

# Mary Bridge Children's Community Health Needs Assessment

2022



Mary Bridge   
Children's  
MultiCare 



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# Acknowledgements



## **Mary Bridge Children's**

*Stefan Agyemang, Mary Quinlan Fabrizio,  
Jamilia Sherls-Jones*

## **Tacoma-Pierce County Health Department**

*Jason Carr, Karen Meyer, Connor Pomeroy,  
Julie Teragliafera, Naomi Wilson*

We thank the many community organizations that supported community workshops, provider surveys and key leader interviews.

*Centro Latino*

*Pierce College*

*Clover Park School District/Lakes High School*

*Pierce Transit*

*Degrees of Change*

*Tacoma Area Coalition for  
Individuals with Disabilities  
(TACID)*

*Emergency Food Network*

*Tacoma Community College*

*First 5 Fundamentals*

*Tacoma Housing Authority*

*Franklin Pierce School District*

*Graduate Tacoma*

*Tacoma Pierce County Coalition  
to End Homelessness*

*Greater Tacoma Community Foundation*

*Tacoma Public Schools*

*Mary Bridge Children's*

*Oasis Youth Center*



# Executive Summary



Mary Bridge Children's  
Community Health  
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2022

Mary Bridge Children's, in partnership with the Tacoma-Pierce County Health Department (TPCHD), has conducted a Community Health Needs Assessment (CHNA) to identify the key health issues facing children and youth within the hospital's service area based on current data.

This CHNA includes the results of a comprehensive review of select pediatric health indicator data along with stakeholder input. The overall process included collecting and analyzing quantitative data, in combination with community engagement activities. These activities included interviews and focus groups with community leaders and residents of Pierce County representing key sectors affected by health disparities, and pediatric healthcare providers.

This CHNA fulfills Section 9007 of the Affordable Care Act and Washington state CHNA requirements. This report includes data on:

- Demographics of the Mary Bridge Children's service area
- Life expectancy & leading causes of death among children and youth
- Chronic illnesses

As mentioned above, the CHNA process included asking community members for their viewpoints, concerns, thoughts and ideas. For this report, CHNA partners made a deliberate decision to speak with individuals with either direct lived experience or who work with those who do. This information is intended to inform how Mary Bridge Children's directs resources, plans programs and makes decisions for the future in a way that considers the thoughts and opinions of their patients and families.

These community engagement activities included three community workshops with residents, ten interviews with local organizational leaders, and an online provider survey. Mary Bridge Children's and TPCHD pledge to continue to engage community stakeholders throughout the CHNA process not simply as sources of input but as equal partners with shared accountability and investment in addressing health concerns.

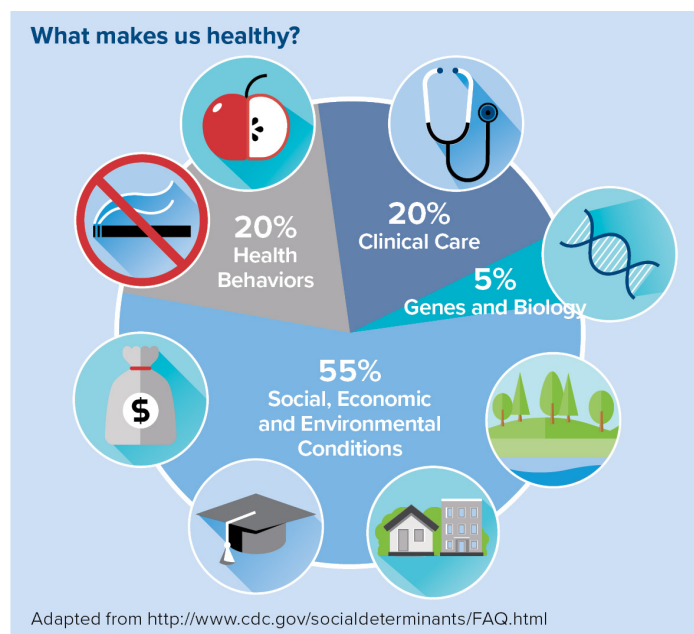


# Executive Summary

Continued

## COMMITMENT TO HEALTH EQUITY

Throughout the CHNA process, social determinants of health provided the framework for the community engagement process and focused attention on the importance of neighborhood and community conditions. Income, education, housing and transportation create opportunities and barriers to health. Health should not be determined by race, zip code, income, gender identity, or other factors.



## PRIORITY HEALTH NEEDS

Priority health needs were selected using the methodology outlined in the Supplement (“Selection of Priority Health Needs”). A copy of the scoring rubric is located at the end of the document. Using this methodology and rubric, the following health needs were identified as priorities for Mary Bridge Children’s:

- **Behavioral Health**
  - Anxiety and depression
- **Access to Care**
  - Prenatal care
  - Routine dental care
- **Maternal Child Health**
  - Low birth weight
  - Infant mortality
- **Violence**
  - Child abuse and neglect

# Executive Summary

Continued

Each of these topics provides significant opportunity for collaboration as well as programmatic and investment expansion.

Three issues were identified as a part of the community engagement process and provide an important context. These concerns were mentioned by the community members who participated in focus groups and stakeholder interviews as both specific and broad themes that impact the daily lives of the children in the Mary Bridge Children's service area. These concerns are:

- 1. Barriers to accessing healthcare.**
- 2. Institutional and structural racism.**
- 3. Challenges meeting basic needs.**

Again, each of these topics provides for a broad opportunity for collaboration, programmatic and investment expansion.

As part of this assessment, Mary Bridge Children's is committed to finding ways to align efforts across organizations, learn about best practices to support these areas, and encourage organizations to collectively invest in data, programs, and policies to promote health for the children and youth in the hospital service area. Collaboration and partnerships between public health, health systems, behavioral health systems, and community organizations will continue to be important in developing effective implementation strategies to address Pierce County in these areas.

# Introduction



Mary Bridge Children's contracted with the Tacoma-Pierce County Health Department to conduct a comprehensive Community Health Needs Assessment (CHNA). The process included quantitative analyses, qualitative interviews, provider surveys and focus groups with community leaders and residents of Pierce County representing several key population groups disproportionately affected by health disparities.

## PURPOSE

The purpose of this report is to share the emerging health needs of the Mary Bridge Children's service area, including:

- What residents have to say about critical issues facing the Mary Bridge Children's service area.
- The population's health behaviors and health outcomes are served by Mary Bridge Children's Hospital and Health Network.
- Priority health needs.

This report contains information that can be used to respond to an evolving community and new challenges.

## METHODS

To develop this report, TPCHD analyzed an array of data sources to describe the community's health. These data sources include:

- Community workshops
- Key informant interviews
- Provider surveys
- Selected health indicators

The report summarizes:

1. Community characteristics
2. Life expectancy
3. Leading causes of death
4. Leading causes of hospitalizations
5. Levels of chronic illness
6. Access to healthcare, use of preventive services and oral health
7. Maternal and child health
8. Injury and violence prevention
9. Behavioral health

Assets and resources available to the community and opportunities for improvement are at the end of each section, if applicable. In addition, the Supplement provides more details about the methods used to develop this report.



# Description of the Community



## DEMOGRAPHIC CHARACTERISTICS

The characteristics of a community inform what health behaviors and outcomes may be future concerns or help us further understand the existing population's health issues.

### Race and Ethnicity

The youth in this service area is primarily non-Hispanic white. However, the combined percent of youth of color is roughly equivalent to that of non-Hispanic white. The Hispanic population represented 19% of the population, while the next largest racial group was youth identifying with multiple races.

### Age and Sex

Most youth in this service area were elementary-middle school age (56.9% of all youth in the service area). Newborns (<1 year of age) made up the smallest proportion of youth in the service area (5.3%). As of 2020, the ratio of boys to girls was about 1:1.

## Youth Demographics (%)

### Mary Bridge Service Area, 2020

Race and Ethnicity	Count	Percent
White	187999	51.2
Black	24970	6.8
AIAN	4445	1.2
Asian	25021	6.8
NHOPI	7726	2.1
Multiracial	48963	13.3
Hispanic as Race	68192	18.6

Sex	Count	Percent
Male	188089	51.2
Female	179227	48.8

Age (years)	Count	Percent
Under 1	19614	5.3
1-4	79407	21.6
5-9	104155	28.3
10-14	104802	28.6
15-17	59338	16.2

Source: Washington State Office of Fiscal Management, Forecasting Division

# Description of the Community

Continued

## Disability Prevalence Among Youth

Disabilities can relate to any of six functions: hearing, vision, cognition, ambulatory, self-care and independence.<sup>3</sup>

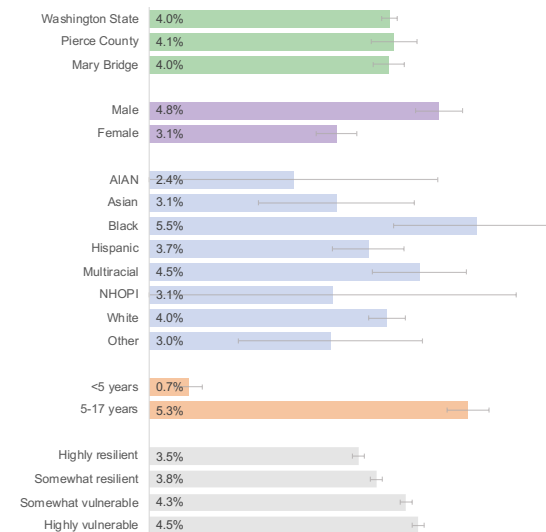
The prevalence of disability was not significantly different within this service area compared to the county or the state. Boys were significantly more likely to have a disability compared to girls. Black youth were more likely to have a disability compared to other races, but the difference was not significantly meaningful. Older children were significantly more likely to have a disability compared to younger children.

When we looked at social vulnerability across the census tracts in this service area, the prevalence of disability increased with increasing levels of social vulnerability.<sup>4</sup> Children living in highly vulnerable regions were significantly more likely to have a disability than those living in highly resilient areas.

<sup>3</sup> United States Census Bureau. "How Disability Data are Collected from The American Community Survey". Updated 08 Oct 2021. Retrieved from: <https://www.census.gov/topics/health/disability/guidance/data-collection-ac.html>

<sup>4</sup> A lower social vulnerability score corresponds to greater resiliency in a community. To see which census tracts were assigned to which social vulnerability group, see [Map 1 \(page 14\)](#).

## Youth with Disabilities (%) Mary Bridge Service Area, 2015-2019



(\*) value significantly different from WA state

The chart above shows the prevalence of disability solely among youth (0-17 year olds). As a result, percentages may be substantially different from previous versions of this report.

Source: U.S. Census Bureau, American Community Survey (ACS) 5-year estimates, 2015-2019

# Description of the Community

Continued

## **SOCIOECONOMIC CHARACTERISTICS**

The social and economic characteristics of a community viewed through a population lens provide a foundation for public health stakeholders to understand available resources. Educational attainment, free and reduced-price lunch eligibility, and limited language proficiencies are some examples of socioeconomic characteristics that must be considered as we attempt to improve the health of our population.

## **On-Time Graduation**

The graduation rate helps describe the educational well-being of a community. Higher educational attainment empowers individuals to take advantage of employment opportunities and earn higher incomes, which helps to diminish the burden of poverty on a community. The 2020 four-year high school graduation rate, gathered from OSPI data, in this service area was slightly higher (87.0%) compared to Pierce County (83.0%) and the state of Washington (82.9%). Girls had a higher graduation percentage compared to boys. Asian students had the highest high-school graduation percentage, while American Indian and Alaskan Natives had the lowest.

## **Free and Reduced-Price Lunch**

A free and reduced-price meal program is a federal program for students whose household income is less than or equal to 130% of the federal poverty limit (free) or between 130% and 185% of the federal poverty limit (reduced-price). This program helps to ensure that children have access to food with good nutritional value. During the 2019-2020 school year, 42.2% of students in this service area were eligible for free or reduced-price lunch. This measure was slightly lower than students in Pierce County (43.8%) and the state (43.3%).



# Description of the Community

Continued

## Limited English Proficiency

While many individuals are bilingual or multilingual (speak one or more languages other than English), some report that they either do not speak English or speak English "less than very well." Among all youth aged five to seventeen in this service area, there was a lower proportion of primary speakers of different languages who spoke English 'less than very well' compared to the state and the county. However, none of the differences were statistically meaningful.

The table to the right shows that among primary speakers of different languages (aged five to seventeen), the proportion who spoke English 'less than very well' was highest among those who primarily spoke an Asian or Other Pacific Islander language and lowest among those who spoke Spanish.

## Speaks English "less than very well" by primary language spoken - Youth (%) Mary Bridge Service Area, 2015-2019

Language	Estimate	95% CI
Spanish	14.8%	(12.0% - 36.7%)
Other Indo-European Language	22.0%	(16.1% - 35.1%)
Asian or Other Pacific Islander Language	29.9%	(24.4% - 48.5%)
Other Language	22.0%	(16.1% - 35.1%)

*Includes individuals aged 5 to 17 years of age*

*Data Source: U.S. Census Bureau, American Community Survey (ACS)  
5-year estimates, 2015-2019*

# Description of the Community

Continued

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## HEALTH AND SOCIAL VULNERABILITY

The conditions in which we live have a big impact on our health and well-being. For example, people who live in wealthier neighborhoods tend to be healthier than those who live in poorer neighborhoods. Likewise, people targeted by racism and others forms of discrimination tend to get sick more often than those who are not targeted. According to the U.S. Centers for Disease Control and Prevention (CDC), health equity is achieved when every person can “attain his or her full health potential” and no one is “disadvantaged from achieving this potential because of social position or other socially determined circumstances.” Achieving health equity requires creating an even playing field, focused and ongoing societal efforts to address historical and contemporary injustices; overcome economic, social, and other obstacles to health and healthcare; and eliminate preventable health disparities.

There are different ways to measure the level of social and economic advantage within a community or population, something experts often refer to as socioeconomic position (SEP). One option involves creating a summary index that can be used to measure and compare the level of social vulnerability between groups. CDC defines social vulnerability as “a community’s resilience when faced with external stressors”.<sup>1</sup> As a group, people who are more socially vulnerable are less resilient, and vice versa. This means

they are less able to avoid or protect themselves from things that might threaten their health. Differences in social vulnerability can increase risk for disease, shorten lifespans, and contribute to health inequities. Reducing social vulnerability can decrease human suffering and lead to stronger, healthier communities.

Traditionally, we have measured social vulnerability based on individual factors (household income, educational achievement, race/ethnicity, and access to transportation). MultiCare chose to look beyond these individual factors and use social vulnerability to better understand existing disparities within a geographical area (community). The Social Vulnerability Index (SVI) combines 15 individual measures (including the four just mentioned) into one summary indicator, and then calculates a score or percentile ranking. Scores are calculated at the census-tract level, using data routinely collected from the U.S. Census Bureau. A lower SVI score corresponds to a lower level of social vulnerability (or more resilience), and vice versa. According to the US Climate Resilience Toolkit, *“Social vulnerability is a term describing how resilient a community is when confronted by external stresses on human health. These stresses can range from natural or human-caused disasters to disease outbreaks. By reducing social vulnerability, we can decrease both human suffering and economic losses.”* Looking at SVI allows us to identify disparities that may not

<sup>1</sup><https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>

# Description of the Community

Continued

be seen otherwise and is another way to highlight disparities that exist throughout Pierce County. **This identifies areas that may benefit from targeted interventions in the future.** For more information about SVI, please visit the CDC website.<sup>2</sup>

Note: It is important to remember that social vulnerability is not a measure of individual health or how strong or weak individuals are within a community. Instead, it reflects the conditions in which individuals within a community live, and how easy or difficult it is for the entire community to be happy, healthy and prosperous. SVI measures how a community can respond to stressors.

The service area was defined using a different geography compared to SVI data (zip codes vs. census tracts). Using geographical software, the corresponding census tracts were identified through using two different methodologies (if the census tract boundary intercepted the zip code boundary, or if it had its center within the zip code boundary). The corresponding population for each method was compared to the population of the zip codes. The results indicated that census tracts that had their center within the zip code boundary should be used.

<sup>2</sup><https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>

We sorted all the census tracts within this service area (n=289) within this report by SVI score. We then divided this list into four equally sized groups (or tiers) based on the range of the SVI scores in all 289 tracts. Finally, we compared rates of disease between people (in aggregate) who live in each tier.

