



## INTRODUCTION

The 2023 Kitsap Public Health District Community Health Assessment (CHA) highlights the current demographics, socioeconomics, and health status of residents; the factors that contribute to less-than-optimal health outcomes; and resources in a community to improve health. The CHA can be used as the foundation for community and organizational priority setting, planning, program development, policy changes, coordination of community resources, funding applications, and development of new ways to collaboratively use community assets to improve the health of the population.

The CHA is the basis for developing a community health improvement plan (CHIP). Informed by the Mobilizing for Action through Planning and Partnership (MAPP) framework, developed by the National Association of County and City Health Officials (NACCHO), the 2023 CHA includes three main assessments:

<b>Community Voice Assessment</b>	<ul style="list-style-type: none"><li>• 16 key informant interviews</li><li>• 10 focus group discussions</li><li>• 2 community surveys</li></ul>
<b>Community Surveys</b>	<ul style="list-style-type: none"><li>• Kitsap Community Resources 2022 Community Survey</li><li>• Kitsap Public Health District 2021 Community Survey</li><li>• 2021 Kitsap County Community Health and Wellbeing Survey</li><li>• 2020 Kitsap County Community Health and Wellbeing Survey</li></ul>
<b>Community Status Assessment</b>	<ul style="list-style-type: none"><li>• Analysis of 126 health indicators</li></ul>

The CHA also includes “Community Assets”— lists of organizations and initiatives whose work intersects with topics covered by the CHA. The Kitsap Community Resources (KCR) 2022 Community Survey and Focus Group Discussions were conducted in partnership with local community organizations and led by KCR, a nonprofit social services agency.

## ASSESSMENT: COMMUNITY VOICE

Community voice is woven throughout this report to incorporate the experiences and input from Kitsap community members and organizational leaders. We used three methods to gather input from the community— focus group discussions, key informant interviews, and community surveys. The data collection and analysis methods for each are described in the following sections.

### 2022 Kitsap Community Resources (KCR) Focus Group Discussions

Ten focus group discussions were conducted in partnership with local community organizations and led by KCR. The purpose of the focus groups was to gather input directly from community members in small group settings throughout Kitsap County. These discussions were 60 to 90 minutes in length and conducted in person or via Zoom. Please refer to **Appendix A** for the questionnaire used in these focus group discussions.

The focus groups included people representing diverse races, ethnicities, ages, geographic regions, income levels, genders, and sexual orientations. Recruitment for focus groups occurred through KCR, KPHD, and partner organization outreach. All participants were compensated with a \$25 gift card. Participants for the focus group discussions added voices under-represented in previous community health assessments. In addition to focus groups where the general community was invited, focus groups were held specifically with members of the following communities:

- African American/Black community members
- Community social service providers
- Mam-speaking community members
- People experiencing homelessness
- Spanish-speaking community members
- Tribal community members

### 2022 Virginia Mason Franciscan Health (VMFH) Key Informant Interviews

Sixteen interviews were conducted with Kitsap County organizational leaders across five sectors (health systems, human services, education, business, and community, faith-based, and nonprofit organizations). The interviews were approximately 60 minutes in length and held either in person or via Zoom or Microsoft Teams. Please refer to **Appendix A** for the questionnaire used in these key informant interviews.

KPHD staff from the Community Health Division and Equity and Epidemiology programs developed a list of potential interviewees as part of their work on the Virginia Mason Franciscan Health St. Michael Medical Center Community Health Needs Assessment. Individuals were selected based on the following criteria:

- Organizational leaders who work on behalf of marginalized populations;
- Leaders who represent key sectors of business, nonprofit, education, health and human services, local government, and first responders;
- Organizational leaders who were available within the project timeline (October – December 2022)

## 2022 Focus Group Discussions and Key Informant Interviews Analytic Strategy

As focus group participants and key informant interviewees were asked similar questions (see **Appendix A**) on the health needs and concerns of the community, common themes were identified from the combined transcripts. The themes that were identified indicated that the health needs and concerns community members (focus group participants) were experiencing and perceiving were similar to what organizational leaders (key informant interviewees) were observing.

