	69.2%	76.0%	76.4% (2019)	↑	80.5%	N/A	BRFSS 2014-2020; HP 2030
2019 Female breast cancer rates	137.5/100K	132.3/100K	129.7/100K	↔	No goal	None detected	CHAT WSCR 2015-2019
2019 Melanoma rates	33.3/100K	27.6/100K	22.7/100K	↔	No goal	Gender (males), R/E (White NH)	CHAT WSCR 2015-2019; CDC and National Cancer Institute
2019 Lung cancer rates (including bronchus)	51.9/100K	47.4/100K	52.9/100K	↓	No goal	N/A	CHAT WSCR 2015-2019; CDC and National Cancer Institute

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## Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Cancer (cont.)</b>							
2020 Prostate cancer screening in past 2 years (men, 40+ y.o.)	20.1%	19.1%	N/A	N/A	No goal	N/A	BRFSS 2020
2019 Male prostate cancer rates	102.2/100K	98.2/100K	111.6/100K	↔	No goal	R/E (White NH, Black NH <sup>‡</sup> )	CHAT WSCR 2015-2019; CDC and National Cancer Institute
2020 met colorectal screening guidelines (50-75 y.o.)	71.9%	74.2%	65.2% (2018)	N/A	74.4%	N/A	BRFSS 2020; HP 2030
2019 Colon cancer rates (excluding rectum)	19.7/100K	21.9/100K	N/A	↔	No goal	N/A	CHAT WSCR 2015-2019
2020 Women with pap test in past 3 years (women, 21-65 y.o.)	69.7%	69.6%	80.5% (2018)	↓	84.3%	N/A	BRFSS 2011-2020; HP 2030
2019 Female ovarian cancer rates	8.9/100K	9.0/100K	9.6/100K	↔	No goal	N/A	CHAT WSCR 2015-2019; CDC and National Cancer Institute
2019 Female cervical cancer rates	8.3/100K	6.8/100K	7.5/100K	↔	No goal	N/A	CHAT WSCR 2015-2019; CDC and National Cancer Institute
2019 Brain cancer rates	7.4/100K	6.6/100K	N/A	↔	No goal	N/A	CHAT WSCR 2015-2019; CDC and National Cancer Institute

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Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Cancer (cont.)</b>							
2019 Lymphoma rates	22.6/ 100K	20.6/ 100K	N/A	↔	No goal	N/A	CHAT WSCR 2015-2019; CDC and National Cancer Institute
2019 Childhood cancers (all cancers combined, <18 y.o.)	15.8/ 100K	18.5/ 100K	N/A	↔	No goal	N/A	CHAT WSCR 2015-2019
<b>Chronic Disease</b>							
2019 Asthma hospitalization rate	29.8/ 100K	25.9/ 100K	N/A	↓	No goal	Gender (female), Age (0-4 y.o.)	CHAT CHARS 2016-2019
2021 Asthma diagnosis, current (adults, self-reported)	10.0%	10.5%	7.8% (2020)	↔	No goal	Gender (female)‡, Age (18-24 y.o.)‡	BRFSS 2011-2021; CDC National Asthma Data
2021 asthma diagnosis, current (youth, self-reported)	7.2%	7.8%	N/A	↓	No goal	R/E (Multiracial NH)	HYS 2016-2021
2019 COPD hospitalization rates	68.2/ 100K	60.7/ 100K	N/A	↔	No comparable goal	Gender (females)	CHAT CHARS 2016-2019
2021 COPD diagnosis (adults, self-reported)	3.7%	4.7%	5.6% (2020)	N/A	No goal	Age (35+ y.o.)‡	BRFSS 2021; CDC National Trends in COPD
2019 Heart attack hospitalization rates	121.7/ 100K	125.5/ 100K	N/A	↓	No goal	Gender (males)	CHAT CHARS 2016-2019