**Table 1.**  
**Groups of Census Tracts Based on SVI Score**

Group Label	SVI Score
Highly resilient	0.0 – 5.95
Somewhat resilient	5.95 – 7.5
Somewhat vulnerable	7.5 – 8.95
Highly vulnerable	8.95 or greater

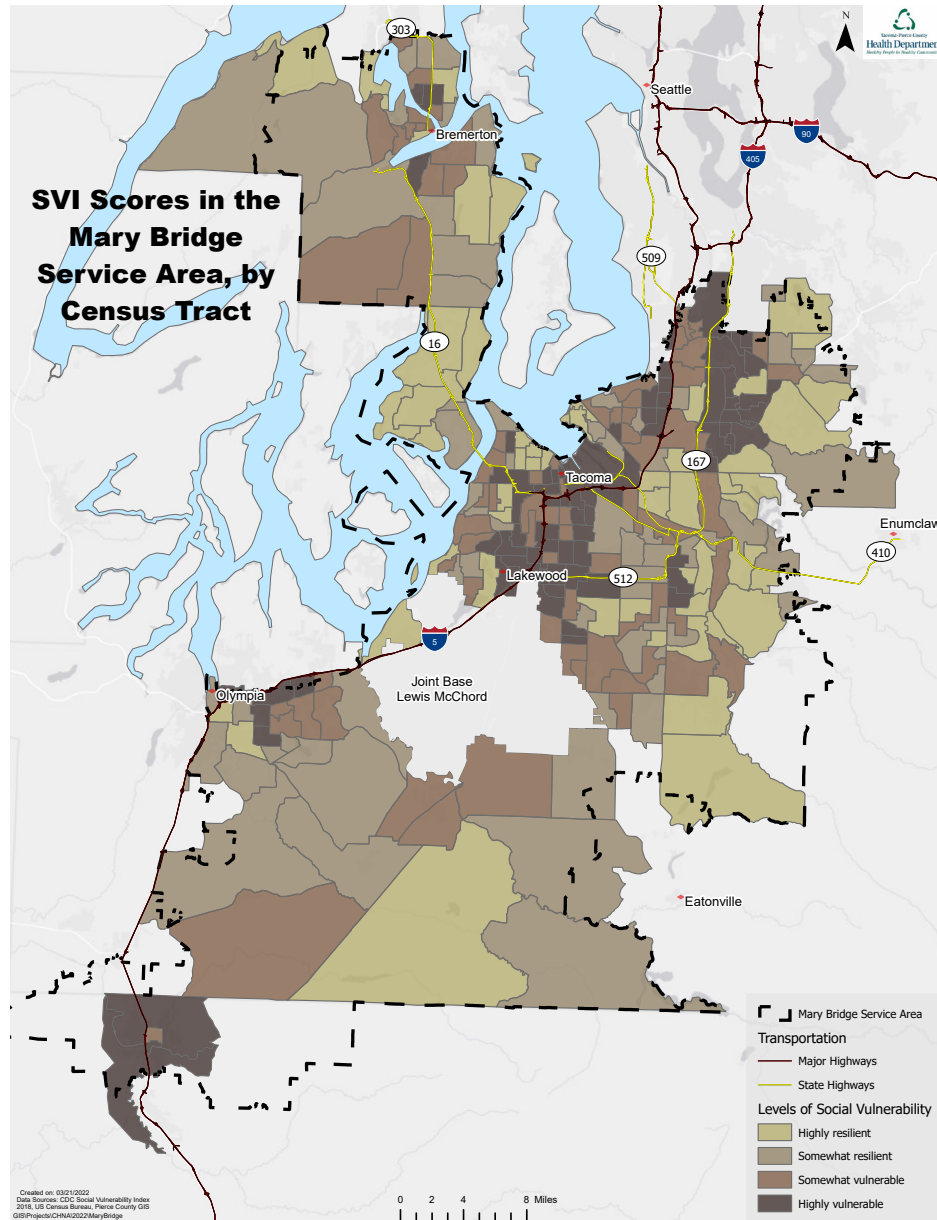
Due to data availability at the census-tract level, we were not able to use SVI for every indicator in this report. SVI was used for the following 4 indicators: disability, percent insured, inadequate prenatal care and low birth weight.



# Description of the Community

Continued

Map 1.  
SVI Scores in Pierce County, by Census Tract



# Medicaid Profile



Medicaid is a federally funded program that started in 1965. It provides health insurance for low-income individuals who meet the specific criterion: those with disabilities (or have a family member with disabilities), who are 65+ years or older, are pregnant, or who are legally responsible for a child under 18 years of age.

In Washington, Medicaid is referred to as Washington Apple Health/Apple Health. Mary Bridge chose to include this in the report to highlight who is on Medicaid. It is estimated that the majority (>85%) of individuals on Medicaid are on a fee-for-service plan (as opposed to managed care). As such, this report focuses solely on those on a fee-for-service plan. Briefly, fee-for-service involves Medicaid directly paying each provider. As eligibility can change throughout the year or between different years, members were classified as a fee for service if they did not have a managed care plan record.

Medicaid claims data (submitted by providers for reimbursement purposes) can offer a glimpse into the top reasons why individuals may appear in the emergency department. Additionally, it can track the level of follow-up care (defined by the number of individuals with a primary care visit within one year of visiting the emergency department). This information is useful because it can help hospitals improve their care level, highlighting different needs/disparities in a unique population.

# Medicaid Profile

Continued

## Demographic Characteristics

From 2015 – 2017, 75,471 Medicaid beneficiaries in this service area were under age 65 (both on fee-for-service and managed care). Most members were white, of those on a fee-for-service plan (n=67,479, 89.4%). There were slightly more male beneficiaries compared to females.

The table to the right shows demographics for those under 65 on a fee-for-service plan in the service area.

## Medicaid Demographic Characteristics Fee-for-service for those under 65 years, Mary Bridge Service Area, 2015-2017

Group	Number of Members	Percent
Pierce County	67479	100.0%

Gender	Count	Percent
Male	34528	51.2%
Female	23951	35.5%

Race/Ethnicity	Count	Percent
AI/AN	888	1.3%
Asian	3419	5.1%
Black	5953	8.8%
NHOPI	139	0.2%
Other	2147	3.2%
White	52804	78.3%
Missing	2129	3.2%
Hispanic	1379	2.0%

Source: Washington State Office of Fiscal Management, Medicaid Claims Database, 2015-2017.

\*Race is self-reported and is assigned to a member if reported at any point during the enrollment period. If two or more races are reported, multiple races are preferred. As a result, the total count for the race may not equal the total overall count.

# Medicaid Profile

Continued

## Leading Causes of Emergency Department (ED) visits by the number of visits (individuals on Medicaid)

Information about what drives individuals to the emergency room can be used to better understand the community's needs, potential barriers, and what areas can be targeted for preventive care to avoid unnecessarily using the emergency department.

For the purposes of this report, causes are determined by the primary diagnoses field. As a result, numbers are likely an undercount, as similar diagnoses can appear in later diagnoses fields. The following table lists the top causes by the number of visits (instead of the number of individuals) to better understand the most frequent reasons people visit the emergency department.

Due to data availability, the data in the tables to the right show members who live in Kitsap, King, Thurston and Pierce counties. As a result, it includes those outside the hospital service area.

OVERALL	Number of Visits
Other Upper Respiratory infections	6543
Other Injuries and Conditions Due to External Causes	3479
Superficial Injuries; Contusion	3184
Open Wounds of Head: Neck: and Trunk	2956
Viral Infection	2765
Fever of Unknown Origin	2651
Abdominal Pain	2584
Influenza	2238
Otitis Media and Related Conditions	2193
Fracture of Upper Limb	2068

# Medicaid Profile

Continued

## Leading Causes of Emergency Department (ED) visits by the number of visits (individuals on Medicaid) (by gender)

Upper respiratory infections were among the top 5 causes for an individual (regardless of gender) to visit the emergency department. Boys visited the emergency department for head/neck wounds more than girls, while girls had more visits due to abdominal pain compared to boys.

Male	Number of Visits
Other Upper Respiratory Infections	3392
Open Wounds of Head: Neck: and Trunk	1886
Other Injuries and Conditions Due to External Causes	1859
Superficial Injury; Contusion	1743
Viral Infection	1454
Fever of Unknown Origin	1374
Fracture of Upper Limb	1298
Influenza	1181
Otitis Media and Related Conditions	1150
Open Wounds of Extremities	1118

Female	Number of Visits
Other Upper Respiratory infections	3151
Other Injuries and Conditions Due to External Causes	1620
Abdominal Pain	1531
Superficial Injury; Contusion	1441
Viral Infections	1311
Fever of Unknown Origin	1277
Urinary Tract Infections	1108
Open Wounds of Head: Neck: and Trunk	1070
Influenza	1057
Otitis Media and Related Conditions	1043



# Medicaid Profile

Continued

## Leading Causes of Emergency Department (ED) visits among youth by the number of visits.

Other upper respiratory infections, injuries caused by external causes and superficial injuries/contusions were among the top causes to visit the ED for all races. Minority youth visited the ED more frequently for viral infections (including upper respiratory infections) and open head/neck wounds than white youth.

Non-Hispanic White	Number of Visits
Other Upper Respiratory Infections	1850
Other Injuries and Conditions Due to External Causes	1164
Superficial Injury; Contusion	1144
Open Wounds of Head: Neck: and Trunk	1043
Abdominal Pain	785
Fracture of Upper Limb	766
Open Wounds of Extremities	726
Viral Infection	670
Otitis Media and Related Conditions	651
Sprains and Strains	651

Any Minority	Number of Visits
Other Upper Respiratory Infections	3873
Other Injuries and Conditions Due to External Causes	1898
Superficial Injury: Contusion	1748
Viral Infection	1694
Abdominal Pain	1591
Open Wounds of Head; Neck and Trunk	1574
Influenza	1541
Fever of Unknown Origin	1532
Otitis Media and Related Conditions	1247
Nausea and Vomiting	1174

Unknown Race	Number of Visits
Other Upper Respiratory Infections	820
Fever of Unknown Origin	502
Other Injuries and Conditions Due to External Causes	417
Viral Infection	401
Open Wounds of Head: Neck: and Trunk	339
Otitis Media and Related Conditions	295
Superficial Injury; Contusion	292
Nausea and Vomiting	274
Other Gastrointestinal Disorders	253
Influenza	219

# Community Engagement



Ongoing and meaningful community engagement can significantly improve hospital/healthcare system efforts to address community health and social outcomes. The community engagement portion of this needs assessment is intended to provide important context to the quantitative data presented and to enhance a generalized understanding of Pierce County residents' needs. It's important to note that assessment collaborators recognize the need to elevate the voices of Black, Indigenous and People of Color (BIPOC) and designed the community engagement part of this assessment to do just that.

Key themes that emerged from the three engagement methods used are described in the section to the right.

## **METHODS**

Three methods were used to hear from residents and stakeholders – community workshops (focus groups), stakeholder interviews and provider surveys. These methods are described in detail in the following sections. Note that because the predominance of the Mary Bridge Children's service area falls in Pierce County, county residents made up the stakeholders for outreach activities.

Throughout the qualitative data collection process, we were committed to using participatory practices as much as possible. Individuals were invited to become a part of a process to improve the health of their community by sharing their experience, knowledge, and suggestions and by helping shape the process. Both focus group and stakeholder interview participants received the questions ahead of time and were asked for input (i.e. did the questions make sense to them? Would they suggest re-wording the questions?). Participants received notes immediately following interviews and were encouraged to provide corrections, clarifications, etc.

Our objective was to listen to those with lived experience in Pierce County. Results of the assessment will be shared with participants for ongoing involvement.

# Community Engagement Results

Continued

## Community Workshops (focus groups)

The purpose of the community workshops was to hear directly from residents in small group settings. Three focus groups were held, comprising Pierce County residents and based on gaps identified by MultiCare Health System and Virginia Mason Franciscan Health. The populations of interest were selected based on gaps identified in previous assessments, the need for trust building and recognized health disparities. Focus groups were held with the following:

- LGBTQ adults
- Youth (ages 14 – 17)
- Adults experiencing homelessness

All three focus groups included people representing diverse race, ethnicity, gender, and sexual orientations. This diversity allowed for discussions and interviews to assess intersectionality whenever this organically came up. Recruitment for focus groups occurred through word of mouth invitations.

These marginalized populations often experience significantly greater barriers to accessing healthcare and can also experience worse health outcomes due to a wide variety of factors (i.e. sexual identity, racism, etc.). Those who attended the workshops were promised confidentiality and consented to participate by attending the workshop.

Due to COVID-19 safety precautions, the LGBTQ focus group was held online. The youth focus group was held in person (high ventilation and masks required) and parental consent was obtained for all participants. The focus group comprising residents living unhoused was held in person (outdoors and masks required).

All participants were given a \$30 gift card to compensate them for their time. In addition, participants received transcripts from their focus group or interview allowing them an opportunity to see the notes and make corrections before the notes were analyzed.

Data analysis of workshop notes was performed simultaneously by the workshop group facilitator and a TPCHD analyst using coding to identify emergent themes. Health Department staff used [Atlasti.com](https://www.atlasti.com) qualitative data analysis software to code the transcripts. Focus group transcripts were first analyzed for content and then to see if the participant was describing something that happened in an organization, in the community, in a public policy, or in an interpersonal interaction.

Analysts used inductive coding to look for patterns across content of the interviews and the space the participants were describing (such as in the community, in an organization, in an interpersonal relationship, etc.). Patterns were then reviewed to see if participants were describing a problem or a solution.

# Community Engagement Results

Continued

## Key informant interviews

We conducted ten interviews with Pierce County organizational leaders across seven sectors. Interviews were approximately 60 minutes in length, and all were held online due to COVID-19 safety precautions. MultiCare and Virginia Mason Franciscan provided the Health Department with more than 30 names of suggested local leaders. Ten participants were selected based on the following criteria:

1. Individual is either a person of color or represents/ works on behalf of marginalized populations.
2. Represents key sectors of business, non-profit, education, transportation, health and human services, local government, and law enforcement/ first responders.
3. Was not interviewed for the previous 2018-2019 CHNA (to avoid redundancy in data and to promote diversity).
4. Available within the project timeline.

Interviewees were promised confidentiality and consented to participate.

Data analysis of workshop notes was performed simultaneously by the workshop group facilitator and a TPCHD analyst using coding to identify emergent themes. Health Department staff used Atlasti.com qualitative data analysis software to code and analyze the notes.

Analysts used inductive coding to look for patterns across content of the interviews and the space the interviewees were describing (such as in the community, in an organization, in an interpersonal relationship, etc.). Patterns were then reviewed to see if the informants were describing a problem or a solution.

# Community Engagement Results

Continued

## QUESTIONS

MultiCare Health System and Virginia Mason Franciscan Health collaborated with the Health Department staff on questions for both key stakeholders and community workshops. The objective was to ask the same open-ended questions to both audiences to understand perspectives and root causes of population health issues from individual viewpoints. Additionally, by asking “what do you think healthcare can do?” participants were given the chance to share their thoughts and ideas on potential solutions to problems that were identified by themselves or others.

1. *What are the most important issues and concerns you (or your customers/constituents) are currently facing?*
  - *What do you think healthcare can do to help?*
2. *How and where are you currently seeing evidence of racism in Pierce County?*
  - *What do you think needs to change?*
  - *What do you think healthcare can do to help?*

## Themes (from combined key informant interviews and focus groups)

Because both audiences were asked the same set of questions, themes were identified from combined results. The themes that were identified indicate that Pierce County residents are experiencing, and leaders are observing similar issues. In other words, there were no noteworthy differences between what was heard from workshop participants and key stakeholders. Participants identified both problems and solutions at institutional, community and interpersonal levels.



## Barriers to healthcare.

Both community members and organizational leaders referred to the systemic barriers to healthcare for many members of the Pierce County community.

Examples of barriers included lack of provider diversity (preventing some from feeling welcome and comfortable seeking care), lack of insurance, cost of healthcare (even if insured), and provider shortage (resulting in difficulty getting care). Several groups mentioned the need for cultural competence, specifically related to the need for healthcare institutions to be prepared to serve all people, regardless of race, ethnicity, class, gender, sexual orientation, religion, etc. One significant barrier that was mentioned by multiple community members was the lack of mental health providers.

### Selected participant quotes:

***“Help providers get what they need to serve diversity.”***

– Focus group participant (community member)

***“In general, with racism, I see it even more so with Black women and trans Black women seeing the healthcare they need and downplaying the things they [are] trying to seek help for. Also not being heard. Not being taken seriously. Everyone’s pain should be taken seriously.”***

– Focus group participant (community member)

***“I see racism in the healthcare system. Clearly. If there was not racism within policies, structures, there wouldn’t be these gaps in metrics that we see. Shouldn’t matter if folks have insurance.”***

– Focus group participant (community member)

***“Mental health support. Not enough therapists who take insurance and are affordable and accessible.”***

– Focus group participant (community member)

### *Institutional and structural racism.*

Participants – particularly those in organizational leadership positions – talked about systemic problems within local, state, and federal programs and institutions. We heard references to issues related to trust, lack of opportunities for leadership and civic engagement (civic power) as well as hiring practices.

Some participants mentioned a disconnect between those in positions of decision making and those affected by decisions. In other words, decision makers are perceived to be out of touch with how their decisions impact constituents or customers.

Lastly, both focus group and key stakeholders spoke extensively about the pervasiveness of racism. Participants mentioned evidence and impacts of racism in community, institutional and interpersonal settings, including everything from race related skirmishes in public, microaggressions, and the disproportionate impacts racism plays on individual health.

#### **Selected participant quotes:**

***“Everywhere you see a discrepancy based on race, there’s something else going on. It’s because of a system or structure. Education, housing, policing, health system – we must dig to understand the system impacting it. Anywhere there’s a discrepancy in the data, it’s about race.”***

– Key informant (community leader)

***“Advice for leadership: Don’t be afraid to get it wrong. You will offend. You will polarize. That is the job of leadership. Especially in healthcare. Lead with systemic racism. You will find better opportunities...Inclusionary practices. Rub some people wrong. Hold steady.... OK to fail. Be confident. Weather the storm.”***

– Key informant (community leader)

***“I see evidence of racism in everything that’s systematic. Education. Access to healthcare. Rental assistance.”***

– Focus group participant (community leader)

***“Systemic racism is a long-standing problem. Often, it’s not even known by the agencies that keep it in place; that keep us in the endless cycle.”***

– Focus group participant (community member)

***“Conversations don’t center BIPOC populations. BIPOC populations aren’t on boards. We have to make sure we are signaling this out. Hear the voices and responding. There may be members of groups. People may feel uncomfortable. There has been civil unrest for centuries. Change relies on accountability.”***

– Key informant (community member)

### *Challenges meeting basic needs.*

Many participants – community members and organizational leaders alike – spoke of the challenges residents face meeting their basic needs. Housing, transportation, healthy food, childcare, healthcare, access to banking services (credit), etc. COVID-19 exacerbated all these pre-existing challenges.

The impacts of social determinants of health have become deeper and more profound, affecting the most vulnerable. Availability and cost of childcare, transportation, access to healthy food, education, stable housing, basic needs, etc. all impact marginalized populations to a greater degree.