Data analysis of the transcripts and notes was performed by a KPHD epidemiologist using MaxQDA, a qualitative data analysis software, and Reflexive Thematic Analysis (TA), a qualitative data analytic framework that aims to generate themes from a dataset and involves a disciplined practice of critically interrogating how the data analyst impacts and influences the analysis.<sup>1</sup> The questions below were modeled from the Reflexive TA framework and used to review and refine initial themes into the final three core themes:

1. Is this a theme that represents a pattern across participants?
2. Does this theme tell us something about the needs of community members?
3. Does this theme include or exclude many coded segments?
4. Is there enough data to support that this is a strong theme?

## 2022 Kitsap Community Resources (KCR) Community Survey

Every three years, Kitsap Community Resources (KCR) conducts a comprehensive assessment to evaluate the needs and assets in our community. This year, KCR collaborated with organizations around Kitsap County to improve local data collection efforts and better understand our communities' greatest needs. The 2022 KCR Community Survey was conducted from June through October 2022 in SurveyMonkey and included 75 questions.

The survey was promoted through community organizations, including Kitsap Regional Library, and online social media platforms, such as Facebook and Twitter. A drawing for \$25 gift cards was offered as an incentive for survey participants. In all, 4,544 responses were collected, including responses in English, Spanish, Tagalog, and Kurdish, with a 77% completion rate.

Survey responses were cleaned, and free-text responses were organized into categories. During the cleaning process, exact duplicate survey responses were identified and evaluated. All responses that met the following criteria were excluded from the analysis (339 responses): more than 75% identical responses across the survey submitted within five minutes of their matching response, or participant did not live, work, or access services in Kitsap. A total of 4,205 responses were included in the analysis.<sup>2</sup> Participants were allowed to skip questions they did not want to answer. School district of residence was assigned to participants based on the reported ZIP code of residence. (See the data note below on Kitsap geography for more information about which ZIP codes were included in each school district.) Household income and race/ethnicity were self-reported by participants.

Selected survey participant demographics can be found in **Appendix B**. A public dashboard was created for service partners and community members to allow for detailed exploration of data as needed and identification of questions and responses important to individual organizations.<sup>3</sup>

## 2021 Kitsap County Community Health and Wellbeing Survey

In May 2021, the Kitsap Public Health District (KPHD) conducted the Community Health and Wellbeing Survey to better understand the feelings of Kitsap County residents about COVID-19, vaccination, and how they were coping during the

pandemic. Overall, there were 7,146 respondents, however 387 non-Kitsap residents were excluded. An additional 366 individuals who did not answer the question, “Have you received a COVID-19 vaccine, or do you plan to receive one?” were also excluded. This resulted in a total of 6,393 respondents. Selected survey participant demographics can be found in **Appendix C**.

The survey was conducted online via SurveyMonkey and advertised in emails sent via GovDelivery, KPHD, and the Kitsap County Emergency Operations Center. There were also posts on the health district’s social media pages (Facebook, Twitter, and Instagram) including a paid advertisement on Facebook. KPHD also added banners to our homepage and other COVID-19 topic pages on our website. Finally, several of our community partners shared the survey with their members which included a notice in the Kitsap Regional Library’s email newsletter. The full report of survey findings can be viewed [here](#).

### **2020 Kitsap County Community Health and Wellbeing Survey**

In April 2020, the Kitsap Public Health District (KPHD) conducted the Community Health and Wellbeing Survey to better understand Kitsap residents’ perceptions of COVID-19 illness during January through April 2020 and how residents were coping during the initial phase of the pandemic and stay-at-home order. Overall, there were 11,102 respondents who clicked on the survey. Selected survey participant demographics can be found in **Appendix D**.

The survey was designed by KPHD in cooperation with Kitsap County government and organizations throughout Kitsap County. It was conducted in Survey Monkey in English. All responses were anonymous and voluntary. The community was notified of the survey through e-mail bulletins to KPHD COVID-19 subscribers and Kitsap County subscribers, as well as posted on Facebook, Instagram, Twitter, Nextdoor, and the Kitsap Sun newspaper. The full report of survey findings can be viewed [here](#).