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Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Chronic Disease (cont.)</b>							
2019 Diabetes hospitalization rates	107.6/100K	109.9/100K	N/A	↓	No comparable goal	Gender (males)	CHAT CHARS 2016-2019
2021 Adult prediabetes diagnosis (self-reported)	12.0%	10.8%	N/A	↑	No goal	N/A	BRFSS 2017-2021
2021 Adult diabetes diagnosis (self-reported)	6.5%	7.9%	8.7% (2019)	↓	No goal	R/E (BIPOC)‡	BRFSS 2019-2021; CDC Prevalence of Diagnosed Diabetes
2021 Adult obesity (BMI 30.0+)	32.7%	28.9%	41.9% (2017-Mar. 2020)	↑	36.0%	Age (45-64 y.o.)‡	BRFSS 2011-2021; HP 2030; NHSR No. 158
2019 Hypertension-related hospitalization rates	191.3/100K	234.7/100K	N/A	↔	No goal	Gender (males)	CHAT CHARS 2016-2019
2021 Adults high blood pressure/hypertension diagnosis (self-reported)	26.1%	27.5%	45.7% (2017-2020)	N/A	42.6%	Gender (males), Age (35+ y.o.)‡	BRFSS 2021; HP 2030
2019 Stroke (acute) hospitalization rates	148.5/100K	143.5/100K	N/A	↓	No goal	Gender (males)	CHAT CHARS 2016-2019
<b>Older Adults and Healthy Aging</b>							
2019 Older adult physical activity (65+ y.o.)	20.0%	24.7%	N/A	↔	No goal	Gender (males)‡	BRFSS 2013-2019

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Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Older Adults and Healthy Aging (cont.)</b>							
2020 Older adult falls (65+ y.o.)	26.9%	30.5%	N/A	↓	No goal	Gender (females)‡	BRFSS 2012-2020
2019 Older adults Alzheimer's hospitalization rate (65+ y.o.)	57.3/100K	43.9/100K	N/A	↓	No comparable goal	N/A	CHAT CHARS, 2016-2019
2019 Older adults cognitive disorder hospitalization rate (65+ y.o.)	149.8/100K	117.7/100K	N/A	↔	No goal	N/A	CHAT CHARS, 2016-2019
<b>Maternal, Child, and Family Health</b>							
2021 Teens who have ever had sex (grades 8, 10, 12)	17.8%	17.5%	N/A	↓	No comparable goal	None	HYS 2016-2021
2021 Teens using inadequate birth control (grades 8, 10, 12)	4.5%	4.5%	N/A	N/A	No comparable goal	None	HYS 2018-2021
2020 Teen pregnancy rate (15-19 y.o. women)	14.6/1K	17.5/1K	N/A	↓	31.4/1k	None	CHAT CHS Abortion Reporting System, Vital Statistics System, and Fetal Death Certificates 2016-2020; HP 2030
2020 Teen birth rate (15-19 y.o. women)	7.4/1K	10.8/1K	15.4/1K	↓	No goal	R/E (Multiracial NH, PI NH, AIAN NH, Hispanic)	CHAT CHS Birth Certificate Data 2016-2020; CDC National Vital Statistics Report V. 70, No. 17
2020 Teen abortion rate (15-17 y.o. women)	2.8/1K	3.0/1K	N/A	↓	No goal	N/A	CHAT CHS Abortion Reporting System, Vital Statistics System, and Fetal Death Certificates 2016-2020

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† Statistically significant disparity from reference group. Greater than 20% disparity from reference group if unable to assess for statistical significance but disaggregated data is available and reasonably reliable.

‡ Small sample size and/or RSE greater than 25%. Unable to assess for statistically significant differences. Interpret with caution.

^ Figures may be artificially low due to a large percentage of "Don't know" or "Refused" responses. Interpret with caution.

# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Maternal, Child, and Family Health (cont.)</b>							
2020 Teen abortion rate (18-19 y.o. women)	15.1/1K	11.9/1K	N/A	↓	No goal	N/A	CHAT CHS Abortion Reporting System, Vital Statistics System, and Fetal Death Certificates 2016-2020
2020 Pregnancy rates (15-44 y.o. women)	72.3/1K	66.6/1K	N/A	↓	No goal	N/A	CHAT CHS Abortion Reporting System, Vital Statistics System, and Fetal Death Certificates 2016-2020
2020 Unintended pregnancies	22.2%‡	32.7%	N/A	N/A	36.5%	R/E (BIPOC)‡, Age (20-34 y.o.)‡	PRAMS 2016-2020; HP 2030
2020 Abortion rate (among women all ages per 1K aged 15-44 y.o.)	11.5/1K	10.7/1K	N/A	↓	No goal	N/A	CHAT CHS Abortion Reporting System, Vital Statistics System, and Fetal Death Certificates 2016-2020
2021 Initiated prenatal care in 1st trimester (pregnant women)	81.3%	81.7%	77.7%	↔	No comparable goal	Age (20-24 y.o.)	CHAT CHS Birth Certificate Data 2017-2021
2021 Inadequate prenatal care (Kotelchuck Index; pregnant women)	28.7%	30.5%	N/A	N/A	<19.5% (inverse)	R/E (PI NH, Black NH, Hispanic), Age (20-29 y.o.)	CHAT CHS Birth Certificate Data 2017-2021; HP 2030
2021 No prenatal care (pregnant women)	0.8%	1.5%	N/A	↑	No comparable goal	R/E (White NH)	CHAT CHS Birth Certificate Data 2017-2021
2021 Smoking during pregnancy	4.5%	4.6%	5.5% (2020)	↓	4.3% (inverse)	R/E (AIAN NH, Multiracial NH), Age (20-24 y.o.)	CHAT CHS Birth Certificate Data 2017-2021; HP 2030

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Maternal, Child, and Family Health (cont.)</b>							
2021 Gestational diabetes	13.4%	11.8%	7.8% (2020)	↑	No goal	R/E (Asian NH, Black NH, Hispanic), Age (40-44 y.o.)	CHAT CHS Birth Certificate Data 2017-2021; CDC National Vital Statistics Report V. 71, No. 3
2020 Birth rate (15-44 y.o. women)	60.5/1K	55.6/1K	56.0/1K	↓	No goal	N/A	CHAT CHS Birth Certificate Data 2016-2020; CDC National Vital Statistics Report V. 70, No. 17
2020 Preterm births	9.9%	10.7%	10.5%	↔	9.4%	R/E (AIAN NH, PI NH), Age (35-44 y.o.)	CHAT CHS Birth Certificate Data 2016-2020; HP 2030
2020 Low birth weight	7.3%	7.0%	8.2%	↑	No goal	R/E (AIAN NH, Asian NH, Multiracial NH)	CHAT CHS Birth Certificate Data 2016-2020
2020 Abortion rate (among women all ages per 1K aged 15-44 y.o.)	11.5/1K	10.7/1K	N/A	↓	No goal	N/A	CHAT CHS Abortion Reporting System, Vital Statistics System, and Fetal Death Certificates 2016-2020
2020 Breastfeeding initiation (adult women)	97.1%	96.7%	N/A	↑	No goal	None detected‡	PRAMS 2016-2020
2020 Breastfed at least 8 weeks (adult women)	73.4%	80.8%	N/A	↓	No comparable goal	R/E (White NH)‡, Age (25-29 y.o.)‡	PRAMS 2016-2020
2020 No postpartum check-up (adult women)	10.0%‡	9.3%	N/A	↑	No goal	N/A	PRAMS 2016-2020
2020 Postpartum depressive feelings (adult women)	6.6%‡	7.8%	N/A	N/A	No goal	N/A	PRAMS 2016-2020

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Maternal, Child, and Family Health (cont.)</b>							
2021 Monthly child care cost as percent of household income	16.1-26.8%	N/A	N/A	N/A	No goal	Age (infants and toddlers)	US Census Bureau, ACS table S1903 2021; Child Care Aware of WA 2021
2021 Child care needs met	29.1%	33.2%	N/A	N/A	No goal	Age (infants and toddlers) ‡, Income (200+ FPL) ‡	Child Care Aware of WA 2021
<b>Oral Health</b>							
2020 Dentists in SC	74.6/100K	83.3/100K	71.4/100K	↑	No goal	N/A	CHR 2022
2020 Last dental visit within the past year (adults)	70.0%	68.7%	63.0%	↔	No goal	Age (25-34 y.o.)	BRFSS 2011-2020; NCHS NHIS
2021 Last dental visit within the past year (youth)	74.4%	75.0%	N/A	↓	No comparable goal	R/E (BIPOC except Asian NH)	HYS 2016-2021
<b>Food Security, Nutrition, and Physical Activity</b>							
2020 Food-insecure	8.5%	8.9%	11.8%	↓	6.0%	N/A	Feeding America, Map the Meal Gap, 2020; HP 2030
2020 Households on SNAP	8.9%	11.1%	11.3%	↓	No goal	R/E (Black NH, NHOPI NH, AIAN NH, Other NH, Multiracial NH, Hispanic/Latino/a)	Census Bureau ACS, Table S2201, 2020