#### **Selected participant quotes:**

***“Food and shelter are the basic issues all people have a right to and are now not able to get.”***

- Focus group participant (community member)

***“What are health impacts to lack of food and shelter? Delaying medical care.”***

- Focus group participant (community member)

***“Long term disability. COVID 19 has a resulting long-term disability on many people.”***

- Focus group participant (community member)

***“Alcohol and drug abuse. Students maybe abuse products that impact their bodies and minds due to trauma. How to cope and escape. COVID has made this worse. Alternative options are available.”***

- Focus group participant (community member)

***“People who have never tried to access services are now needing to access and services are not available.”***

- Focus group participant (community member)

# Community Engagement Results

Continued



Three stakeholder groups contributed to a five question online survey (see Appendix \_\_) to assess the perspectives of front-line pediatric providers. The audience included Mary Bridge Children's providers (n=94), Tacoma Public School District school nurses (n=31) and Franklin Pierce School District school nurses (n=11). The results of this survey are summarized below.

When asked to select the **top three ongoing health concerns**, survey participants selected:

- Behavioral health, including depression and anxiety.
- Child health and wellness.
- Access to primary healthcare.

When asked to select **the most helpful to improve the health concerns** of the population they serve, participants selected:

- Behavioral health services.
- Access to healthy food.
- Access to primary care.

Survey participants indicated the following as **the top (significant) barriers impacting their ability to provide services**.

- Limited staff resources.
- Staff time constraints.
- Need for specialists.

Lastly, survey participants selected the following **top barriers impacting their clients' ability to access services**.

- Do not know how to access services.
- Lack of or limited staff services.
- No transportation/distance (to services).

## Building on strengths and resources.

**The following opportunities for improvement were mentioned by interview and focus group participants as a way for healthcare systems to use their existing strengths and resources to meet community needs.**

- **Greater transparency about availability of patient's financial assistance and how it is disbursed.**
- **Increase funding for prevention programs to help avoid use of the emergency department.**
- **Healthcare can serve as models for providing onsite childcare and/or childcare stipends for employees.**
- **Increase training and resources for culturally relevant healthcare.**
- **Healthcare and other institutions should partner with farmers markets to increase local access to fresh food.**
- **Advocate for policy change so that K-12 students are automatically opted in to receive free and reduced price lunch (vs. having to opt out).**



# Community Engagement Results

Continued

## LIMITATIONS

While Mary Bridge Children's service area extends beyond Pierce County, stakeholders and focus group participants were from Pierce County only.

For this report, community engagement data comes from focus groups and interviews. Focus group and interview results are not entirely generalizable, and limitations to the strength of the conclusions exist. Strengths and assets were not evaluated due to limitations from the COVID-19 pandemic.

Some voices are missing from this report. A focus group comprised of people representing the Pierce County American Indian community was held as a part of this assessment. However, due to personal concerns raised by a participant, the results of this discussion were not included in the analysis.

## Additional qualitative data: COVID-19 Health Equity Assessment

Tacoma-Pierce County Health Department (Health Department) completed this assessment to inform COVID-19 response and recovery efforts. The full report can be found [here](#).

This assessment found that adverse social, economic, and environmental conditions make individuals and communities more susceptible to the damaging effects of the COVID-19 pandemic. Structural racism is a key driver of the disproportionate impacts of COVID-19 among Black, Indigenous, and People of Color (BIPOC). We analyzed surveillance data to determine risk groups and where cases are most concentrated. We measured the association between rates of COVID-19 infection and the prevalence of social and economic conditions that can affect health, such as race, income, and educational achievement. Most importantly, we hosted listening sessions with those who are most at-risk to understand the pandemic's effect on them and their families and how well they have found support during these challenging times.

Overall, we found an abundance of evidence suggesting the effect of COVID-19 on our community has been substantial, disproportionate, and preventable. For example, people of color experience higher infection rates than white residents. Also, we found that people residing in areas with comparatively poor social and economic conditions (e.g., lower income or limited English) were much more likely to become infected.

# Community Engagement Results

Continued

Because of the timely nature of this assessment, the themes identified in this assessment are listed below and included in this report.




**Economic**

- Urgent need for financial support for medical care, unemployment, and basic needs.




**Health**

- Urgent need for medical care, insurance coverage, supplies and PPE, culturally grounded communications.
- Essential workers risk health to continue working.
- Uncertainty about effectiveness of public health directives.
- Barriers to accessing care include confidentiality, fear of exposure.



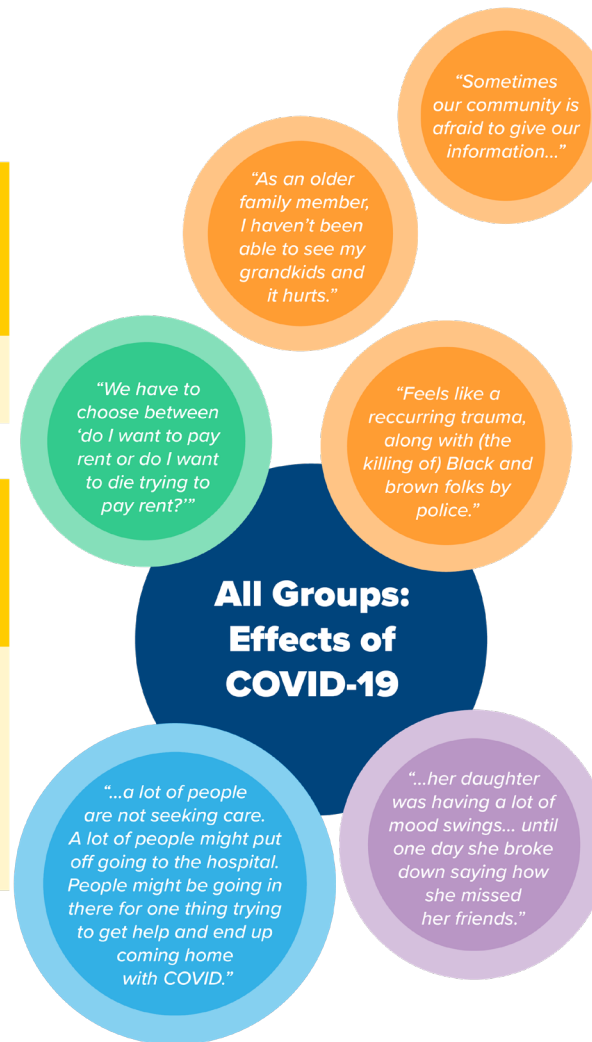
**Social/Cultural**

- Distrust in providers and public health due to a lack of culturally grounded information, and a history of structural violence and systemic racism.
- Disruption of important social and cultural practices.
- Challenges with remote learning.
- Youth not feeling heard.



**Emotional**

- Stress/anxiety, depression and fatigue due to decrease in social connections, increase in workload, homeschooling, and general fear of illness.



# Leading Causes of Death



Life expectancy - the average number of years a person at birth can expect to live, given current death rates - is a widely used measure of overall health. However, it is partially determined by environment and human behavior (risky and health-promoting).

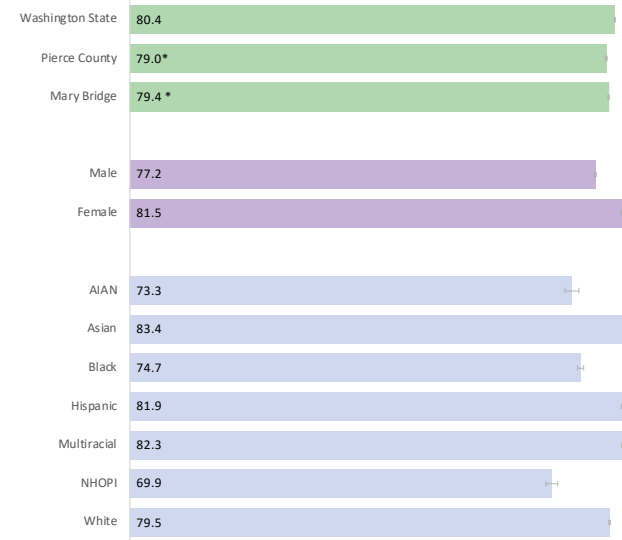
Factors that directly influence life expectancy include the leading causes of deaths and hospitalizations. As a result, these indicators provide actionable information for future public health interventions.

## Life Expectancy

As mentioned above, life expectancy is the average number of years a person at birth can expect to live, given current age-specific death rates. It can evaluate mortality trends over time, the relative increase/decrease of a population, and future planning purposes.

Life expectancy within the service area was significantly lower than the state but significantly higher than Pierce County. Within the service area, women tended to live significantly longer than men. Asian individuals had the longest life expectancy (83.4 years), while Native Hawaiians and Other Pacific Islanders had the shortest life expectancy (69.9 years).

## Life expectancy (years) Mary Bridge Service Area, 2015-2019



Data Source: Washington State Department of Health, Center for Health Statistics, 1990-2016, Community Health Assessment Tool (CHAT), April 2021.

# Leading Causes of Death

Continued

## LEADING CAUSES OF DEATH

The top three leading causes of death for youth in this service area were the same. The top three conditions were those present at birth (those originating in the perinatal period, malformations, deformations and chromosomal abnormalities), followed by accidents. Suicide became the leading cause of death once an individual turned 13.

## Top 10 Leading Causes of Death among youth (0-17 years) Mary Bridge Service Area, 2015-2019

OVERALL	Rate*
Perinatal conditions	12.1
Congenital malformations deformations and chromosomal abnormalities	7.5
Accidents	5.0
All other diseases (Residual)	3.0
Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified	2.9
Intentional self-harm (suicide)	2.8
Cancer	2.1
Assault (homicide)	2.1
Major cardiovascular diseases	1.2
Influenza and pneumonia	1.1

\*Age-specific death rates per 100,000 people

Source: Washington State Department of Health, Center for Health Statistics, 1990-2016, Community Health Assessment Tool (CHAT), October 2017.

# Leading Causes of Death

Continued

## Top 10 Causes of Death in youth (by gender)

Mary Bridge Service Area, 2015-2019

Male	Rate*
Perinatal conditions	12.2
Congenital malformations deformations and chromosomal abnormalities	7.5
Accidents	6.5
Intentional self-harm (suicide)	3.2
All other diseases (Residual)	3.1
Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified	3
Assault (homicide)	3.0
Cancer	2.1
Influenza and pneumonia	1.3
Major cardiovascular diseases	1.0

Female	Rate*
Perinatal conditions	12.1
Congenital malformations deformations and chromosomal abnormalities	7.6
Accidents	3.4
All other diseases (Residual)	2.9
Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified	2.8
Intentional self-harm (suicide)	2.3
Cancer	2.1
Major cardiovascular diseases	1.4
Assault (homicide)	1.2
Influenza and pneumonia	0.8

\*Age-specific death rates per 100,000 people

Source: Washington State Department of Health, Center for Health Statistics, 1990-2016, Community Health Assessment Tool (CHAT), October 2017.

## Top 10 Causes of Death in youth (by age group)

Mary Bridge Service Area, 2015-2019

0-12 years	Rate*
Perinatal conditions	16.7
Congenital malformations deformations and chromosomal abnormalities	10.2
Accidents	5.2
Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified	4.0
All other diseases (Residual)	3.4
Assault (homicide)	1.7
Cancer	1.6
Influenza and pneumonia	1.5
Major cardiovascular diseases	1.3
Infectious and Parasitic Disease	0.9

13-17 years	Rate*
Intentional self-harm (suicide)	9.3
Accidents	4.6
Cancer	3.3
Assault (homicide)	3.1
All other diseases (Residual)	2.1
Major cardiovascular diseases	1.0
Chronic lower respiratory diseases	0.4
Pneumonitis due to solids and liquids	0.4
Congenital malformations, deformations and chromosomal abnormalities	0.4
Events of undetermined intent	0.4

\*Age-specific death rate per 100,000 people

(^) data suppressed due to counts lower than 5

Source: Washington State Department of Health, Center for Health Statistics, 1990-2016, Community Health Assessment Tool (CHAT), October 2017.



# Leading Causes of Death

Continued

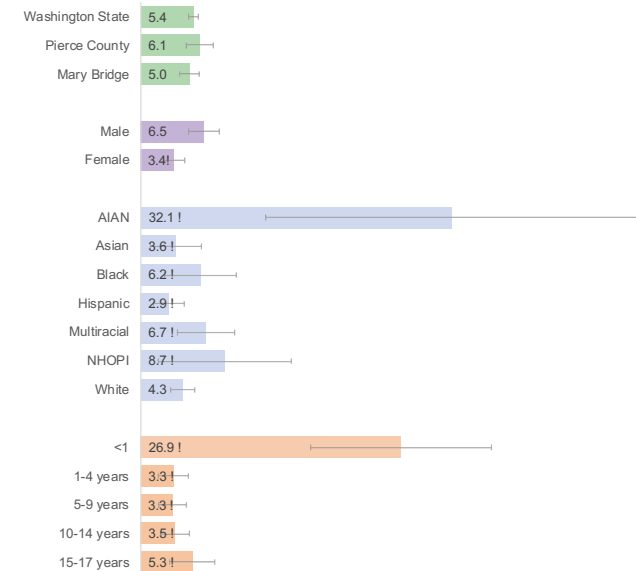
## ACCIDENTAL DEATHS

Accidental or unintentional deaths are caused by unnatural means: examples include motor vehicle accidents, unintentional poisonings, or unintentional falls. The rate of accidental deaths is the number of deaths resulting from unintentional injuries per 100,000 people.

There was no significant difference between the rate of unintentional injury deaths in this service area compared to the state or to the county. Within the service area, boys were more likely to die due to unintentional injuries compared to girls. American Indian and Alaskan Native youth were significantly more likely to die due to unintentional injuries compared to Asian, Black, Hispanic, Multiracial, and white youth.

The rate of unintentional injury deaths was significantly higher among newborns (<1 years of age) compared to other age groups. From babies starting at ages 1-4 years, unintentional injury deaths gradually increased with increasing age.

## Accidental deaths per 100,000 people Mary Bridge Service Area, 2015-2019



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

All rates are age-specific

Source: Washington State Department of Health, Center for Health Statistics (CHS), 1990–2019, Community Health Assessment Tool (CHAT), January 2021.

# Leading Causes of Death

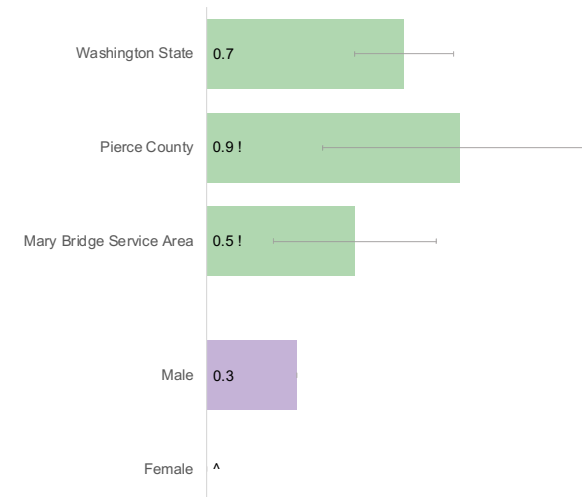
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## DRUG-RELATED DEATHS

Using drugs or other illicit substances places an individual at personal and financial risk. In addition, it can lead to other health issues (dental problems, certain types of cancers and chronic illnesses) and death.

The rate of drug-related deaths in this service area was lower than in the state and the county, but the difference was not significantly meaningful. Boys were significantly more likely to die due to drug-related causes than girls. Data for race/ethnicity and age was too small to report.

## Drug-Related Deaths per 100,000 people Mary Bridge Service Area, 2015-2019



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

(^) data suppressed due to counts lower than 5

Race and age-specific data not shown due to low counts

Rates are per 100,000 individuals and are age-adjusted to the US 2000 standard population

Source: Washington State Department of Health, Center for Health Statistics (CHS), 1990–2019.

# Leading Causes of Death

Continued

## LEADING CAUSES OF HOSPITALIZATIONS

Hospitalizations occur due to a wide array of health concerns. Understanding these hospitalizations is crucial to prioritizing how we allocate resources, what types of interventions are undertaken and where these interventions should be focused.

Perinatal conditions were the top cause of hospitalizations for both boys and girls. Boys were more likely to be hospitalized due to injuries/poisonings and digestive system issues compared to girls. Girls were more likely to be hospitalized due to mental illness than boys.