### **Assessment of E-cigarette, Cigarette, and Marijuana Use among Pregnant Women in Kitsap County, Washington, 2016**

Over a 5-week period in June and July of 2016, a total of 468 surveys were completed by pregnant women, which represented nearly a quarter of the annual civilian births in Kitsap County. The overarching goal of this survey was to understand local community trends of E-cigarette and recreational marijuana use during pregnancy to guide any necessary public health interventions. Selected survey participant demographics can be found in **Appendix E**.

Surveys were self-administered among a convenience sample of women presenting to their scheduled appointments at civilian prenatal care providers in Kitsap County. Clinic reception staff distributed paper surveys to patients upon check-in. Written instructions directed women to complete the survey only if currently pregnant, 18 years or older, and they had not already done so on a previous visit. After anonymously completing the surveys while in the clinic waiting rooms, patients deposited them in a box that KPHD staff picked up regularly. Survey data were entered into a database and analyzed by KPHD staff.

Healthcare providers working in these clinics were also electronically surveyed to assess their perceptions about the prevalence of smoking, E-cigarette, and recreational marijuana use among their patients, current regional practices for cessation counseling, and availability of educational resources. Eight of fourteen (57%) providers responded to the survey. The respondents included 75% physicians and 25% midwives. Most of these providers (63%) described their patients as being a mix of all income groups. All providers reported they routinely ask patients about whether they smoke cigarettes and use recreational marijuana, but only half indicated they ask about E-cigarette use.

## ASSESSMENT: COMMUNITY STATUS

Indicators provide information about a community, its health status, and emerging health issues, from a variety of local, state, and national data sources. Topics include demographics, socioeconomics, housing, healthcare access, wellbeing, and environmental health, among others. For a brief description of the data sources used in this report, please refer to **Appendix F**. Indicator estimates in this report were generated for Washington and Kitsap County. When estimates were not readily available directly from the data source, Excel, Stata, or R software were used to analyze data. Estimates for Kitsap resident subgroups were also generated when available and appropriate.

Key findings were identified within the qualitative and quantitative indicators and metrics in each chapter based on the following criteria:

- Kitsap was better or worse than the state and the difference was statistically significant.
- Kitsap has a statistically significant improving or worsening trend over time.
- Kitsap is not currently meeting a national goal from Healthy People 2030.
- The topic was identified in the thematic analysis of the key informant interviews and/or focus groups conducted with KCR in 2022.
- The topic was identified by more than half of survey participants in the 2022 KCR survey.
- There was a qualitative or quantitative concern found or expressed that was subjectively determined to be important by our epidemiologists.

Key disparities were identified in a similar manner:

- Subgroups had consistently better or worse outcomes than other groups and the differences were statistically significant.
- Data on inequities were available to be evaluated.
- The topic was identified in the thematic analysis of the focus groups conducted with KCR in 2022.
- There was a qualitative or quantitative concern found or expressed that was subjectively determined to be important by our epidemiologists.

### A note on the Environmental Health chapter

By leveraging a broad range of environmental health indicators used in publicly available, county-wide reports published in the last five years (2019-2023), this chapter highlights a selection of recent environmental health data gathered for Kitsap County. While this chapter is not intended to be a comprehensive assessment of environmental health in Kitsap, with this information we hope to better understand where we are starting from as we focus more on the impact of environmental health on our community moving forward. As this chapter draws from existing reports, data may not reflect our **current** environmental health landscape, and the time periods and data used to generate the information included will vary.

### A note on population estimates

Note that U.S. Census Bureau delays in processing data inputs from the 2020 Census have prevented the Washington Office of Financial Management's release of the 2020 Small Area Demographic Estimates (SADE). In response, a

statewide workgroup recommends adoption of population interim estimates (PIE)<sup>4</sup> that make use of available 2020 decennial data. These estimates are necessary for the calculation of disease, as well as risk and protective factor, rates which require population denominator data. PIE will be used until final population estimates are released from OFM, which is expected in 2024.