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Food Security, Nutrition, and Physical Activity (cont.)</b>							
2022 Students enrolled receiving free or reduced-price lunch (OSPI, 2021-2022 school year)	38.5%	46.8%	N/A	↑	No goal	N/A	WA OSPI 2017/18 - 2021/22 school years
2021 Students on free/reduced price lunch (self-reported, grades 8-12)	43.3%	43.4%	N/A	↑	No goal	R/E (all BIPOC), Age (8 <sup>th</sup> grade)	HYS 2021
2021 Students who eat at least 5 servings of fruits/vegetables per day (grades 8-12)	21.8%	23.3%	N/A	↔	No comparable goal 5 servings/day (varies individually)	Gender (females), Age (10 <sup>th</sup> , 12 <sup>th</sup> grade)	HYS 2021; Dietary Guidelines for Americans 2020-2025
2021 Students who meet physical activity recommendations (grades 6-12)	20.8%	20.8%	N/A	↓	No comparable goal 60 minutes per day	Gender (females), Age (12 <sup>th</sup> grade)	HYS 2021; CDC recommendations
2019 Adults meeting exercise guidelines	20.3%	22.5%	25.2% (2020)	↑	29.7%	Age (45-64 y.o.)‡	BRFSS 2019; HP 2030

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Climate and Environmental Health</b>							
2022 Days of high temperatures (over 90°F)	4	N/A	N/A	↑	No goal	N/A	NWS 2008-2022
2016-2019 Heat-related illness hospitalizations	<10; <0.5/ 100K	183; 0.57/ 100K	N/A	N/A	No goal	N/A	CHAT CHARS 2016-2019
2020 Residents living in a 100-year flood zone	3.24%	3.34%	N/A	↔	No goal	Region (rural areas)	WTN 2016-2020
2022 Wildfire smoke days	11-30 days, depends on area	N/A	N/A	↑	No goal	N/A	DOE 2015-2022
2020 Air quality standards not met	20%	N/A	N/A	↔	No goal	N/A	WTN 2016-2020
2020 Average PM2.5 concentrations	11.1 ug/m3	State median: 8.85 ug/m3	N/A	↔	No goal	N/A	WTN 2006-2020
2020 Public Water System contaminant exceedances, percent of population– Arsenic	0.0%	0.2%	N/A	↔	No goal	N/A	WTN 2016-2020
2020 Public Water System Contaminant exceedances, percent of population– Nitrates	0.0%	<0.1%	N/A	↔	No goal	N/A	WTN 2016-2020

N/A: data not available or not assessed (due to unavailability, unreliability, or small numbers)

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# Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Climate and Environmental Health (cont.)</b>							
Public Water System Contaminant exceedances, percent of population—Others: PCE (Solvent), TCE (Solvent), Trihalomethanes (TTHM), Atrazine (herbicide), DEHP (in plastics), Haloacetic Acids (HAA5)	0.0%	0.0%	N/A	↔	No goal	N/A	WTN 2016-2020
2019-2021 Pesticide exposure illness rates	3.9/100K	7.6/100K	N/A	↔	No goal	N/A	WTN 2016-2020
2020 Blood lead screening children <72 months old	3.4%	4.2%	N/A	↑	No goal	N/A	WTN 2016-2020
2020 Percent population with blood lead ≥5 µg/dL among children <72 months old	1.3%	1.9%	N/A	↑	No goal	N/A	WTN 2016-2020
<b>Built Environments</b>							
2021 Riding transit to work	1.6%	2.1%	2.5%	↓	5.3%	N/A	ACS 2015-2021, HP2030
2021 Driving to work alone	64.3%	62.0%	67.8%	↓	No goal	N/A	ACS 2015-2021, HP2030
2019 Traffic volume (vehicles per meter per day)	541	601	395	N/A	No goal	N/A	EJScreen 2019
2022 Within a 10-minute walk of a park	76% (median)	N/A	55%	N/A	No goal	N/A	TPL 2022

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## Appendix B: Data Summary Tables by Topic (cont.)