### Top 10 Leading Causes of Hospitalization among youth (0-17 years)

Mary Bridge Service Area, 2016-2019

Overall	Rate*
Perinatal conditions	4669.5
Mental Illness	153.0
Diseases of the digestive system	143.6
Injury and poisoning	143.6
Diseases of the nervous system and sense organs	104.9
Congenital anomalies	97.0
Endocrine; nutritional; and metabolic diseases and immunity disorders	93.2
Mood disorders	73.8
Other perinatal conditions	73.3
Cancer	73.3

\*Age-specific rate per 100,000 people

Source: Washington Hospital Discharge Data, Comprehensive Hospitalization Abstract Reporting System (CHARS)

### Top 10 Leading Causes of Hospitalization in youth (by gender)

Mary Bridge Service Area, 2016-2019

Male	Rate*
Perinatal conditions	4717.5
Respiratory infections	181.4
Injury and poisoning	173.8
Diseases of the digestive system	151.0
Mental Illness	114.7
Diseases of the nervous system and sense organs	107.4
Congenital anomalies	101.5
Endocrine; nutritional; and metabolic diseases and immunity disorders	95.2
Acute bronchitis	90.7
Cancer	81.0

Female	Rate*
Perinatal conditions	4670.3
Mental Illness	194.4
Respiratory infections	144.5
Diseases of the digestive system	138.6
Injury and poisoning	113.5
Mood disorders	105.1
Diseases of the nervous system and sense organs	102.7
Congenital anomalies	94.2
Endocrine; nutritional; and metabolic diseases and immunity disorders	93.7
Acute bronchitis	71.5

\*Age-specific rate per 100,000 people, standardized to the U.S. 2000 standard population

Source: Washington Hospital Discharge Data, Comprehensive Hospitalization Abstract Reporting System (CHARS), 2016-2019

# Leading Causes of Death

Continued

## Top 10 Leading Causes of Hospitalization in youth (by age group)

Mary Bridge Service Area, 2016-2019

Age >1 (Rate*)	Age 1-4 (Rate*)	Age 5-9 (Rate*)	Age 10-14 (Rate*)	Age 15-17 (Rate*)
Perinatal conditions (84441.5)	Respiratory infections (283.4)	Diseases of the digestive system (97.1)	Mental Illness (206.3)	Mental Illness (479.7)
Hemolytic jaundice and perinatal jaundice (1322.1)	Injury and poisoning (170.0)	Injury and poisoning (96.3)	Diseases of the digestive system (131.0)	Mood disorders (281.0)
Other perinatal conditions (1315.5)	Diseases of the nervous system and sense organs (134.7)	Diseases of the nervous system and sense organs (76.8)	Injury and poisoning (116.0)	Diseases of the digestive system (210.9)
Respiratory infections (1117.8)	Diseases of the digestive system (125.8)	Respiratory infections (63.5)	Mood disorders (102.1)	Injury and poisoning (190.5)
Congenital anomalies (979.4)	Acute bronchitis (124.9)	Endocrine; nutritional; and metabolic diseases and immunity disorders (57.2)	Endocrine; nutritional; and metabolic diseases and immunity disorders (86.0)	Endocrine; nutritional; and metabolic diseases and immunity disorders (117.7)
Acute bronchitis (888.4)	Cancer (120.3)	Epilepsy; convulsions (50.7)	Lower gastrointestinal disorders (80.8)	Diseases of the respiratory system (107.7)
Cardiac and circulatory congenital anomalies (408.6)	Asthma (100.7)	Cancer (48.9)	Respiratory infections (80.0)	Suicide and intentional self-inflicted injury (104.5)
Infectious and parasitic diseases (370.4)	Epilepsy; convulsions (99.7)	Asthma (48.7)	Diseases of the nervous system and sense organs (68.1)	Lower gastrointestinal disorders (103.2)
Diseases of the nervous system and sense organs (345.4)	Endocrine; nutritional; and metabolic diseases and immunity disorders (83.7)	Lower gastrointestinal disorders (48.4)	Diabetes (65.8)	Diseases of the nervous system and sense organs (94.6)
Diseases of the digestive system (342.7)	Maintenance chemotherapy; radiotherapy (80.7)	Congenital anomalies (41.1)	Cancer (62.9)	Diabetes (84.2)

\*Age-specific rate per 100,000 people, standardized to the U.S. 2000 standard population

Source: Washington Hospital Discharge Data, Comprehensive Hospitalization Abstract Reporting System (CHARS), 2016-2019

# Leading Causes of Death

Continued

## Top 5 Leading Causes of Emergency Department Use

Emergency Departments are primarily designed to act as a center for immediate care in a life-threatening situation. However, understanding why people visit the emergency department is essential because it can identify potential hazards and allocate resources appropriately.

The top condition diagnosed upon visiting the emergency department was a head injury. However, 2/5 (40%) of the leading conditions for visiting the emergency department were respiratory.

## Top 5 Leading Causes of Emergency Department Use Mary Bridge Children's Hospital, 2021

Visit Diagnosis <sup>1</sup>	Total Patients	Percent <sup>2</sup>	Top Condition (Number of Patients with the condition)
Injury, poisoning and other external causes	7127	29.91%	Injuries to the head (n=1193)
Diseases of the respiratory system	6648	27.90%	Upper respiratory infection (n=2520)
Infections and parasitic diseases	5482	23.00%	Viral infections (n=1514)
Diseases of the GI system	2999	12.59%	Vomiting (n=1305)
Mental, behavioral and neurodevelopmental disorders	1569	6.59%	Suicidal ideation (n=690)

<sup>1</sup>Visit diagnosis is based on the top diagnosis listed in the medical record.

<sup>2</sup>Percent is out of the total patients who had one of the top five conditions.

Source: Mary Bridge Children's Hospital Emergency Department Medical Records, 2021

# Chronic Disease



Chronic diseases and conditions - such as cancer and asthma - encompass many of the most common, costly and preventable health concerns in our communities.

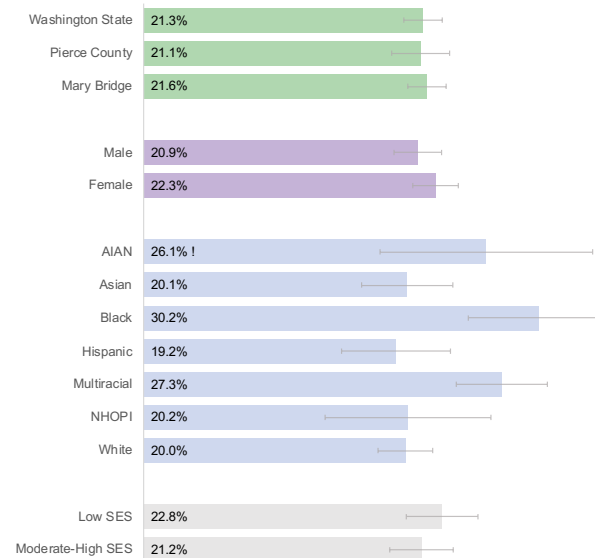
## Asthma – Youth

Asthma affects people of all ages but most often starts in childhood. Asthma prevalence among children in Washington is estimated using the Healthy Youth Survey, where students report if a doctor had ever diagnosed them with asthma.

There were no significant differences between youth in this service area and the state or the county. Black youth and those who identified with multiple races were significantly more likely to have asthma than those who were Asian or white.

No significant difference was seen by socioeconomic status.

## Asthma Prevalence-Youth (%) Mary Bridge Service Area, 2018



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Mother's Education was used as a proxy for socioeconomic status (SES). Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was described as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)



## CANCER

In the simplest terms, cancer is uncontrolled cell growth,<sup>5</sup> that often leads to tumors. It can result from age, harmful environment, inborn errors, and other unknown reasons. As shown in the leading causes of death section above, it is frequently one of the top reasons people die (regardless of age or gender). The number of new cases, or incidence, of several types of cancer, is available through the state cancer registry (WSCR).

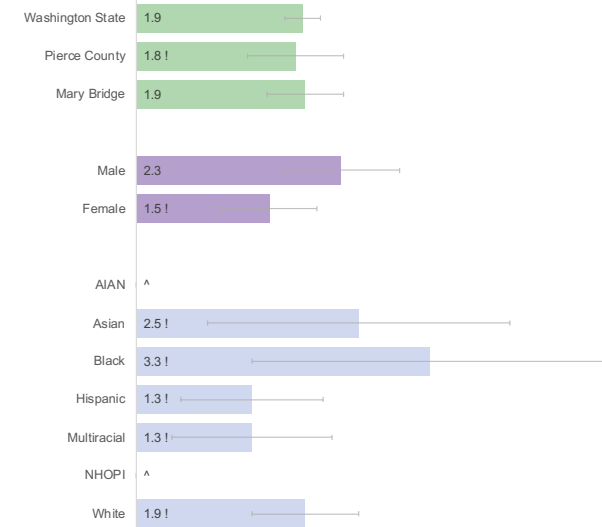
The following sections discuss the incidence of a few major cancers – lymphoma, leukemia, bone cancer and brain and other nervous system cancers.

### Lymphoma

The lymphatic system is a key part of the immune system: it helps move lymph around the body through a network of organs and cells. The two main types of lymphoma are Hodgkin’s Lymphoma and Non-Hodgkin’s Lymphoma. Non-Hodgkin’s lymphomas are more common in youth.

The incidence of lymphoma among youth in this service area was not significantly different from the county or the state. Boys were slightly more likely to develop lymphomas compared to girls, but the difference was insignificant. Black children were the most likely to develop lymphoma, though none of the differences between races were significantly meaningful.

### Lymphoma Incidence Mary Bridge Service Area, 2009-2018



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

(^) data suppressed due to a count lower than 5

Rates are age-specific

Rates represent new cancer cases per 100,000 people, excluding “in-situ” cancers

Source: Washington State Cancer Registry, 2009-2018

<sup>5</sup> National Cancer Institute. “What is Cancer?”. Updated: 5 May 2021. Retrieved from: <https://www.cancer.gov/about-cancer/understanding/what-is-cancer>.

# Chronic Disease

Continued

## Leukemia

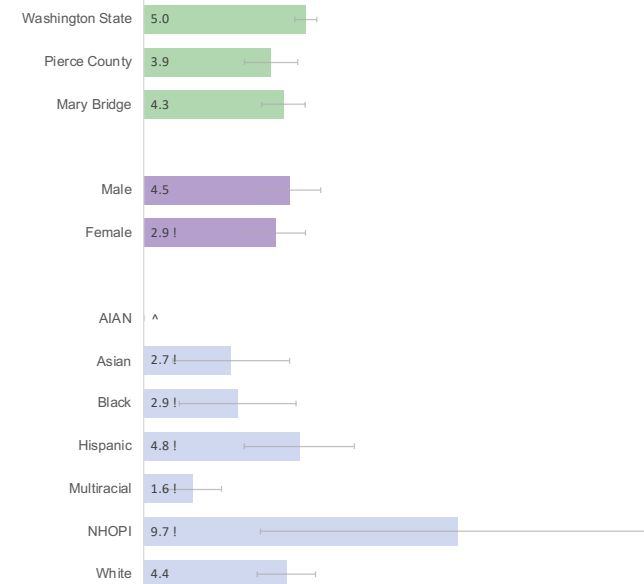
Leukemia is a cancer of the blood and bone marrow that begins in developing blood cells. Doctors usually classify leukemias based on speed (acute or chronic) and where it started (myeloid or lymphoid cells). Most childhood leukemias are acute lymphocytic leukemias.<sup>6</sup>

The incidence of leukemia in this service area was not significantly different from the state or county. In addition, no significant differences were seen by gender.

Native Hawaiian and Pacific Islander youth were significantly more likely to develop leukemias than youth who identified with multiple races.

## Leukemia Incidence

### Mary Bridge Service Area, 2009-2018



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

(^) data suppressed due to a count lower than 5

Rates are age-specific

Rates represent new cancer cases per 100,000 people, excluding "in-situ" cancers

Source: Washington State Cancer Registry, 2009-2018

<sup>6</sup> Mayo Clinic. "Leukemia". Updated on: 13 Jan 2021. Retrieved from: <https://www.mayoclinic.org/diseases-conditions/leukemia/symptoms-causes/syc-20374373>

# Chronic Disease

Continued

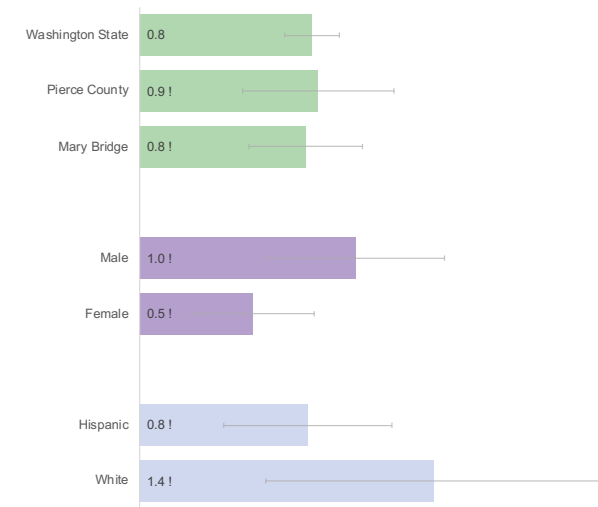
## Bone Cancer

Osteosarcomas and Ewing’s sarcoma are the most common types of bone cancer in children (with osteosarcoma being more common). Osteosarcomas are commonly found in bones around the knee, whereas Ewing’s sarcomas are widely found in the upper leg/pelvis. Both osteosarcoma and Ewing’s sarcoma usually develop in pre-teen/early teenage (10-14) years.<sup>7</sup>

The incidence of bone cancer among youth in this service area was not significantly different from the county or the state. Boys were slightly more likely to develop bone cancer than girls, but the difference was not significantly meaningful. Non-Hispanic white youth were more likely to develop bone cancer than Hispanic youth, but the difference was insignificant. The incidence of bone cancer among other races was too small to provide a reliable rate.

<sup>7</sup> Memorial Sloan Kettering Cancer Center. “Types of Bone Cancer”. Retrieved from: <https://www.mskcc.org/cancer-care/types/bone/types>.

## Bone Cancer Incidence Mary Bridge Service Area, 2009-2018



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Not all races are shown due to low incidence.

Rates are age-specific

Rates represent new cancer cases per 100,000 people, excluding “in-situ” cancers

Source: Washington State Cancer Registry, 2009-2018

## Brain and Other Nervous System Cancer Incidence

Brain tumors are masses or growths of abnormal cells in the brain and surrounding areas. There are several different types: Choroid plexus carcinomas, Craniopharyngiomas, Embryonal tumors, Gliomas, Mixed glial and neuronal tumors, and Pineoblastomas. Astrocytomas (a type of glioma) and medulloblastomas (an embryonal tumor) are the most common brain and other nervous system cancer in children.<sup>8</sup>

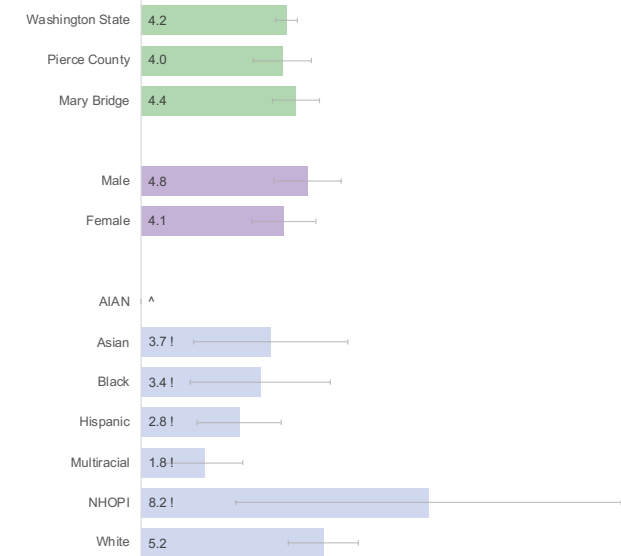
The incidence of brain and other nervous system cancer among youth in this service area was not significantly different from that of the state or the county. Boys were more likely to develop brain and other nervous system cancers than girls, but the difference was not statistically meaningful.

Native Hawaiian and other Pacific Islander youth were significantly more likely to develop brain and other nervous system cancers than youth who identified with multiple races.

<sup>8</sup> American Cancer Society. "Types of Brain and Spinal Cord Tumors in Children". Last Revised: 20 June 2018. Retrieved from: <https://www.cancer.org/cancer/brain-spinal-cord-tumors-children/about/types-of-brain-and-spinal-tumors.html>

## Brain and Other Nervous System Cancer Incidence

### Mary Bridge Service Area, 2009-2018



Rates are age-specific

(\*) value significantly different from WA state

(!) relative standard error greater than 30%

(^) data suppressed due to a count lower than 5

Not all races are shown due to low incidence.

Rates represent new cancer cases per 100,000 people, excluding "in-situ" cancers

Source: Washington State Cancer Registry, 2009-2018

# Chronic Disease

Continued

## **ASSETS & RESOURCES – CHRONIC DISEASE**

**Puget Sound Asthma Coalition** (PSAC) is a diverse collaboration of families, healthcare providers, businesses, schools, non-profits and government. Members help to improve quality of life for families living with asthma through education, outreach, innovation, and advocacy.

**Leukemia and Lymphoma Society** provides support, education and free notebook with information and practical resources for families with a newly diagnosed child.

### **Childhood Leukemia Foundation**

Provides information/supportive resources. Your child may be eligible for an I-pad to help coping with treatment.

**Pediatric Brain Tumor Foundation** provides support, education and free notebook with information and practical resources for families with a newly diagnosed child.

**Alex's Lemonade Stand** (ALSF) is dedicated to changing children's lives through impactful research, raising awareness and supporting families to help cure pediatric cancer.

# Health Behaviors



A healthy and active lifestyle has been shown to profoundly impact reducing the burden of chronic illness described in the previous section. A healthy diet and regular physical activity are protective factors promoting our health & well-being. At the same time, tobacco use and a multitude of environmental exposures (lead, tobacco smoke, various pesticides and insecticides) are some factors that may lead to adverse health outcomes.

## OBESITY, PHYSICAL ACTIVITY AND NUTRITION

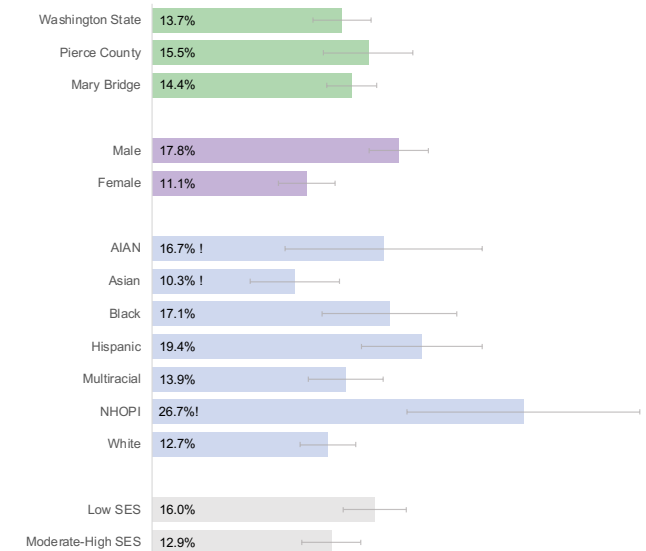
Many chronic diseases discussed in the previous section share the exact root causes, such as high-calorie diets with low nutritional value and a lack of physical activity. As our society becomes more sedentary and reliant on technology and quick/easy food options, the prevalence of several chronic diseases is likely to increase.