PIE were created by Public Health – Seattle & King County using a combination of the race/ethnicity and geography pattern from Census 2020 redistricting data and the age and sex pattern from Census 2010-based SADE from OFM. Once combined, the resulting estimates were calibrated to available Census 2020 based population estimates at the county level. Because we have applied PIE to historic data, some rates will be different from what we published in previous reports and dashboards posted to our website. Indicators that use PIE have been noted throughout this report.

### A note on hospitalization data

To handle a mid-year code conversion from International Classification of Disease (ICD) version 9 to version 10, 2015 hospitalization data is comprised of 2015 Washington hospitalization data for the first nine months and 2014 Washington hospitalization data for the last three months.

### Data terminology and notes

The following additional technical notes can help users understand the contents of this report:

- **Data availability:** Each indicator in the report is provided for the years and subgroups for which data is available. This means that some indicators will have data for 2022, while others may only have data through 2019. In addition, some indicators have data available for many subgroups (e.g., age groups), while others may have no data available for subgroups.
  - Indicators are displayed with all the available information that was selected as relevant at the time.
  - For some indicators, the subgroups, or stratification levels, may not have had a sample size adequate to draw reliable conclusions about that population and are therefore excluded from this report.
- **Data reliability and suppression:** Estimates based on too few respondents are considered unreliable and may constitute a breach of confidentiality in some circumstances. In this report data with a numerator between 0 and 10 or a relative standard error greater than 30% are not reported.
- **Relative standard error (RSE):** RSE is used to evaluate the reliability of the statistical estimate when there are a small number of events. When the RSE is large, the estimates are imprecise ( $RSE \geq 25\%$ ). Some estimates will be presented for multiple years rather than single years to reduce the RSE.
- **Counts and rates:** A count is an actual or estimated number of people or occurrences (e.g. 100 Poulsbo residents or 17 hospitalizations). Because population sizes vary across different groups or geographies, counts cannot be used to compare impacts in different communities. For instance, if 10 cases of a disease were reported in Bremerton and 10 cases of the same disease were reported in Seattle, the proportional impact would be much greater in Bremerton because Bremerton's population is much smaller than Seattle's. Instead of comparing counts, we calculate rates to allow for comparisons between different populations.
  - **Rate:** A standardized proportion (or ratio) expressed as the number of occurrences (e.g., live births per year) that have occurred with respect to a standard population, within a defined period (usually 1 year). Rates help compare differences in data between groups while controlling for differences in population

size. The size of the standard population used (i.e., per 100,000, per 1,000, etc.) can vary depending on whether the events are common or rare. A rate per 100,000 is calculated by dividing the number of occurrences by the population of the sample group, then multiplying by 100,000. For instance, in 2021 there were an estimated 219 dentists serving Kitsap County's population of 277,700 people —  $(219/277,700) \times 100,000 = 78.9$  dentists per 100,000 population.

- **Age-adjustment:** All age-adjusted rates in this report are adjusted to the 2000 U.S. population. Because risk of death and disease is affected primarily by age, we expect that as a 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 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 helps us make comparisons across populations.
- **Confidence intervals and statistical significance:** Most of the estimates provided in this report come with some intrinsic level of uncertainty due to the random nature of the data. Statistical uncertainty can be summarized by a 95% confidence interval.<sup>5</sup> Confidence intervals are one way to represent how “good” an estimate is, e.g., the larger a confidence interval for a particular estimate, the more caution is required when using the estimate. In this report, confidence intervals are also used to determine if there is a statistically significant difference between estimates.
  - **Statistical significance:** When the confidence intervals of two estimates of the same indicator from different groups do not overlap (for example, estimates for the state and Kitsap County), the difference between the estimates is considered statistically significant, and the estimates are likely different. However, if the confidence intervals do overlap then no statistically significant difference is detected.
  - **Subgroup comparison:** The comparison of subgroups, such as age groups, is completed by comparing the confidence intervals to the reference group identified in each subgroup. The reference group is selected based on the indicator and may be the highest or lowest estimate depending on context. For example, when comparing the percentage of Kitsap's population without health insurance, the reference group was selected based on the subgroup category with lowest percentage since the goal is that very few to no residents will be without health insurance.
- **Trends:** Statistical trends over time were calculated using the Joinpoint Regression Program version 5.0, 2023 — accessed at [surveillance.cancer.gov/joinpoint](https://surveillance.cancer.gov/joinpoint) — for indicators with data available for multiple and consecutive years.
  - **Trend line:** The trend line shows the indicator estimate for a series of years. Sometimes it may appear that there is a large amount of change, but if it is not consistent enough over time or if the numbers affected are too small, it will not be statistically significant and will, therefore, be labeled as no change. The lack of statistical significance should not be used to discount the amount of change, but instead to help distinguish change that is occurring consistently over time in populations large enough for stable results.
- **Kitsap geography:** For the purposes of data analysis at the sub-county geography level, Kitsap was divided into five geographic regions, which align roughly with school districts and are defined by the following characteristics and ZIP codes:

- Bainbridge Island: includes all residents of the island and ZIP codes 98110 and 98061.
- Bremerton: includes the southern half of east Bremerton, as well as the entirety of west Bremerton to include all of ZIP code 98312, as well as 98310, 98314, and 98337.
- Central Kitsap: includes Silverdale, Seabeck, and the top half of east Bremerton. It is defined by ZIP codes 98311, 98315, 98380, 98383 and 98393.
- North Kitsap: includes Poulsbo, Kingston, Hansville and the entire northern portion of Kitsap County. The Suquamish Tribe and the Port Gamble S'Klallam Tribe reside in portions of North Kitsap. It includes ZIP codes 98340, 98342, 98345, 98346, 98364, 98370, and 98392.
- South Kitsap: includes all the area south of, but not including ZIP code 98312. It is defined by ZIP codes 98322, 98353, 98359, 98366, 98367, 98378, 98384, and 98386.

For additional information about data analysis and reporting in Washington, please visit: <https://doh.wa.gov/data-and-statistical-reports/data-guidelines>

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## COMMUNITY ASSETS

Community assets are included at the end of chapters to help identify organizations within Kitsap working in the specified area and key partnerships for potential implementation changes.

The KPHD Equity Program led the development of the community assets listed at the end of each chapter. This list was created using the following process:

- Reviewing previous community assets listed in Virginia Mason Franciscan Health Community Health Needs Assessments and verifying all links and resources were up to date, making modifications as needed for wording or deleting assets no longer available.
  - Consulting with Equity Program staff to add assets based on community experiences, and verifying these assets to make sure the information is as accurate as possible.
  - Conducting a resource audit of the Kitsap Public Health District website for any additional assets.
  - Connecting with KPHD subject-matter experts to add assets, based on topic.
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## STRENGTHS & LIMITATIONS

This report presents an array of qualitative and quantitative data that enable a broad view of the health status of Kitsap County. For this report, we highlighted data from focus groups, interviews, surveys, and health indicators.

### Strengths

- **Community voice:** On-the-ground information is needed to help inform and tell the story of indicators through focus group discussions, key informant interviews, and survey participant responses.



- KCR approached their 2022 community survey development and focus group outreach by collaborating with multiple service organizations and more than 4,200 members of our community shared their perspective in the community survey; the largest response to any previous survey conducted by KCR.
  - A public dashboard of the survey results was created to make it easier for all service partners and community members to explore data in detail and allow identification of questions and responses important to individual organizations.
  - Focus groups were held with populations of interest that had not been heard from in previous community health assessments. The hope is that these results will serve as an educational piece for agencies throughout Kitsap County to better understand the challenging issues our community faces and ultimately aid in creating effective solutions.
- **Data completeness:** Many of the indicators in this report rely on data that is routinely collected, has the ability to be disaggregated, and is matured, i.e., all records have been transmitted, e.g., the Center for Health Statistics estimates death data to be 99% complete, providing an accurate count of almost all deaths in Kitsap County. Similarly, hospitalizations are estimated to be 98-100% complete. Having an accurate count of all deaths and hospitalizations in our area allows comparison from year to year, by cause, and by subgroup with very high confidence, even when numbers are small.