Indicator	SC value	WA value	U.S. value	Trend	Goal	SC disparate group†	Sources
<b>Built Environments (cont.)</b>							
2021 Access to exercise opportunities	79%	79%	80%	N/A	No goal	N/A	ACS 2021
2021 No Internet subscription at home	5.1%	6.4%	9.1%	↓	0%	Age (elderly), low income	ACS 2015-2021, WA Broadband Office
2021 High speed internet subscription at home	94.9%	93.5%	90.1%	↑	60.8%	Age (elderly), low income	ACS 2015-2021, HP2030

*N/A: data not available or not assessed (due to unavailability, unreliability, or small numbers)*

*† Statistically significant disparity from reference group. Greater than 20% disparity from reference group if unable to assess for statistical significance but disaggregated data is available and reasonably reliable.*

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# Appendix C: CHA Process and Community Recruitment

## Community recruitment

Community input was solicited in the Fall of 2022 through Data Committee and key informant interview participation. Interested individuals were asked to submit their contact information, a brief description of which community or organization they represented, and which pathway of participation best fit their availability and interest.

The project team sought to recruit 15 people for the Data Committee and 10-15 people for key informant interviews. Existing [community partners](#) were asked to help in the recruitment process by sharing the online participation application with their community members. Community partners were also asked to provide further suggestions of individuals or community groups that should be considered for outreach or inclusion. Special consideration and outreach were made for systemically excluded community groups and members as well as the youth of Snohomish County.

The project team reviewed all individual applications and selected participants for both the Data Committee and community interviews. Those selected represented a variety of community groups and public service sectors across the county. Focus groups were later incorporated to offer a more culturally competent setting for some community groups, as well as to expand the opportunity for input to more individuals.

Data Committee participants were offered a stipend of \$50 per 1.5-hour data presentation meeting (total up to \$250) and a stipend of \$200 for the half-day discussion and voting session for top health priorities. Adult community members who participated in one-time, 1- to 1.5-hour interviews or focus groups were offered a stipend of \$100. Organizations that hosted focus groups among youth were offered a \$500 group stipend to go towards activities supporting the participating youth.

## Data Committee

Project team epidemiologists analyzed and presented data to the Data Committee over the course of two months from October to December 2022. Time was set aside at the end of each of the five Data Committee meetings to discuss the data that had been presented. After the initial five meetings, project team epidemiologists systematically reviewed all data that had been presented to the Data Committee and re-presented the Data Committee with 40 total indicators across the various health-related topics where data suggested opportunity for improvement. Over the course of three rounds of voting and discussion, the Data Committee reduced the number of indicators to the six health priorities listed in the [Executive Summary](#).

## Key informant interviews and focus groups

Members of the project team coordinated with their respective assigned community members to schedule key informant interviews and focus groups at a time and location that was convenient for the interviewee(s). Key informant interviews and focus groups were held in October and November of 2022. Participants were given the option of meeting virtually if it was more suitable to their schedule and needs. Key informant interview and focus group questions, adapted and borrowed from the 2017 Massachusetts Department of Public Health State Health Assessment, can be found in Appendices [E](#) and [G](#).<sup>1</sup> Interviews were recorded for epidemiologists to qualitatively analyze for themes and to accurately represent quotations from participants that are highlighted throughout this document.<sup>2</sup>

# Appendix D: About the Data

## Quantitative data

Quantitative data for each health indicator was assessed using the following systematic data criteria when available and applicable. Data was assessed for statistically significant differences when possible and appropriate. Reference groups for significance testing and sub-population comparisons are labeled in figures throughout this report as *[sub-population] (ref)*. The following are a list of comparisons or trends that were provided when possible.

- Local trend over time
- Comparison to Washington State
- Comparison to U.S.
- Comparison to goal (e.g., Healthy People 2030)
- Local disparities based on race/ethnicity, age, and sex

In future Community Health Assessments (CHA), efforts will be made to include comparisons to similar and neighboring counties in Washington State. However, it is acknowledged that this was not feasible for the current CHA, and it is recognized as a limitation.

Local data based on race/ethnicity, age, and sex were collected and assessed specifically to highlight health disparities and inequities. Health disparities and inequities are systemic and preventable differences in a person's health or opportunities to achieve optimal health. They are closely linked with social, economic, and environmental disadvantage, which are often referred to as social determinants of health.<sup>1-3</sup>

Abbreviations are used in several figures for racial/ethnic groups. A list of abbreviations used throughout this report can be found in [Appendix A](#).