### Obesity – Youth

Youth are classified as obese when they are in the top 5% for body mass index by age and gender-based on growth charts developed by the CDC.

There were no significant differences between obesity among youth in this service area and the state or the county. However, within the service area, Native Hawaiian and Pacific Islander youth were significantly more likely to be obese compared to white and Asian youth and those who identified with multiple races.

### Youth Obesity (%) Mary Bridge Service Area, 2018



(\* ) value significantly different from WA state

(!) relative standard error greater than 30%

Mother's Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was described as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)



# Health Behaviors

Continued

## PHYSICAL ACTIVITY – YOUTH

Engaging in physical activity in youth is essential for developing a healthy lifestyle. The U.S. Department of Health and Human Services recommends that children and adolescents be active for at least 60 minutes every day (including three days of muscle-strengthening activities).<sup>9</sup>

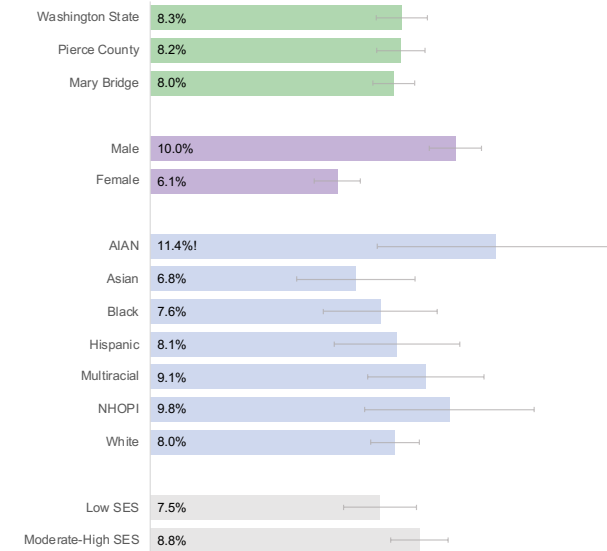
### Meeting Full Physical Activity Recommendations – Youth (%)

The percentage of youth in this service who met the physical activity recommendations was not significantly different from the state or the county. Boys were significantly more likely to meet the physical activity recommendation than girls. American Indian/Alaskan Native youth were the most likely to meet physical activity requirements, while Asians were the least likely to meet these requirements. None of the differences were significantly meaningful.

No significant differences existed by socioeconomic status.

<sup>9</sup>U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans, 2nd edition. Washington, D.C.: U.S. Department of Health and Human Services, 2018.

### Meeting Full Physical Activity Recommendations - Youth (%) Mary Bridge Service Area, 2018



(\* ) value significantly different from WA state

(!) relative standard error greater than 30%

Mother's Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was defined as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)

# Health Behaviors

Continued

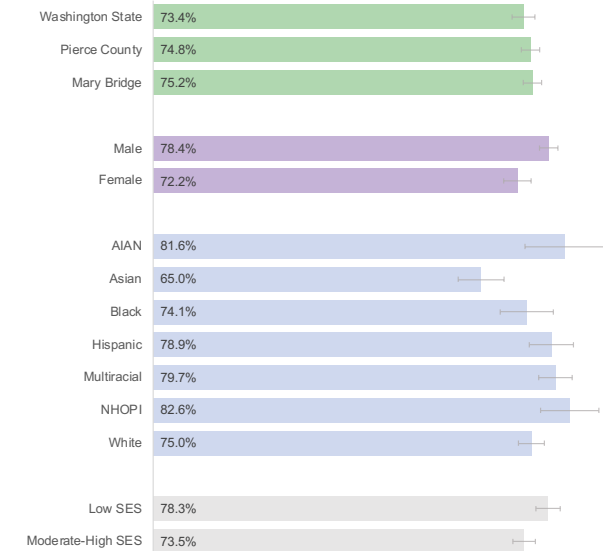
## Sugar-Sweetened Beverages

The availability and consumption of sugar-sweetened beverages (SSB) by youth can lead to the development of unhealthy behaviors and chronic diseases later in life.

The percentage of youth in this service area who drank sugar-sweetened beverages was not significantly different from that of the state or the county. Boys were significantly more likely to drink sugar-sweetened beverages than girls. American Indian and Alaska Native youth were significantly more likely to drink sugar-sweetened beverages than Asian youth.

Lower SES youth were significantly more likely to drink sugar-sweetened beverages than those of higher SES.

## SSB consumption (%) Mary Bridge Service Area, 2018



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Mother's Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was defined as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)

# Health Behaviors

Continued

## TOBACCO

Tobacco use remains one of the most prevalent risky behaviors in communities across the United States, despite robust evidence that tobacco use increases the risk of heart disease, cancer, and many other adverse health outcomes. Moreover, despite a general trend of decreasing tobacco use nationwide, an increase in electronic cigarette availability and attempts to replace traditional cigarettes with electronic cigarettes and vaping product popularity among youth continues to be a concern.

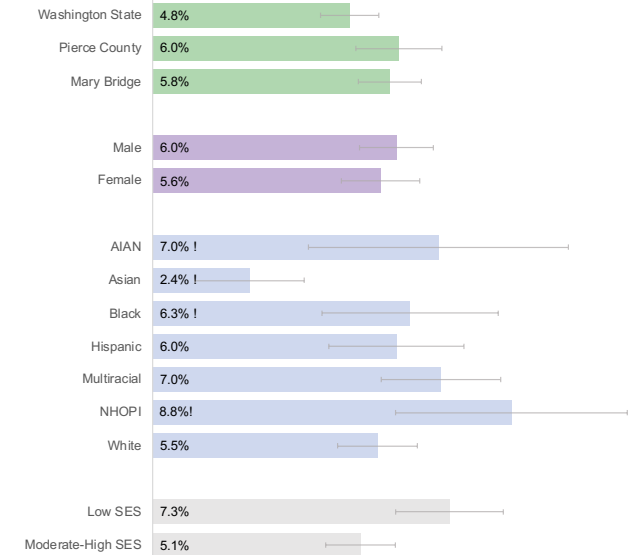
### Current Cigarette Use – Youth

While the rate of tobacco use initiation has been declining nationwide, the issues of tobacco use among youth remains a concern. Preventing youth from forming a smoking habit reduces the risk of that individual smoking into adulthood.

The percentage of youth in this service area who smoked cigarettes in the past 30 days was not significantly different from the state or the county. Within the service area, boys were more likely to report having smoked cigarettes than girls. Native Hawaiian or other Pacific Islander youth were significantly more likely to smoke a cigarette than Asian youth.

The percentage of youth who smoked a cigarette decreased with increasing socioeconomic status.

### Cigarette use, past 30 days (%) Mary Bridge Service Area, 2018



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Mother's Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was defined as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)

# Health Behaviors

Continued

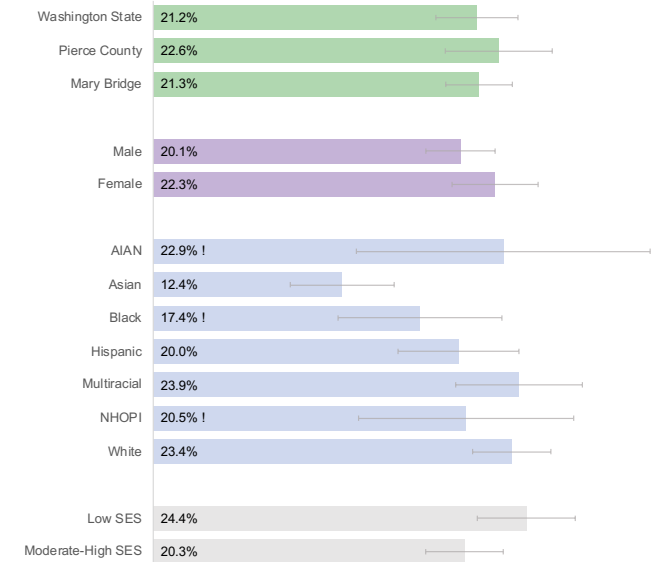
## Current E-Cigarette Use – Youth

Although cigarette use has declined nationwide, a new public health concern is the increasing prevalence of electronic cigarette (e-cigarette) use among youth. The long-term effects of e-cigarette use are unknown.

The percentage of youth in this service area who used an e-cigarette in the past 30 days was not significantly different from the state or the county. Within the service area, no significant differences were seen by sex. White and Hispanic youth were significantly more likely to use an e-cigarette than Asian youth.

No significant difference was seen by socioeconomic status.

## E-Cigarette use, past 30 days (%) Mary Bridge Service Area, 2018



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Mother's Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was defined as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)

# Health Behaviors

Continued

## **ASSETS & RESOURCES – HEALTH BEHAVIORS**

**Clean Air for Kids** (CAFK) is an asthma-management program that works to reduce asthma morbidity and mortality by mitigating and eliminating environmental triggers. CAFK is a partnership between Mary Bridge Children's Tacoma - Pierce County Health Department, Puget Sound Asthma Coalition and MultiCare service area providers.

**Mary Bridge Nutrition Services** helps support children and families with referral-based services ranging from basic nutritional support to specialty nutrition clinics.

**Ready Set Go! 5210** - is a community-based initiative in Pierce County to promote healthy lifestyle choices for children, youth and families.

The **Women Infant and Children Supplemental Nutrition** program help pregnant women, new mothers and young children eat well, learn about nutrition and stay healthy.

**SNAP-Ed (Supplemental Nutrition Assistance Program Education)** – A federal grant program also referred to as Basic Foods or Food Stamps.

**Food banks, Farmer's Markets** and other feeding programs sponsored by faith-based organizations are working to provide healthier options to their customers.

**YMCA** of Pierce and Kitsap Counties:

- **Diabetes Prevention Program**
- **ACT! Actively Changing Together**

**Truth Initiative** is a nonprofit tobacco control organization "dedicated to achieving a culture where all youth and young adults reject tobacco."

**Mary Bridge Children's Asthma and Pulmonary Program** provides comprehensive care including evaluation, testing and treatment for children with asthma and other pulmonary disorders. We have expanded access to virtual care as well.

# Access to Care, Use of Clinical Preventive Services and Oral Health



Mary Bridge Children's  
Community Health  
Needs Assessment  
2022

Access to comprehensive, high-quality health care services is vital for building healthier communities. However, factors limiting access to health care make it more challenging to reach our best health & well-being potential. These barriers include inadequate insurance coverage, high care costs, and gaps in service availability. Addressing these barriers increases the likelihood we continue to have a healthy and vibrant community.

## ACCESS TO CARE

The availability of insurance coverage can be the difference between receiving adequate prenatal care or postponing that care. High-risk pregnancy and regular visits with a primary care provider are essential. For example, screening can help identify cancer-related health conditions early to increase the chances of successful treatment. Insurance coverage also allows individuals to engage the health care system before conditions develop and reduce the cost of neglected health. Unfortunately, segments of our population continue to be uninsured and have trouble accessing care.

## Insurance Coverage

The lack of health care access can be particularly burdensome for individuals who don't have adequate health insurance. Following the implementation of the Patient Protection & Affordable Care Act, the proportion of residents reporting no insurance decreased significantly. Still, persistent insurance coverage gaps persist.

The percentage of the population in this service area covered by insurance was not significantly different compared to the county or the state. Both boys and girls were equally likely to be insured. Younger children (<6 years of age) were slightly more likely to be insured than older children, but the difference was not statistically meaningful.

No significant differences were seen when we looked at social vulnerability across the census tracts in this service area.<sup>10</sup>

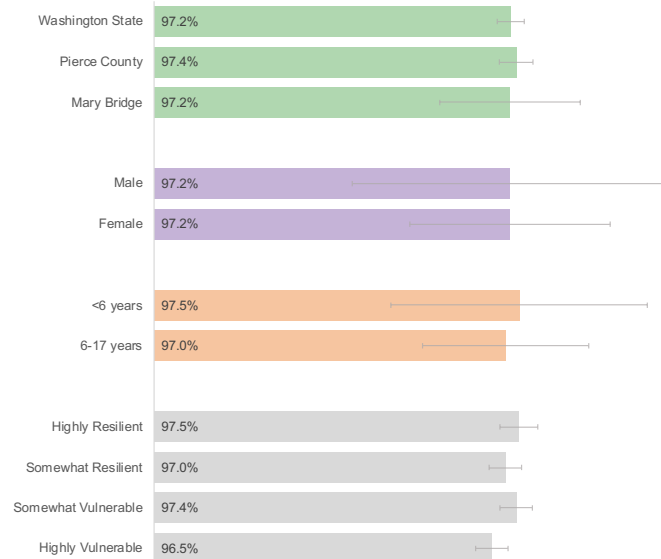
<sup>10</sup> A lower social vulnerability score corresponds to greater resiliency in a community. To see which census tracts were assigned to which social vulnerability group, see Map 1 (page 14).



# Access to Care, Use of Clinical Preventive Services and Oral Health

Continued

## Insurance Coverage (%) Mary Bridge Service Area, 2015-2019



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

The chart above shows the percent who are insured solely among youth (0-17 year olds). As a result, percentages may be substantially different from previous versions of this report.

Source: U.S. Census Bureau, American Community Survey (ACS) 5-year estimates, 2015-2019

## ORAL HEALTH

Oral health is an oft-overlooked component of a robust public health system. For example, regular dental checkups have a crucial role in preventing childhood caries (cavities) and reducing the risk of chronic diseases.

**Dental Checkups** – Regular dental checkups for youth help promote proper oral hygiene practices and address acute and chronic conditions.

### Routine Dental Checkup – Youth

To prevent cavities and promote preferred dental hygiene practices, it is essential to be routinely screened by a dental professional.

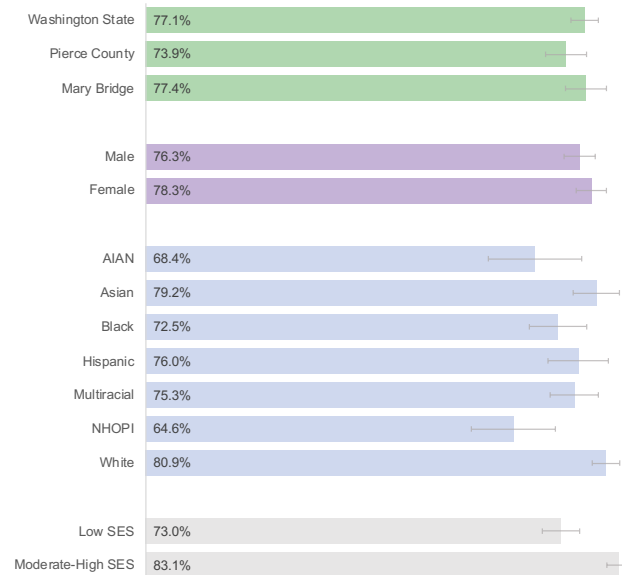
The percentage of youth in this service area with a routine dental checkup in the past year was not significantly different from the state or the county. However, white youth were significantly more likely to have a dental checkup than Native Hawaiian and Pacific Islander youth in the past year.

The percentage of youth with a routine dental checkup in the past year significantly increased with increasing socioeconomic status.

# Access to Care, Use of Clinical Preventive Services and Oral Health

Continued

## Routine dental checkup, past year (%) Mary Bridge Service Area, 2018



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Mother's Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was defined as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)

## CLINICAL PREVENTIVE SERVICES

Clinical services focused on disease prevention and detection – including colorectal, breast and prostate cancer screening – make significant contributions to reducing disease prevalence. One of the greatest public health successes of clinical preventive services – immunizations – has reduced the burden of infectious disease worldwide and continues to do so. Understanding clinical preventive services in our community is key to maintaining a healthy community.

**Vaccinations** – The Advisory Committee on Immunization Practices (ACIP) provides advice and guidance on effective control of vaccine-preventable diseases in the U.S. civilian population. This report estimates vaccination rates using data from the Washington State Immunization Information System (WSIIS) for 15-39 months and adolescents (15-17 years).

# Access to Care, Use of Clinical Preventive Services and Oral Health

Continued

## Vaccinations (19-35 months)

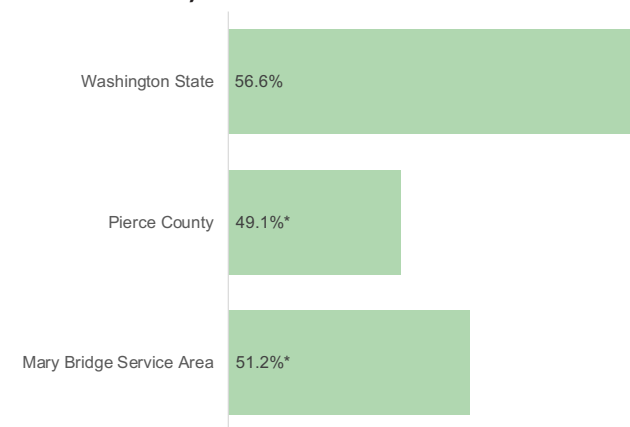
Obtaining the recommended vaccinations early in childhood, particularly for children between 19 and 35 months old, has successfully reduced the burden of infectious disease among youth. One commonly used measure for vaccinations is the percentage of children who have received the 4313314 HEDIS series (4 diphtheria, tetanus, acellular pertussis, 3 polio, 1 measles, mumps, rubella, 3 hepatitis B, 3 Hemophilus influenza type B, 1 chicken pox, and 4 pneumococcal conjugate vaccine) (4313314 HEDIS series).<sup>11</sup>

The percentage of children between 19 and 35 months old in this service area who had their recommended vaccinations was significantly lower compared to the state. However, it was significantly higher compared to Pierce County.