## Limitations

- **Disaggregated data limitations:** Disaggregated data, county level data broken down into sub-groups (age, race, ethnicity, geographic region, gender, and other groups), are not available for all the data indicators, which limits the ability to look at disparities and inequities within the community.
  - Disaggregated data may be limited by the size of the population, requiring the averaging of several years of data. This limits the ability of the report to represent the most current state of health.
  - For some indicators, these sub-groups may not have a sample size adequate to draw reliable conclusions about that population. If so, they are suppressed.
- **Limited data availability:** Data are not always collected on an annual basis, and even when they are, the most recent data may not yet be available, resulting in data that can be several years old. In addition, data delays and unavailability are seen due to the various consequences of the recent COVID-19 pandemic. Every effort was made to include the most recent data; however, the use of older data means that in some cases the data may not represent the current situation. Charts and indicators are labeled with the year of the data, so that the lag between data collection and this report can be taken into consideration.
- **Decreasing response rates:** U.S. national and state survey response rates after the onset of the COVID-19 pandemic decreased. For example, the household response rate to the US Census American Community Survey decreased from 86.0% in 2019 to 71.2% in 2020. Recent research indicates the greatest decreases in response rates occurred among persons with lower income and lower education.
- **Sampling error:** All survey and census estimates include some amount of error. Sampling error derives from the fact that the data are based on a sample of the population rather than the entire population and estimates generated from sample survey data have uncertainty associated with them. This uncertainty, referred to as sampling error, means that the estimates derived from a sample survey will likely differ from the values that

would have been obtained if the entire population had been included in the survey, as well as from values that would have been obtained had a different set of sample units (people responding) been selected. Sampling errors can be expressed quantitatively in various ways including confidence intervals.

- **Community survey limitations:** Survey data often have issues arising from how, where, and from whom the data were collected. The surveys included in this report employed a convenience sample of those willing to participate. In addition, monetary rewards for participation in the KCR community survey were provided. Because of this, findings cannot be assumed to represent (generalized to) the Kitsap County population or any subgroup of that population.
  - Additionally, differences in age, sex, and geographic region distribution between participants and the overall population in the KCR survey suggest the survey results may not represent the entire population of Kitsap, and subgroup analyses may not represent the entire subgroup. These findings should be used in combination with other data sources to start conversations about important next steps.
  - Some of the KCR community survey questions asked for household-level information, such as household income and use of certain services; however, because multiple individuals from the same household could submit surveys, results for these questions may be skewed. Additionally, because household members could not reliably be linked within the survey, this could not be adjusted for in the analysis.
- **Focus group discussion and key informant interview limitations:** Focus group and key informant interview results do not necessarily represent the community as a whole, and there are limitations to the strength of the conclusions. In addition, it was not possible to hear from every facet of our community. Future focus groups to discuss the health needs among additional communities are needed, including discussions among people with disabilities, people who are pregnant/postpartum, people with lived experiences of substance use disorder, parents of young children, youth, and people who are incarcerated, among others.
  - Additionally, while every effort was taken to use verbatim transcripts for the focus group analysis, researchers' notes taken during the focus group discussions were used for three of the ten focus groups due to technical issues with the recording device (focus groups with people experiencing homelessness and African American/Black community members) and unexpected translation funding and service availability issues (focus group with Mam-speaking community members). While the themes generated in this report incorporate the overarching experiences and perceptions shared by these participants, the analysis relied on researchers' observations and notes, and not participants' spoken words.

## APPENDIX

### A. 2022 Virginia Mason Franciscan Health Key Informant Interview (KII) and 2022 KCR Focus Group Discussion (FGD) questionnaires

Sixteen key informant interviews were conducted with community members who serve in leadership roles or who are subject matter experts in various aspects of community health. Key informant interviewees were asked nine questions:

1. The World Health Organization defines health as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.” Please describe your top 3 concerns regarding the health of communities you serve in Kitsap County. Please be specific about why you chose those 3 concerns.