To prioritize equity, data was disaggregated by race and ethnicity when available and appropriate. When sample sizes were insufficient, the racial/ethnic categories were disaggregated into non-Hispanic White and BIPOC (Black, Indigenous, and people of color). While efforts were made to standardize how race/ethnicity data are displayed, some figures and data may differ. These differences are dependent on data sources and the self-reported racial/ethnic categories of the populations they describe. For example, Hispanic and Hispanic/Latino/Latina are both used throughout this report, as are Native Hawaiian or other Pacific Islander (NHOPI) and Pacific Islander (PI). Similarly, efforts were also made to standardize how age data are displayed. However, some figures and data may differ depending on the data available and the age groups typically used for specific indicators.

When quantifying instances of health events and population estimates, figures are most often shown in whole counts, rates per 100,000, or percent. The exception to this is among maternal and child health indicators, which may be shown in either percent or the industry standard of rate per 1,000 people.

## Qualitative data

Qualitative data was collected by conducting focus groups and key informant interviews among individuals who live in or serve the local community through their work. Many of those interviewed who serve local communities are also part of those communities. A total of 4 focus groups and 11 key informant interviews were conducted (46 total community participants). A subscription to [Otter.ai](#) was purchased to transcribe interview and focus group recordings. [Taguette](#), a free and open-source tool for

## Appendix D: About the Data (cont.)

qualitative analysis, was used to qualitatively analyze the transcribed interviews.<sup>4</sup> Themes identified in these interviews can be found in the key informant interview and focus groups themes section.

### **Considerations, limitations, and data gaps**

Data for this report was collected during a set timeframe in 2022 and may have since been updated or refreshed by their respective publishers. In the event of new data in the months and years to come, the report will remain unchanged, but readers may refer to the data sources to collect more recent data.

While this assessment covers a wide scope of health-related topics, it does not capture every unique perspective or population in Snohomish County. Sometimes data is not available or is too small to share without compromising its validity or the confidentiality of Snohomish County residents. Any non-zero counts that are less than 10 and rates or proportions based on non-zero counts less than 10 are suppressed. Data suppression can happen more often when data is disaggregated (split up) into smaller sub-populations, such as racial/ethnic groups or age groups. At times to account for this, BIPOC (Black, Indigenous, People of Color) racial/ethnic groups, or age groups, were aggregated (combined) to allow the data to be shared. Moving forward, efforts will be made to identify data sources that allow for a more comprehensive examination of health disparities, including by race and ethnicity.

Comparisons among sub-populations were calculated using 95% confidence intervals where possible and appropriate. Relative standard error (RSE) was used to help determine which survey data statistics were considered reliable to include in this report. If the RSE was greater than 25% or the sample size was too limited to have confidence in the survey estimates, they were excluded or aggregated to increase the stability of the data. If an estimate had an RSE greater than 25% but may still be reliable, the data figure will have a footnote to indicate caution.

This assessment uses survey-based data for both youths and adults. These surveys are intended to be representative of the populations they sample. Like all surveys, their results have the potential to be impacted (or biased) by a respondent's desire to answer a question, their comfort level in being honest, their memory, etc. The totals presented from survey-based data may not add up to 100%. In these instances, other survey responses that are not shown include *no*, *don't know*, and/or the respondent *refused to answer*.

### **Community participation considerations**

While the key informant interviews and focus groups included a cross-section of some residents and community groups in Snohomish County, many voices were not included in the qualitative data collection process. This includes, but is not limited to Tulalip Tribes, Sauk-Suiattle Tribe, and Stillaguamish Tribe members; members of the Russian and Ukrainian communities; the hearing impaired and deaf community; members of the senior community; and members of the community whose preferred spoken language is something other than English.

Similarly, the Data Committee did not have representation from the Sauk-Suiattle Tribe, the Stillaguamish Tribe, mental health practitioners, the Russian and Ukrainian communities, the hearing impaired and deaf community, youth, the LGBTQIA+ community, the senior community, or community members whose preferred spoken language is something other than English.

The project team will strive to be inclusive of these additional community members and groups in future iterations to better understand their unique perspectives and experiences within Snohomish County. To

## Appendix D: About the Data (cont.)

identify other unacknowledged groups, please contact the Snohomish County Health Department Epidemiology and Informatics team via the online submission form ([click here](#)), email ([shd.epi@co.snohomish.wa.us](mailto:shd.epi@co.snohomish.wa.us)), or phone (425-339-5200), and they will work towards incorporating them in future iterations of the CHA/CHIP process.