<sup>11</sup> Washington State Department of Health. "Public Health Measures: Public Health Immunization Measures by County". Retrieved from: <https://doh.wa.gov/data-statistical-reports/washington-tracking-network-wtn/immunization-data/county-public-health-measures-dashboard>

## Recommended early childhood vaccines completed (%)

19-35 months, 4313314 HEDIS series



Source: Washington State Immunization Information System, 2021

# Access to Care, Use of Clinical Preventive Services and Oral Health

Continued

## **ASSETS & RESOURCES – ACCESS TO CARE**

Mary Bridge Immunization Clinic offers free vaccines for newborns and children up to age 19.

Tacoma Area Coalition for Individuals with Disabilities (TACID) works with individuals to assess needs, including behavioral health needs. TACID supports and connects individuals with community resources, including behavioral health services.

Sea Mar Community Health Center specializes in primary care medicine, including preventive health exams, urgent care visits, minor procedures, health education, follow-up care from hospital visits and referrals for other medical services. In addition to these services, Sea Mar provides comprehensive health services for the entire family, including dental, behavioral health and preventive health services.

Lindquist Dental Clinic for Children provides accessible, compassionate and effective dental care to Puget Sound children in need at local clinics, schools and dental outreach events.

Tacoma-Pierce County Health Department Family Support Centers assist families in finding resources and applying for DSHS benefits, including SNAP (food stamps) and medical and dental benefits. In addition,

the Family Support Centers connect families to low-cost and/or free resources in the community, including pregnancy, parenting and maternity support; infant case management; services for children with special needs; and services for behavioral health care needs

Pierce County maintains a list of Pierce County Dental Care Clinics and Resources.

Community Health Care provides medical, dental and pharmacy services. Dental services are provided at five locations in Pierce County, to include school based services.

Access to Baby and Child Dentistry (ABCD) puts young children across Washington state on a lifelong path to good oral health. ABCD connects low-income families with providers who know how to care for young children, focusing on prevention and avoiding tooth decay, as well as educating parents about how to take good care of their children's teeth. Originally established to increase access to dental services for Medicaid eligible clients age five and younger, starting in January 2022, the program will be expanded to include children with a Developmental Disabilities Administration (DDA) indicator thorough age twelve.

# Maternal and Child Health



Improving the well-being of mothers, infants, and children determines the starting point of health for families in our community. Maximizing the potential of our community requires protecting and promoting the health of our future generations through positive behaviors, such as early and adequate prenatal care and breastfeeding.

## **PREGNANCY**

Pregnancy is a complex and life-changing experience that lays the foundation for a community's future. Many factors impact the likelihood of poor pregnancy outcomes. However, early and adequate prenatal care may prevent pregnancy-related complications, help mothers navigate a high-risk pregnancy or assist them in connecting to tobacco cessation resources.

**Prenatal Care** – Obtaining early and adequate prenatal care is essential to ensure that mothers address any acute or chronic health conditions that may lead to poor pregnancy outcomes.

## **Prenatal Care Adequacy**

The adequacy of prenatal care is measured using Kotelchuck's Adequacy of Prenatal Care Utilization (APCU) index. Prenatal care is considered adequate based on when prenatal care is initiated (the earlier, the better) and how many regular visits are completed.

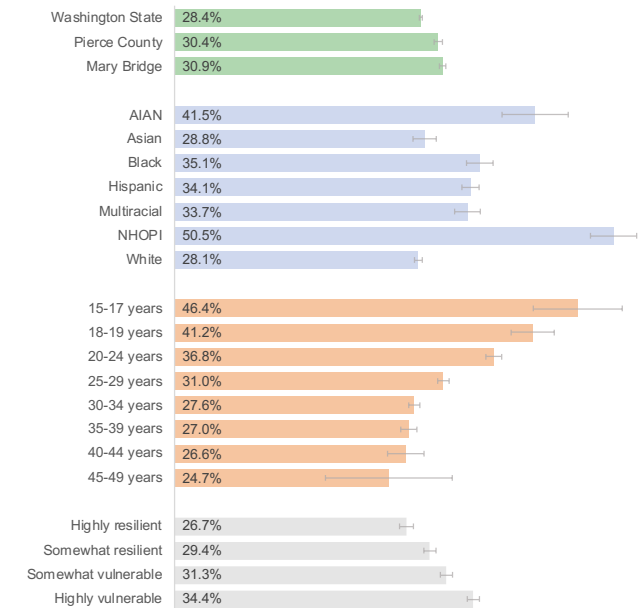
The percentage of mothers in this service area who had inadequate prenatal care was significantly higher compared to the state. However, it was not significantly different compared to Pierce County. Within the service area, women who were American Indian/Alaskan Native and Native Hawaiian or Other Pacific Islanders were significantly more likely to have inadequate care compared to Asian, Black, Hispanic, Multiracial and white mothers. In addition, Black, Hispanic and Multiracial mothers were significantly more likely to have inadequate care than Asian and white mothers. The percentage of mothers who had inadequate care decreased with the increasing age of the mother.

# Maternal and Child Health

Continued

When we looked at social vulnerability across the census tracts in this service area, the percentage of mothers with inadequate prenatal care increased with increasing social vulnerability. Mothers living in somewhat vulnerable and highly vulnerable census tracts were significantly more likely to have insufficient prenatal care compared to mothers who lived in highly resilient areas.<sup>12</sup>

## Inadequate prenatal care (%) Mary Bridge Service Area, 2015-2019



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Age groups represent the age of the mother

Some races were excluded due to sample size limitations

Source: Washington State Department of Health, Center for Health Statistics (CHS), Birth Certificate Data, 1990–2016, Community Health Assessment Tool (CHAT), April 2021.

<sup>12</sup> A lower social vulnerability score corresponds to greater resiliency in a community. To see which census tracts were assigned to which social vulnerability group, see [Map 1 \(page 14\)](#).



# Maternal and Child Health

Continued

## INFANCY

The first year of life, or infancy, is important in child development. Infant mortality, including Sudden Infant Death Syndrome (SIDS), is a concern in all populations with disparities between populations – such as teenage pregnancies and race and/or ethnicity.

**Infant Mortality** – The number of infant deaths per 1,000 live births is generated using birth certificate data and represents the infant mortality rate.

**Low Birth Weight** – A birthweight under 2500 grams is low birthweight, while a very low birthweight is under 1500 grams.

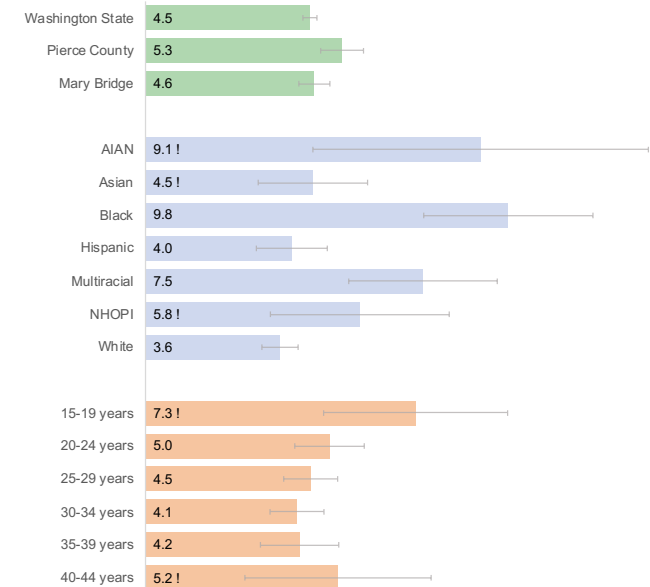
## Infant Mortality

Infant mortality refers to the child’s death less than 365 days after birth. As prenatal care has improved, infant mortality has become less common but still exists.

The rate of infant mortality in this service area was not significantly different from the state or the county. However, within this service area, a few disparities were seen, with American Indian and Alaskan Natives and Blacks having significantly higher infant mortality rates than white residents. Blacks also had a significantly higher infant mortality rate than Asian, white, and Hispanic residents.

Infant mortality was highest among mothers aged 15-19 years and 40-44 years. However, no age group (based on the mother’s age) was statistically significantly different.

## Infant Mortality Rate (IMR) Mary Bridge, 2014-2018



IMR: Infant deaths per 1,000 live births

(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Source: Washington State Department of Health, Center for Health Statistics (CHS), 1990–2018, Community Health Assessment Tool (CHAT), June 2020.

# Maternal and Child Health

Continued

## Low Birth Weight

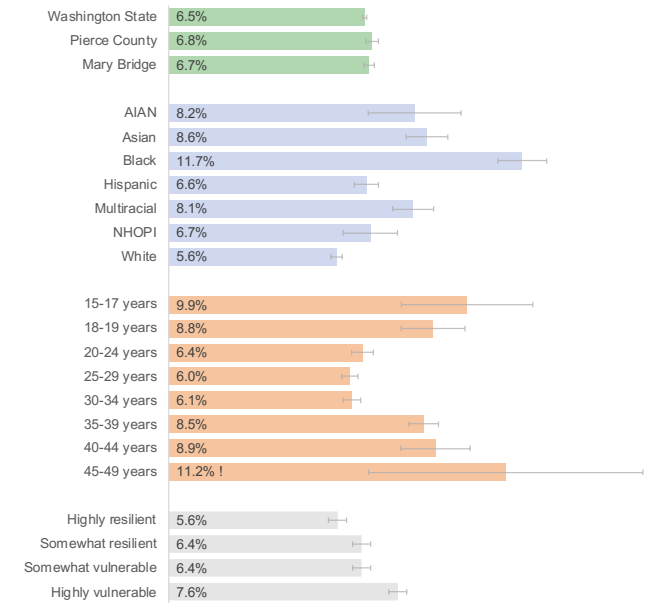
Having a low birth weight is an important risk factor for the well-being of a newborn. As a county-wide measure, low birth weight is measured as the proportion of births where the infant was 2500 grams or fewer.

The percentage of mothers with babies with low birthweight in this service area was not significantly different compared to the state or County. However, Black mothers had a significantly higher percentage of births with a low birth weight than mothers from other races. Asian mothers had a significantly higher percentage of births with a low birth weight than Hispanic, Native Hawaiian and Other Pacific Islanders and white mothers. White and Hispanic mothers had the lowest percentage of births with low birthweight.

When we looked at SVI across the census tracts in this service area, the percentage of babies born with a low birth weight increased with increasing social vulnerability.<sup>13</sup> Women in highly vulnerable census tracts were significantly more likely to have a low birthweight baby than mothers in highly resilient tracts.

<sup>13</sup> A lower social vulnerability score corresponds to greater resiliency in a community. To see which census tracts were assigned to which social vulnerability group, see [Map 1 \(page 14\)](#).

## Low Birth Weight, ≤2500 grams (%) Mary Bridge Service Area, 2015-2019



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Age groups represent the age of the mother.

Source: Washington State Department of Health, Center for Health Statistics (CHS), Birth Certificate Data, 1990–2019, Community Health Assessment Tool (CHAT), June 2020.

# Maternal and Child Health

Continued

## **ASSETS & RESOURCES – MATERNAL CHILD HEALTH**

**Nurse-Family Partnership** is a home visiting program available to support families through pregnancy and a child's 2nd birthday.

**Black Infant Health** educates pregnant black women and their families about pregnancy and infant health through a partnership with local African American churches, community groups and TPCHD.

**Pregnancy Aid** is a Tacoma Social service agency that provides immediate help to any woman and her family, including food, clothes, baby supplies, and helps with rent and utilities.

**Postpartum Support International** has two active support groups in Pierce County.

**Native American Women's Dialogue on Infant Mortality** (NAWDIM) is a Native-led collective whose members are concerned about high infant mortality rates in their communities.

**Results Washington** is Governor Jay Inslee's statewide framework which calls for reducing birth outcome disparities.

**Period of PURPLE Crying** is a curriculum that helps parents understand this time in their baby's life and is a promising strategy for reducing the risk of child abuse.

**Women, Infants and Children (WIC)** supports pregnant women, nursing moms and children under five to improve access to healthy foods, receive health education and screening services, increase breastfeeding and access other health and social services.

**Public Health Improvement Partnership** is convened by the Washington State Department of Health to prevent or reduce the impact of adverse childhood experiences, such as abuse and neglect.

**Perinatal Collaborative of Pierce County** (PCPC) is a local non-profit dedicated to improving the health of Pierce County mothers and infants. PCPC provides opportunities to learn about best practices in caring for mothers and infants in our community.

**Maternity Support Services** (MSS) include preventive health and education services for Medicaid-enrolled pregnant women and their infants.

**Parenting Partnership** is designed to support NICU infants and their families during the first three years of life. It is a home-visiting program that also includes accompanying families to medical appointments and providing peer support groups.

# Injury and Violence Prevention



Injuries and violence adversely affect everyone from the individual level to the greater community they live in, regardless of their background. Injuries and violence are leading causes of death and disability at all levels of our society, but we can prevent these events. Those who survive these traumatic experiences may face life-long mental and physical problems. Understanding the extent of this socioeconomic issue is critical to effective prevention.

Whether self-inflicted (attempted suicide hospitalizations and suicide deaths) or caused by others (firearm-related injuries), intentional injuries are of public health concern because they are often preventable. Moreover, the resounding effects can be far-reaching and long-lasting.

Although most of the data were collected before the 2019 pandemic, recent data suggests some concerning trends. Anecdotal evidence from the Pierce County Sheriff's Office indicates a significant increase in drive-by shootings and aggravated assaults in 2020 (and the first four months of 2021) compared to earlier years. It is unknown whether this trend will continue.

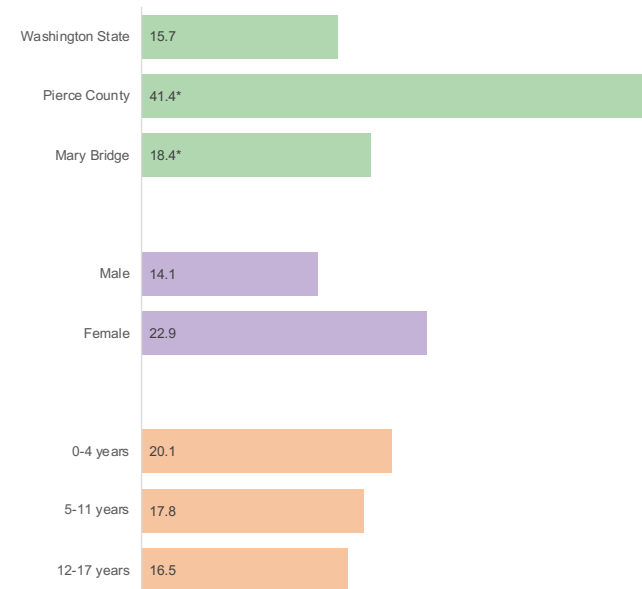
## Child Abuse and Neglect

The rate of child abuse/neglect is measured through the Rapid Health Information Network (RHINO). It is a visit-based rate out of 10,000 emergency dept/urgent care visits. Therefore, an individual may be counted

more than once if they have repeat visits under this category.

This service area had a higher rate of emergency department/urgent care visits related to child abuse and neglect compared to the state. The rate was disproportionately higher for girls and those under 5 years of age.

### Child Abuse and Neglect per 10,000 Emergency Dept/Urgent Care Visits Mary Bridge Service Area, June 2019 – March 2021



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Source: Rapid Health Information Network (RHINO), June 2019-March 2021.

# Injury and Violence Prevention

Continued

## Exposure to Physical Violence

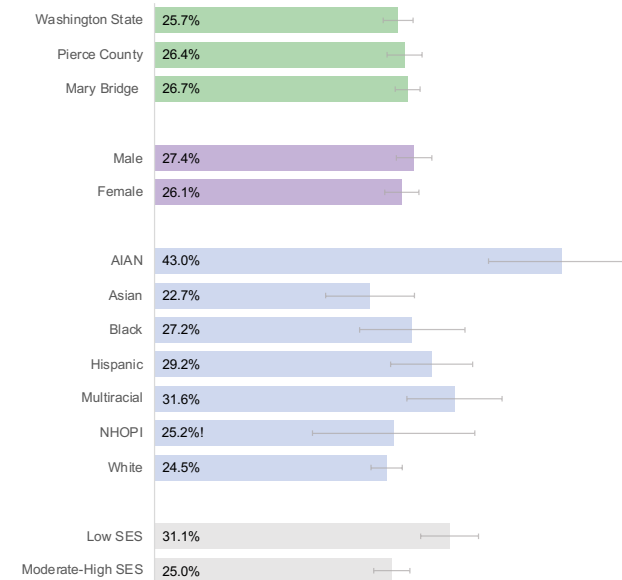
Exposure to violence or domestic abuse can negatively affect a child’s development. Children exposed to violence are more likely to miss school, carry a weapon, develop mental health problems, or use substances. These habits can carry into adulthood. The percentage of youth exposed to physical violence comes from the Healthy Youth Survey.

The percentage of youth in this service area who experienced physical violence or domestic abuse was not significantly different from the county or the state. No differences were seen by gender.

American Indian or Alaskan Native youth were significantly more likely to experience physical violence or domestic abuse than other races (except for multiracial youth). Additionally, the percentage of American Indian or Alaskan Native youth who witnessed physical violence doubled from 2011-2015 (21.6% to 43.0%).

Lower socioeconomic youth were significantly more likely to experience violence or physical abuse than youth with moderate or high socioeconomic status.

## Witnessed Physical Violence – Youth (%) Mary Bridge Service Area, 2018



Percentages may differ from previous versions of this report due to different questions being asked and analyzed.