*In the following questions, I will be asking you for additional information about your top concern out of the 3 you listed. If we have time, I will ask you about the other concerns, too.*

2. Who or what groups in the community are most affected by the concerns you listed (e.g., youth, older residents, racial/ethnic groups, LGBTQ+, homeless, specific Kitsap regions)?
3. What are the barriers and challenges to addressing these concerns?
4. What are some programs or projects in place or planned in Kitsap County that you think will have the most impact on these concerns?
5. How is/could our healthcare system (hospitals and healthcare providers) be involved in addressing the concerns you identified?
6. How is/could Kitsap Public Health District be involved in addressing the concern you identified?
7. What are some additional potential solutions that could help address the concern you described?

*For our next question, I will be asking you for feedback and recommendations for Virginia Mason Franciscan Health.*

8. Virginia Mason Franciscan Health is very interested in ways they can be more involved in our community here in Kitsap County. What recommendations do you have for ways they could be more involved?
9. Is there anything else you would like to share?

Ten community focus group discussions were conducted throughout Kitsap County. Focus group participants were asked up to seven questions:

1. When you consider the state of our community, in your opinion what are the top three needs you see for our community?
2. What do you believe are the top three challenges specifically facing low-income persons in this community?
3. Could you think of 1 to 3 actions that service providers such as KCR could take to address each of these challenges?
4. What can our local hospital, clinics, EMS providers, and other parts of our healthcare system do in the next 1-3 years to improve the health and quality of life of Kitsap County residents?
5. What resources are there in Kitsap County that help keep our residents healthy and safe?
6. What are the challenges to being healthy and safe in Kitsap County?

- Briefly share any other thoughts, suggestions, or ideas you may have on how to best address these challenging needs in our community.

### B. 2022 KCR Community Survey participant demographics

A total of 4,205 responses were included in the analysis. The majority of survey participants identified as female (68%), and most participants identified as White (81%). When compared to the total Kitsap population, survey response rates were higher among the 65+ age group (32% of participants, 21% of the total population) and among Bremerton residents (24% of participants, 18% of the total population).

	Characteristics	Survey Population, n (%)	Kitsap County, % of total population
<b>Age</b>	<i>Under 18</i>	9 (0%)	20%
	<i>18-24</i>	153 (4%)	9%
	<i>25-34</i>	565 (13%)	13%
	<i>35-44</i>	711 (17%)	12%
	<i>45-54</i>	561 (13%)	11%
	<i>55-64</i>	760 (18%)	14%
	<i>65+</i>	1,337 (32%)	21%
<b>Race/Ethnicity<sup>6</sup></b>	<i>Prefer not to answer</i>	109 (3%)	NA
	<i>African American/Black</i>	124 (3%)	3%
	<i>Asian/Asian American</i>	210 (5%)	5%
	<i>Hispanic/Latino/Latinx</i>	233 (6%)	9%
	<i>Native American/American Indian</i>	201 (5%)	1%
	<i>Native Hawaiian or Other Pacific Islander</i>	76 (2%)	1%
	<i>White</i>	3,405 (81%)	72%
	<i>Middle Eastern or North African</i>	35 (1%)	NA
	<i>Prefer not to answer</i>	371 (9%)	NA
	<i>Multiracial</i>	357 (9%)	8%
<b>School District of Residence</b>	<i>Single Race or Ethnicity</i>	3,477 (91%)	92%
	<i>Bainbridge Island</i>	446 (11%)	9%
	<i>Bremerton</i>	1,023 (24%)	18%
	<i>Central Kitsap</i>	691 (16%)	27%
	<i>North Kitsap</i>	1,017 (24%)	19%
	<i>South Kitsap</i>	893 (21%)	27%
	<i>Outside of Kitsap</i>	62 (1%)	NA
	<i>Prefer not to answer</i>	73 (2%)	NA

**Figure 1.** Selected demographic characteristics of survey participants (4,205 participants) as compared to Kitsap County’s population

**Data source:** 2022 Kitsap Community Resources Community Survey

**Note:** For additional demographic characteristics, please visit the community survey public dashboard at [ow.ly/tbvZ50Naanp](https://ow.ly/tbvZ50Naanp)