### ***Special considerations for the COVID-19 pandemic***

The COVID-19 pandemic led to several interruptions in regular data collection processes and structures that may have had an impact on results seen throughout this assessment. For example, some cohort surveys such as the HYS were delayed, resulting in a new cohort of students entering the survey data. Others, such as the Washington Smile Survey, have yet to be readministered since pre-pandemic years and did not have recent enough data for this assessment. The course of the pandemic led to innumerable impacts on the lives of Snohomish County residents including, but certainly not limited to, their ability to access health care. It's possible that increases and decreases seen in the data are more a reflection of the pandemic and its effects on our lives than a change that would have happened if the pandemic had not occurred. Because of this, data spanning before the pandemic to during the pandemic should be interpreted with caution and special consideration for these circumstances. Data is often combined (aggregated) across years to help account for small numbers. Data are also aggregated to show smaller sub-populations within the community. However, data within this report was rarely aggregated across time spanning the years before and after 2020. Public Health has only just begun to grapple with the population-level economic, social, and health-related consequences of the pandemic, and standards for interpretation have yet to be established.

# Appendix E: Data Source Descriptions

## **American Community Survey**

The American Community Survey (ACS) is conducted throughout the United States and Puerto Rico by the U.S. Census Bureau. It collects detailed housing and socioeconomic data and provides population estimates on these topics. It provides annual supplemental data to the 10-year census. Find more information on the ACS [here](#).

## **Behavioral Risk Factor Surveillance System**

The Behavioral Risk Factor Surveillance System (BRFSS) is a long-standing telephone survey among adults that collects data on a wide variety of health-related risk behaviors and preventive health practices that can affect health status. It is conducted by state health departments across the United States and published annually. Find more information on BRFSS [here](#).

## **Comprehensive Hospitalization Abstract Reporting System**

The Comprehensive Hospital Abstract Reporting System (CHARS) is a Washington State Department of Health system that houses hospital discharge data, including data on inpatient and observation patient hospital stays. Find more information on CHARS [here](#).

## **Community Health Assessment Tool**

The Community Health Assessment Tool (CHAT) is a web-based application managed by the Washington State Department of Health. CHAT is a tool for authorized users to view statistics from a variety of Washington State population health-based datasets (e.g., births, deaths, hospitalizations, cancer, etc.). These datasets can often be stratified by age, gender, race, ethnicity, and geographic location. Find more information on CHAT [here](#).

## **County Health Rankings and Roadmaps**

The County Health Rankings and Roadmaps is an interactive web-based application managed by the Robert Wood Johnson Foundation. It ranks the overall health status of counties across the United States and provides data on a variety of health outcomes and their social and environmental determinants. Find more information on County Health Rankings [here](#).

## **Healthy Youth Survey**

The Healthy Youth Survey (HYS) is a school-based survey that is administered every other year to Washington State students in 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grades. It provides data on a variety of topics, including health, mental health, substance use, safety and violence, and related risk and protective factors. HYS data is managed by the Washington State Department of Health. Find more information on HYS [here](#).

## **Healthy People 2030**

Healthy People 2030 is an initiative of the United States Department of Health and Human Services, Office of Disease Prevention and Health Promotion. It provides national objectives on a variety of health outcomes and determinants to improve the health and wellbeing of the population over the next decade. Find more information on Healthy People 2030 [here](#).

# Appendix E: Data Source Descriptions (cont.)

## **Office of Superintendent of Public Instruction**

The Washington State Office of Superintendent of Public Instruction (OSPI) provides data on K-12 students in Washington State through the Comprehensive Education Data and Research System (CEDARS). CEDARS is managed by OSPI. Find more information on OSPI and CEDARS [here](#).

## **Public Health Issue Management System**

The Public Health Issue Management System (PHIMS) is a web-based reporting system for notifiable conditions data managed by Washington State Department of Health. It is primarily used to contain public health and investigation data related to sexually transmitted diseases or infections (STD or STI) in PHIMS-STD. Find more information on PHIMS [here](#).