(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Mother’s Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was defined as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)

# Injury and Violence Prevention

Continued

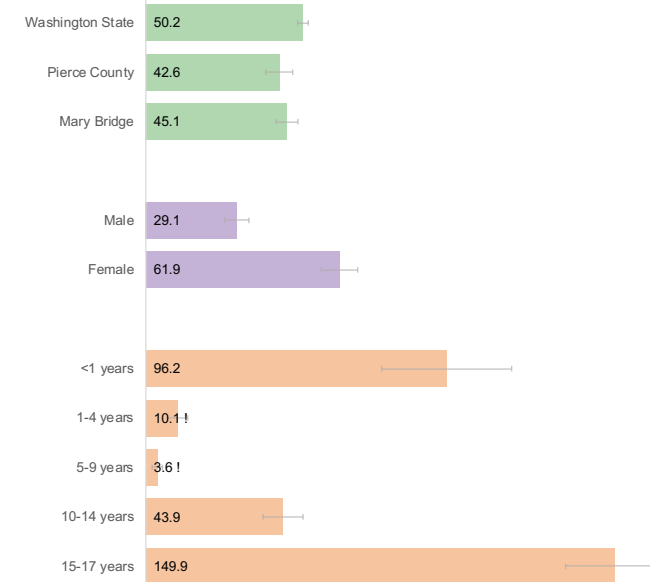
Additional data obtained from RHINO suggests that the rate of self-harm emergency department/urgent care visits increased by 30% from April to July of 2020, compared to a similar timeframe in 2019 (with some of the most significant increases being seen among individuals aged 5-17). As life returns to normalcy, it is unclear whether this trend will continue.

## Hospitalizations – Intentional Injury/Violence

Intentional injuries are primarily self-inflicted or assault but can fall into an “Other” category. Therefore, hospitalization rates due to intentional injuries are generated using the same three categories.

The rate of hospitalizations due to intentional injury in this service area was not significantly different from the state or county. However, girls were significantly more likely to be hospitalized due to intentional injuries than boys. In addition, intentional injuries were significantly more likely among newborns (<1 year) and older teenagers (15-17 years) compared to other age groups.

## Hospitalizations (intentional injury) Mary Bridge Service Area, 2016-2019



Rates are age-specific.

(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Source: WA Hospital Discharge Data, Comprehensive Hospitalization Abstract Reporting System (CHARS) 1987-2015. Washington State Department of Health, Center for Health Statistics, Community Health Assessment Tool (CHAT), August 2021.

# Injury and Violence Prevention

Continued

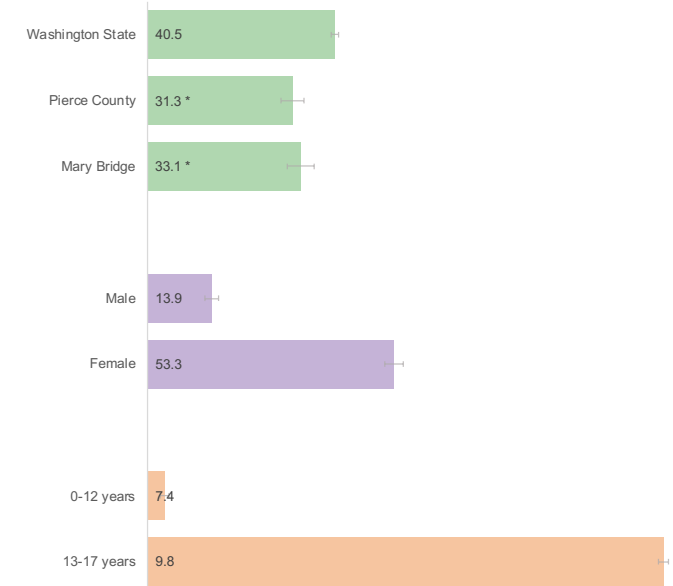
## Hospitalizations (attempted suicide)

The attempted suicide hospitalization rate is reported as the rate per 100,000 people. It uses specific diagnosis codes set by the International Classification of Diseases, 10th Revision to capture the number of attempted suicide hospitalizations.

The attempted suicide hospitalization rate was significantly lower in this service area compared to the state. It was higher than the county rate, but the difference was not significantly meaningful. Girls were significantly more likely to be hospitalized for suicide attempts compared to boys. Teenagers were significantly more likely to be hospitalized for attempted suicide than younger children.

## Hospitalizations (attempted suicides)

Mary Bridge Service Area, 2016-2019



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Source: WA Hospital Discharge Data, Comprehensive Hospitalization Abstract Reporting System (CHARS) 1987-2019. Washington State Department of Health, Center for Health Statistics, Community Health Assessment Tool (CHAT), August 2021



# Injury and Violence Prevention

Continued

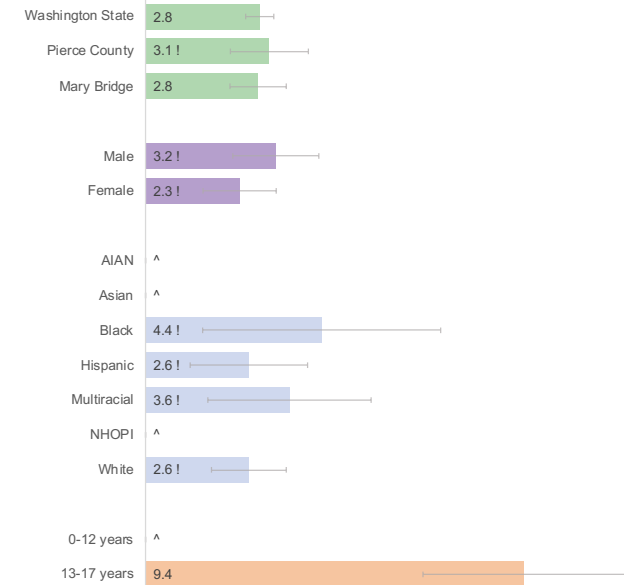
## Suicide

Suicide is one of the leading causes of death. The rate of suicide is the number of deaths due to intentional self-harm per 100,000 people.

Suicide rates for this service area were not significantly different from the state or the county. Boys were more likely to commit suicide compared to girls. Racial/ethnic data for suicides are limited, often leading to large relative standard errors (and unstable rates). Black youth had the highest suicide rates, and white/Hispanic youth had the lowest. None of the differences between rates were statistically meaningful.

Teenagers were significantly more likely to commit suicide compared to younger children.

## Suicides per 100,000 people Mary Bridge Service Area, 2015-2019



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Source: Washington State Department of Health, Center for Health Statistics (CHS), 1990–2019, Community Health Assessment Tool (CHAT), January 2021.

# Injury and Violence Prevention

Continued

## **ASSETS & RESOURCES – CHILD SAFETY**

[Mary Bridge Center for Childhood Safety's](#) mission is to prevent unintentional childhood injury through health education, community partnerships and best practice interventions.

[Help Me Grow](#) is a connection point to find information and resources for families. For the most up-to-date information on resources and support in Pierce County for pregnancy and parenting children ages 0-5, call 2-1-1 and ask for Help Me Grow. Family Resource Navigators can tell you what support is available in your area!

[THINKFIRST](#) is a national injury prevention foundation, including concussions and falls.

[Harborview Injury Prevention and Research Center](#) is an international leader in injury-prevention research that focuses on reducing the personal impact of trauma and broadening the effectiveness of injury-prevention programs.

[Safe Streets Neighborhood Mobilization Programs](#) support safety and violence prevention across Pierce County.

[Crime Prevention Through Environmental Design \(CPTED\)](#) is violence prevention through the lens of more livable neighborhoods.

[Child Abuse Intervention Department | Mary Bridge Children's](#) Mary Bridge's Child Abuse Intervention Department (CAID) supports families when child abuse is suspected or discovered. We also offer community programs to strengthen families and empower people to prevent abuse. Learn more about our programs— all free of charge.

[Children's Advocacy Center – CAID | Mary Bridge Children's](#) When child abuse is disclosed, you may wonder where to turn, how the legal process works and how your family will be supported during an investigation. The Children's Advocacy Center of Pierce County provides a child-focused, safe place for families to get help.

[How to Report Child Abuse or Neglect | Washington State Department of Children, Youth, and Families](#) Child Protective Services is responsible for receiving and investigating reports of suspected child abuse and neglect.

# Behavioral Health



Mental health is essential to a person's well-being and ability to live a full and productive life. Unfortunately, individuals of all ages, including children and adolescents, with untreated mental health disorders are at an elevated risk for many unhealthy and unsafe behaviors and co-occurring disorders, including substance abuse and dependency.

1 in 5 (20%) Americans nationally will experience mental illness in a typical year.<sup>14,15</sup> According to National Alliance on Mental Illness, American Indian/Alaska Natives and multiracial U.S. adults experience more mental illness (18.7% and 31.7%, respectively) despite making up less percent of the U.S. population. In addition, U.S. adults identifying as lesbian, gay or bisexual are also experiencing more mental illness compared to other U.S. adult populations (44.1%).<sup>16</sup>

Mental health indicators (depression and anxiety) are reported from surveys taken before the 2019 coronavirus pandemic (Healthy Youth Survey). The section following these results (COVID-19 and Behavioral Health) outlines how COVID-19 has affected some of these indicators.

## MENTAL HEALTH

The level of psychological well-being or an absence of mental illness, or mental health, affects how we think, feel and act. And depression is an example of how mental health presents itself in our communities.

**Depression** – Depression among youth is measured through the Healthy Youth Survey. It is based on a previous diagnosis of depression by a health care professional.

**Anxiety** – Anxiety/nervousness/being on edge is measured through the Healthy Youth Survey. It is based on a self-report of youth who felt bothered by being nervous/anxious or on edge more than half the time in the previous two weeks.

<sup>14</sup> Nami.org. 2021. *Mental Health By the Numbers* | NAMI: National Alliance on Mental Illness. [online] Available at: <https://www.nami.org/mhstats> [Accessed September 8, 2021].

<sup>15</sup> Adults with any mental illness were defined as having any mental, behavior, or emotional disorder in the past year that met DSM-IV criteria (excluding developmental disorders and substance use disorders). Adults with any mental illness were defined as having serious mental illness if they had any mental behavioral or emotional disorder that substantially interfered with or limited one or more major life activities

<sup>16</sup> Nami.org. 2021. *Mental Health By the Numbers* | NAMI: National Alliance on Mental Illness. [online] Available at: <https://www.nami.org/mhstats> [Accessed September 8, 2021].

# Behavioral Health

Continued

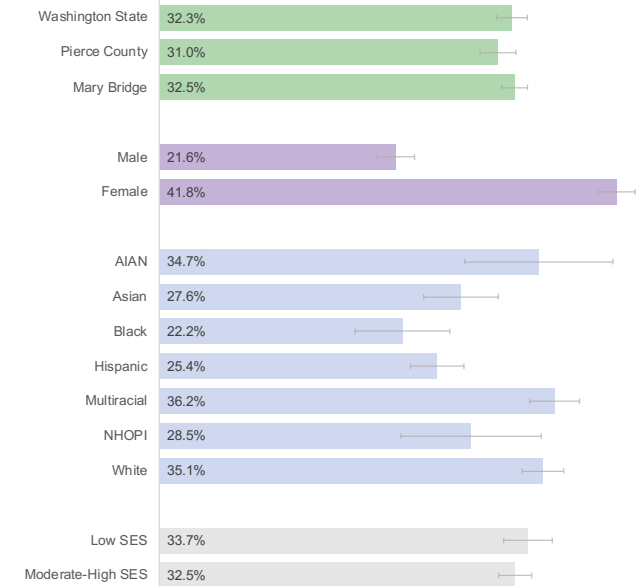
## Anxiety - Youth

Youth are considered anxious when they have reported feeling bothered by feeling nervous, on edge or anxious more than half of the time in the previous two weeks.

No significant differences were seen between youth in this service area and the state/county. Girls were significantly more likely to be nervous/anxious or be on edge compared to boys. Multiracial and white youth were significantly more likely to be nervous/anxious or be on edge compared to Black, Hispanic, and Asian youth. American Indian or Alaskan Native youth were significantly more likely to be nervous/anxious or be on edge compared to Black youth.

No significant differences were seen by socioeconomic status.

## Self-Reported Anxiety – Youth (%) Mary Bridge Service Area, 2018



(\*) value significantly different from WA state

Mother's Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was defined as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)

# Behavioral Health

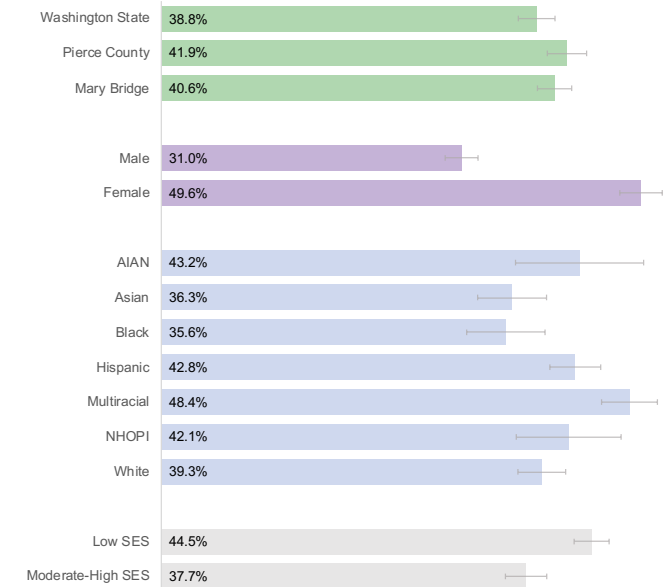
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## Depression Among Youth

Youth are considered depressed when they report feeling so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities in the past 12 months.

There were no significant differences between youth in this service area compared to the state or the county. Girls were significantly more likely to be depressed compared to boys. Youth who identified with multiple races were significantly more likely to be depressed than Asian, Black, Hispanic and white youth. Youth of lower socioeconomic status were significantly more likely to be depressed than those who had moderate to high SES.

## Self-Reported Depression– Youth (%) Mary Bridge Service Area, 2018



(\*) value significantly different from WA state

Race excluded due to sample size limitations

Source: 2018 Healthy Youth Survey (10th graders)

## SUBSTANCE ABUSE AND DEPENDENCY

The inappropriate use of mind-altering substances, legal and illegal, presents major challenges to a community. Substances of public health concern include, but are not limited to, alcohol, marijuana and opioids. Alcohol and marijuana use among youth or driving while under the influence of either are concerns of the public health system. Ensuring an adequate system to assist individuals dealing with substance abuse and dependency issues is key.

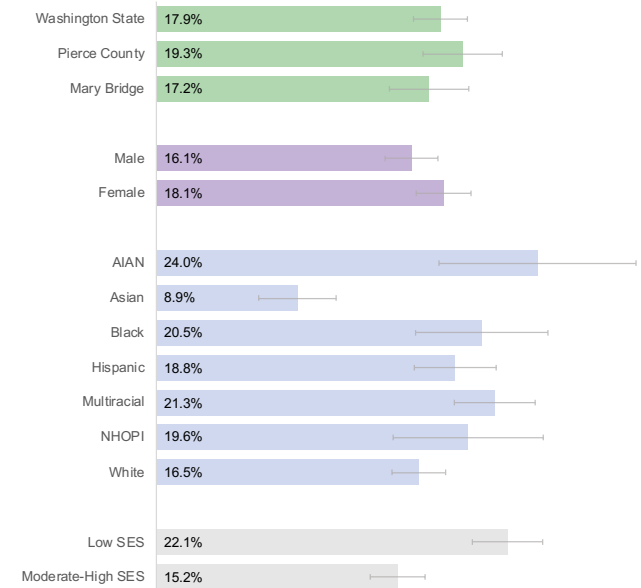
### Marijuana Use - Youth

In Washington State, marijuana use is legal for people 21 years and older. Marijuana use puts youth at greater risk for addiction and failing in school. Most teens who enter drug treatment programs report marijuana is the primary drug they use.

The percentage of youth in this service who reported using marijuana was not significantly different from the state or the county. Girls were more likely to use marijuana than boys, but the difference was not significantly meaningful. Asian youth in this service area were significantly less likely to use marijuana than other race and ethnicity groups.

Youth who reported being of lower socioeconomic status were significantly more likely to use marijuana than those with a higher socioeconomic status.

### Marijuana Use Among Youth (%) Mary Bridge Service Area, 2018



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Mother's Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was defined as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)

# Behavioral Health

Continued

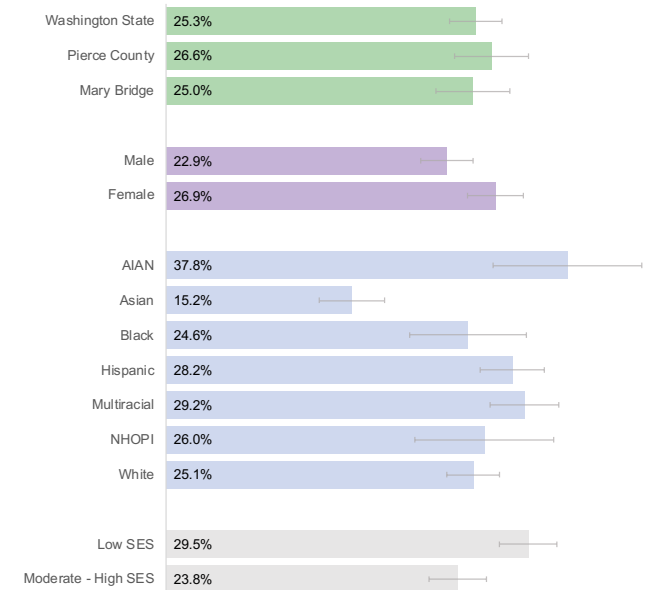
## Alcohol, Marijuana, Painkiller or Other Illicit Drug Use

As mentioned above, marijuana use puts youth at greater risk for addiction and failing in school. Similarly, alcohol can put youth at a greater risk. In addition, both can serve as a gateway mechanism for other illicit drug use.