## **Point-in-Time Count**

The Annual Point-in-Time count (PIT) conducted by Snohomish County Human Services provides a snapshot of people who are experiencing homelessness in Snohomish County. Information about sheltered and unsheltered people who are experiencing homelessness is collected by targeted outreach and general canvassing on a single night in January of each year. It is conducted in conformance with federal and state requirements. Find more information on PIT [here](#).

## **Pregnancy Risk Assessment Monitoring System**

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a survey conducted annually by state health departments and the Centers for Disease Control and Prevention (CDC). PRAMS collects health-related information from new mothers about their experiences before, during, and after their most recent pregnancy. Find more information on PRAMS [here](#).

## **Vital Records: Birth certificate data**

The birth certificate records data are compiled and managed by the Washington State Department of Health. It contains records on all births that occur in Washington State and nearly all births to residents of Washington State. Birth certificate data includes information that is collected at hospitals and birth centers about the mother, father, pregnancy, and child. Find more information on birth certificate data [here](#).

## **Vital Records: Death certificate data**

Statewide death certificate data is compiled and managed by the Washington State Department of Health. Death certificate data includes information collected by funeral directors and certifying physicians, medical examiners, or coroners about the deceased person (e.g., demographic information, causes of death, etc.). Find more information on death data [here](#).

## **Washington Disease Reporting System**

The Washington Disease Reporting System (WDRS) is an electronic disease reporting system managed by the Washington State Department of Health that allows public health staff across Washington State to receive, manage, and track notifiable disease-related data. Find more information on death data [here](#).

## **Washington State Cancer Registry**

The Washington State Cancer Registry (WSCR) is part of a national cancer registry system that collects data about cancer diagnosis, treatment, and death in Washington State. It is managed by the Washington Department of Health. Find more information on WSCR [here](#).

## Appendix E: Data Source Descriptions (cont.)

### **Washington State Immunization Information System**

The Washington State Immunization Information System (WA IIS) is a web-based registry managed by the Washington Department of Health. It keeps track of immunization records for people of all ages. Find more information on WA IIS [here](#).

### **Washington Tracking Network**

The Washington Tracking Network (WTN) is a collection of health outcomes and environmental public health data managed by the Washington State Department of Health. Find more information on WTN [here](#).

# Appendix F: Key Informant Interview Questions

These questions were intended to serve as a guide for conversation about the opinions, observations, and lived experiences of interviewees. The interviewers were trained to ask follow-up questions to the questions listed below. Interviewees were emailed these questions in advance to reference during the interview. Key informant interviewees were offered a stipend of \$100 for their participation.

1. What communities and/or populations do you represent?  
(e.g., teenagers/youth, health care workers, Spanish-speaking parents and families, etc.)
2. What do you think are your community's strengths? (or strengths of the population you represent)
3. What do you think makes an ideal neighborhood or community?
4. What do you think are the most important issues or concerns for people in your community (or the population you represent)?
5. What issues around health concern you the most as someone in your community?
6. Who do you think is most vulnerable to these issues? In what way?
7. What factors do you think contribute most to these issues?
8. From your experience, what are the biggest challenges to people from your community (or population you represent) in addressing these issues?
9. Thinking about the top health issues you mentioned, what are your community's greatest strengths around these issues?
10. What do you think are the most important action items to addressing these issues?
11. What do you think are the obstacles or challenges to addressing these issues?
12. What do you think leaders and decision-makers in our county can do to help improve these issues?
13. Thinking about the future, if you could do one thing to improve the health of your community, what would it be?

# Appendix G: Focus Group Questions

These questions were intended to serve as a guide for conversation about the opinions, observations, and lived experiences of focus group members. The interviewers were trained to ask follow-up questions to the questions listed below. Focus group members were emailed these questions in advance to reference during the focus group session. Adult focus group participants were offered a stipend of \$100 for their participation. Organizations that hosted focus groups among youth were offered a \$500 group stipend to go towards activities supporting the participating youth.

1. What do you think are your community's strengths? (or strengths of the population you represent)
2. What do you think are the most important issues or concerns for people in your community (or the population you represent)?
3. What factors do you think contribute most to these issues?
4. From your experience, what are the biggest challenges to people from your community (or population you represent) in addressing these issues?
5. What do you think are the most important action items to addressing these issues?
6. Thinking about the future, if you could do one thing to improve the health of your community, what would it be?