The percentage of youth in this service area who used marijuana, painkillers, illicit drugs or consumed alcohol in the past 30 days was not significantly different from the state or the county. Girls were more likely to drink alcohol or use marijuana/illicit drugs/painkillers than boys, but the difference was not significantly meaningful. Asian youth in this service area were significantly less likely to consume alcohol or use marijuana/painkiller/illicit drug use in the past 30 days than other races and ethnicities.

Youth who reported a lower socioeconomic status were significantly more likely to consume alcohol or use marijuana/painkillers/other illicit drugs than those who reported a higher socioeconomic status.

## Alcohol, Marijuana, Painkiller or Other Illicit Drug Use– Past 30 days (%) Mary Bridge Service Area, 2018



(\*) value significantly different from WA state

(!) relative standard error greater than 30%

Mother's Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was defined as having a mother who had at least some college or technical training after high school.

Source: 2018 Healthy Youth Survey (10th graders)



# Behavioral Health

Continued

## 2020 and Behavioral Health

The years 2020 and 2021 held many short-term and long-term traumatic events that may exacerbate existing mental health issues (e.g., COVID-19 pandemic, political strife, natural disasters and cries for racial justice). By itself, the COVID-19 pandemic has exacerbated all the social, environmental, and economic inequities we already see, such as:

- Unemployment and housing instability.<sup>17</sup>
- Physical separation from loved ones and increased feelings of isolation and loneliness.
- Physical, emotional and economic stress.
- Grief and loss.
- Interpersonal violence and emotional separation.
- Pressures on parents and caregivers with young children and;
- A cascade of emotions as Washington state shifts back and forth through reopening.

Support systems meant to help individuals often brought more anxiety and/or frustrations through this time. For example, stimulus checks may have inadvertently fueled alcohol and substance misuse.<sup>18</sup>

In Pierce County, COVID-19 has disproportionately affected people of color. For example, case,

hospitalization and death rates are higher among Native Hawaiians and other Pacific Islander, Black and Hispanic residents compared to white residents.<sup>19</sup> These communities are also more likely to be affected by public health measures aimed at slowing the transmission of the disease. For example, making school online-only places an undue hardship on those who do not have internet access.

Besides COVID-19, local and national events have ignited calls for racial and social justice, which may impact mental health in Pierce County, especially within communities of color. Moreover, as individuals and communities experience and process the traumatic events of 2020 differently, most mental health effects are expected to become worse before improving.

The above stressors have impacted youth - disruption of social life, changing schedules, and potential family issues with finances/living arrangements. In addition, these stressors have the potential to drive some individuals to try cigarettes/tobacco or other substances that otherwise would not have tested them.

<sup>17</sup> *The Urban Wire*, 2020. How COVID-19 is Affecting Black and Latino Families' Employment and Financial Well-Being. [online]. Available at <https://www.urban.org/urban-wire/how-covid-19-affecting-black-and-latino-families-employment-and-financial-well-being>.

<sup>18</sup> Thedenchannel.com. 2021. [online]. Available at <https://www.thedenchannel.com/news/national/experts-fear-stimulus-checks-could-be-linked-to-more-drug-overdoses> [Accessed 1 June 2021].

<sup>19</sup> <https://www.tpchd.org/healthy-people/diseases/covid-19/pierce-county-cases>

# Behavioral Health

Continued

## **ASSETS & RESOURCES – BEHAVIORAL HEALTH**

The Gig Harbor & Key Peninsula Suicide Prevention Coalition includes educators, parents, mental health professionals, social service providers, first responders and youth to address the issue of youth suicide in our community.

The HI-FYVE Pierce County Family Youth System Partner Round Table (HI-FYVE FYSPRT) is committed to bringing the voices of the youth, families, and system partners of our communities to create an equitable forum that will help form policy at the local and regional level.

The Crisis Solutions Center offers a therapeutic option when police and medics are called to intervene in a behavioral healthcare crisis. The program minimizes inappropriate use of jails and hospitals and provides rapid stabilization, treatment and referrals for up to 46 individuals.

NAMI Pierce County serves individuals, families and communities in Pierce County struggling with mental health.

211 Pierce County has a dedicated mental health navigator.

Mental Health First Aid is an 8-hour course that gives people the skills to help someone developing a mental health problem or experiencing a mental health crisis.

Tacoma Pierce County Health Department Family Support Partnership - Family Support Centers offer many community-based services. They are a hub to help families find the resources to achieve their goals. Not all support centers have the same services. They are each designed to meet the needs of the community around them.

Greater Lakes Mental Healthcare provides a full range of mental health services.

Pierce County Alliance provides human services, specializing in substance abuse and mental health services for individuals, families and the community.

Comprehensive Life Resources provides behavioral health services, including outpatient and community support services to adults, children and families, homeless individuals, housing services, foster care and residential/inpatient services for children and adults.

Tacoma Area Coalition for Individuals with Disabilities (TACID) works with individuals to assess needs, including behavioral health needs. TACID supports and connects individuals with community resources, including behavioral health services.

# Behavioral Health

Continued

**The Pierce County Coalition for Developmental Disabilities** (PC2) is a parent-driven 501(c)3 organization responsible for providing clear, consistent information for families and individuals who experience developmental disabilities in Pierce County, Washington.

**Catholic Community Services** consists of 12 family centers across Western Washington providing various services, including counseling, case management, information and referral, chemical dependency services, mental health services and family support services to children, adults and families in need.

**Kids Mental Health Pierce County (KMHPC)** is a coalition of people and agencies in Pierce County that are joining together to address the growing behavioral health crisis among school age children and youth.

Pierce County government maintains **this comprehensive list of Community Resources**.



## QUANTITATIVE DATA SOURCES

The data sources included in the quantitative analysis range from those providing aggregate results for the populations of interest to those with raw data available for analysis where TPCHD generated estimates.

### American Community Survey (ACS)

This mailed survey is an annual supplement to the 10-year Census. The ACS location of residence is based on census tracts, which are converted to zip code tabulation area (ZCTA) for analysis.

### Comprehensive Hospitalization Abstract Reporting System (CHARS)

Hospital discharge data, including inpatient and observation patient hospital, stay records.

### Community Health Assessment Tool (CHAT)

This data source is a web application that allows authorized users to generate estimates for different geographies depending on the data source. This tool uses data from various sources to create estimates by zip code, county and state.

### Washington State Department of Social and Human Services (DSHS)

Foster care placement services, foster care support services and Child Protective Services aggregate estimates at the county-level and school district-level were available using the online reporting system available through DSHS.

### Healthy Youth Survey (HYS)

This school-based survey is administered in an even number of years statewide to grades 6, 8, 10 and 12 in public schools. This report highlights 10th-grade data. Socioeconomic status was Mothers Education was used as a proxy for SES. Low SES was defined as having a mother who had a high school diploma/GED or lower. High SES was defined as having a mother who had at least some college or technical training after high school.

### Office of Superintendent of Public Instruction (OSPI)

The Washington State Office of Superintendent of Public Instruction provides data on graduation and free or reduced-price meal data through the Comprehensive Education Data and Research System (CEDARS), an online system that captures student graduation,

transfers and drop-outs. The adjusted cohort method follows a single cohort of students for four years based on their first entered 9th grade. The cohort is adjusted by adding students who transfer into the school and subtracting students who move out of the school.

### **CDC Social Vulnerability Index**

The CDC originally developed this index to help emergency responders prioritize specific communities for hazard preparedness and response. It uses 15 census-tract level variables to rank each community into four major themes: socioeconomic status, household composition and disability, minority status and language and housing type and transportation. The scores are then grouped into one overall score. For this report, tracts are grouped into four categories: highly resilient, somewhat resilient, somewhat vulnerable, and highly vulnerable.

### **Birth Certificate Data**

The birth certificate system contains records on all births occurring in the state and nearly all births to state residents. In addition, information is gathered about the mother, father, pregnancy and child. The data is collected at hospitals and birth centers through forms completed by parents or medical staff, a review of medical charts, or both. Midwives and family members

who deliver the baby complete the birth certificate and collect the information from a parent or their records. Data are compiled by the Washington State Department of Health, Center for Health Statistics.

### **Washington State Cancer Registry (WSCR)**

The Washington State Cancer Registry (WSCR) monitors the incidence of cancer in the state to better understand, control and reduce the occurrence of cancer. In 1995, WSCR received funding through the Centers for Disease Control and Prevention's National Program of Central Cancer Registries. This program is designed to standardize data collection and provide information for cancer prevention and control programs. Estimates based on this data were obtained through the Washington State Department of Health's Community Health Assessment Tool (CHAT).

### **Washington State Immunization Information System (WSIIS)**

The Washington State Immunization Information System (WSIIS) is a lifetime registry that keeps track of immunization records for people of all ages. Estimates for each hospital service were acquired from WSIIS. Immunization reports included data on 19-35-month-olds.

### Washington Tracking Network (WTN)

The Washington Tracking Network is a collection of environmental public health data. Estimates available through this resource are collected from various data sources and serve as a single location to see multiple measures affecting environmental public health.

### Quantitative Methods

Estimates are generated for Washington, Pierce County and the service area. In most cases, we use SAS 9.4 software to analyze data. In some cases, estimates are provided from an external source. Estimates for sub-populations are also generated, and maps are displayed when possible and appropriate. The following definitions help understand the contents of this report:

**Rates:** A rate is a standardized proportion (or ratio) expressed as the number of events (e.g., live births per year) that have occurred for a standard population within a defined period (usually one year). Rates help compare disease risk between groups while controlling for differences in population size. The size of the standard population used can vary depending on whether the events are common or rare. For example, since HIV is a rare condition in Washington, HIV incidence rates are expressed as new cases per 100,000.

**Crude rates** are rates calculated for a total population, while **age-specific rates** are calculated for specific age groups.

**Age-Adjustment:** This report's age-adjusted mortality and disease rates are adjusted to the 2000 U.S. population. The risk of death and disease is affected primarily by age. As the population ages, its collective risk of death and disease increases. As a result, a population with a higher proportion of older residents will have higher crude death and disease rates. To control for differences in the age compositions of the communities being compared, death and certain specific disease rates are age-adjusted—this aids in making comparisons across populations.

**Averages:** Multiple-year average estimates were used to increase sample sizes and minimize widely fluctuating frequencies from year to year.

**Confidence Intervals (CI):** County comparisons to Washington state and comparisons among subpopulations were calculated using 95% confidence intervals. Confidence intervals (error bars on the graphs) indicate the margin of error for the value estimated by describing an upper and lower limit of an estimate. Using confidence intervals is an approach to determine if differences among groups are statistically significant. If the confidence interval of two different estimates does not overlap, we can often conclude that the difference is statistically significant and not due to chance.

**Standard Error (SE):** Standard errors are used to determine significance between groups in the analysis. Unless noted, these are based on 95% confidence intervals or alpha of 0.05. The relative standard error (RSE) determines what statistics are reported. If the RSE is greater than 30% and/or the sample size is too limited to have confidence in these estimates, then they are excluded. If the RSE is greater than 30%, but the estimates may still be reliable, then they are presented but with a “!” to draw attention to this concern.

**Stratification:** Where possible (i.e., the population size or counts were adequate to determine significance and protect anonymity), we analyzed the indicators by race/ethnicity or gender. We used the following terms to describe race/ethnicity:

- NH: Non-Hispanic
- White-NH: Non-Hispanic White
- Black-NH: Non-Hispanic Black
- Hispanic: Hispanic as a race
- Asian-NH: Non-Hispanic Asian
- AIAN-NH: Non-Hispanic American Indian/Alaska Native
- NHPI-NH: Non-Hispanic Native Hawaiian or Pacific Islander
- Multiple: More than one race

For some indicators, these stratification levels may not have a sample size adequate to draw reliable conclusions about that population and are therefore excluded from this report. In addition, groups are typically not combined due to concerns about over-generalizations made based on those results.

### Selection of Priority Health Needs

Key findings were identified as priority health needs by a public health epidemiologist using three criteria. Gender and equity were more heavily weighted due to racism being a major driver for poor health outcomes.

1. Compared to Washington state, county numbers are statistically significantly worse (1 point).
2. The indicator is related to listed themes (domains) from community engagement activities. (1 point)
3. There is an appearance of inequity by gender or race (1 point for each, for a maximum of 2 points).

Due to different methodologies being used in this report compared to the previous version (2016), trends were not considered in the priority scoring analysis. In the 2016 Mary Bridge Community Health Needs Assessment, the population used in the rate analysis included all persons living in the hospital service area. This assessment only included persons less than 18 years to better represent the population Mary Bridge would treat.



# Supplement

## Continued

The sum of these criterion was calculated for each indicator. Indicators were ranked in descending order. From this list, the top four groups of indicators were identified as priorities.

With each priority, the top two indicators with the highest scores (and that had worsening trends) were identified as being sub-priorities.

The selection of priority health needs was limited by several factors. These include:

- Selection of indicators. The inclusion and exclusion of certain indicators may bias the results toward a specific priority.
- Relevance to themes (domains) from community engagement activities. Due to the nature of the interview questions, relevance to some indicators may not be adequately captured.
- Indicators may have more than one association (for example: obesity has a chronic disease component and a behavioral health component). Secondary, tertiary and quaternary associations were ignored.

As a result of these limitations, the identified priorities may not adequately represent the needs of the community.

**Table X.**  
**Mary Bridge CHNA Priorities, Indicators, and Related Scoring**

Note: our qualitative assessment resulted in 3 overarching domains: barriers to health care, insitutional and structural racism, and challenges meeting basic needs.

Priorities and Sub-priorities	Indicators	Scores*
<b>BEHAVIORAL HEALTH:</b>		
<b>anxiety and depression</b>	anxiety	3
	drug related deaths	3
	suicide	3
	attempted suicide	3
	depression	3
	marijuana use	3
	cigarette use	3
	e-cigarette use	3
	use of alcohol/marijuana/painkillers	3
	consumption of sugar-sweetened beverages	2
<b>CHRONIC DISEASE:</b>		
	disability	2
	leukemia	2
	brain and other nervous system cancer	2
	obesity	2
	asthma	2
	lymphomas	0
	bone cancer	0

Priorities and Sub-priorities	Indicators	Scores*
<b>ACCESS TO CARE:</b>		
<b>prenatal care</b>	prenatal care adaquacy	4
<b>routine dental check-ups</b>	routine dental care	3
	vaccination	2
	insurance coverage	1
<b>VIOLENCE:</b>		
<b>child abuse and neglect</b>	child abuse and neglect	4
	youth exposure to physical violence	3
	intentional injury hospitalization	3
<b>MATERNAL AND CHILD HEALTH:</b>		
<b>low birth weight</b>	low birth weight	3
<b>infant mortality</b>	infant mortality	3

\*scores represent the culmination of state/local disease burden, trends, association with qualitative domains, and association with health inequity

## Provider Survey

Every three years, Mary Bridge Children's conducts a Community Health Needs Assessment to understand the needs of the population served by the hospital and its providers, including community partners. The purpose of this survey is to hear from you, as providers.

The results of this survey will be used to inform Mary Bridge Children's priorities as well as programs and strategies that best fit local needs.

1. Please indicate the **primary population** you serve.

- Mary Bridge Children's patients.
- Tacoma Public Schools students.
- Franklin Pierce School District students.

2. What are the **3 biggest ongoing health concerns** for the population you serve?  
**Please choose ONLY 3 responses.**

- |   |  |
|---|--|
| <input type="checkbox"/> Access to birth control      | <input type="checkbox"/> Behavioral health, including depression & anxiety |
| <input type="checkbox"/> Access to immunizations      | <input type="checkbox"/> Obesity prevention                                |
| <input type="checkbox"/> Access to primary healthcare | <input type="checkbox"/> Oral healthcare                                   |
| <input type="checkbox"/> Access to specialty care     | <input type="checkbox"/> Smoking/tobacco use                               |
| <input type="checkbox"/> Asthma/breathing problems    | <input type="checkbox"/> Substance use disorder                            |
| <input type="checkbox"/> Binge drinking               | <input type="checkbox"/> Suicide   |
| <input type="checkbox"/> Cancer                       | <input type="checkbox"/> Violence  |
| <input type="checkbox"/> Child health & wellness      | <input type="checkbox"/> Women's health                                    |
| <input type="checkbox"/> Diabetes                     | <input type="checkbox"/> Other <input type="text"/>                        |
| <input type="checkbox"/> Disability                   |  |
| <input type="checkbox"/> Healthy environment          |  |

# Appendices

## Continued

3. What **3 things** would be most helpful to improve the health concerns of the population you serve? **Please choose ONLY 3 responses.**

- Access to healthy food
- Access to primary care
- Affordable housing
- Breastfeeding support
- Caregiver support
- Childcare
- Domestic violence prevention
- Drug/alcohol services
- Employment opportunities
- Health insurance enrollment
- Home healthcare services
- Immigrant support services
- Behavioral health services
- Oral healthcare
- Physical activity
- Safe places to walk/play
- Smoking and tobacco cessation services
- Transportation
- Violence, bullying, gang prevention
- Other

# Appendices

## Continued

4. What are the **3 most significant barriers** impacting **YOUR ABILITY** to provide services to the population you serve? **Please choose ONLY 3 responses.**

- Cultural competency issues
- High no-show rate
- Inadequate insurance
- Lack of funding to provide services
- Need for bilingual staff
- Need for specialists
- Limited space and/or equipment
- Limited staff resources
- Patient cannot afford prescription medications
- Patient non-compliance
- Staff time constraints
- Other

5. For the population you serve, what are the top **3 barriers** impacting **YOUR CLIENTS'** ability to access your services? **Please choose ONLY 3 responses.**

- There are no issues
- Cannot afford services
- Co-pay/deductible too high
- Cultural/religious beliefs
- Don't know how to access services
- Don't like/afraid to go
- Don't understand need to see a provider
- Inconvenient hours