C. 2021 Kitsap County Community Health and Wellbeing Survey participant demographics

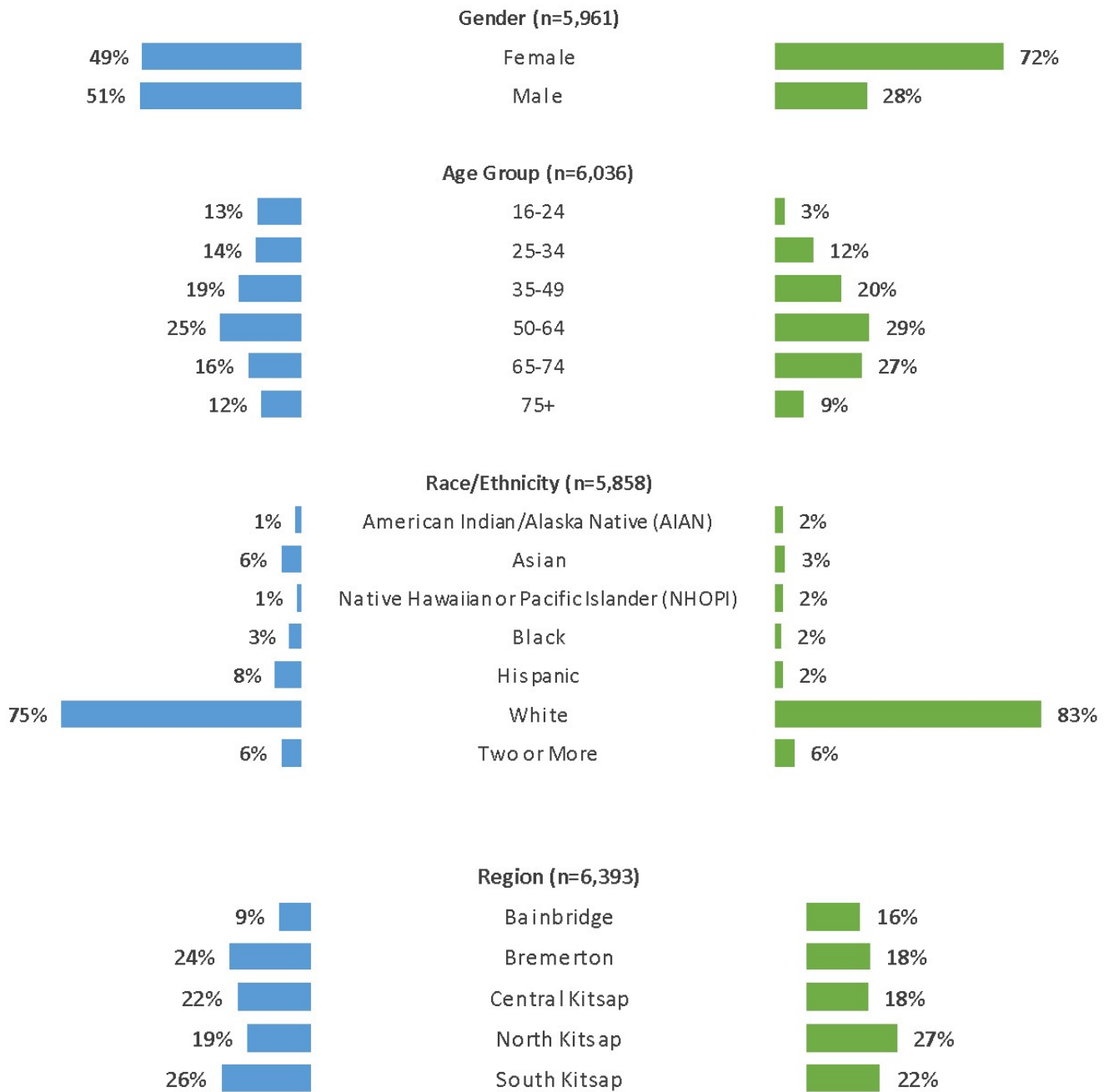


Figure 2. Survey demographics compared to Kitsap County's population

Data source: 2021 Kitsap County Community Health and Wellbeing Survey report

### D. 2020 Kitsap County Community Health and Wellbeing Survey participant demographics

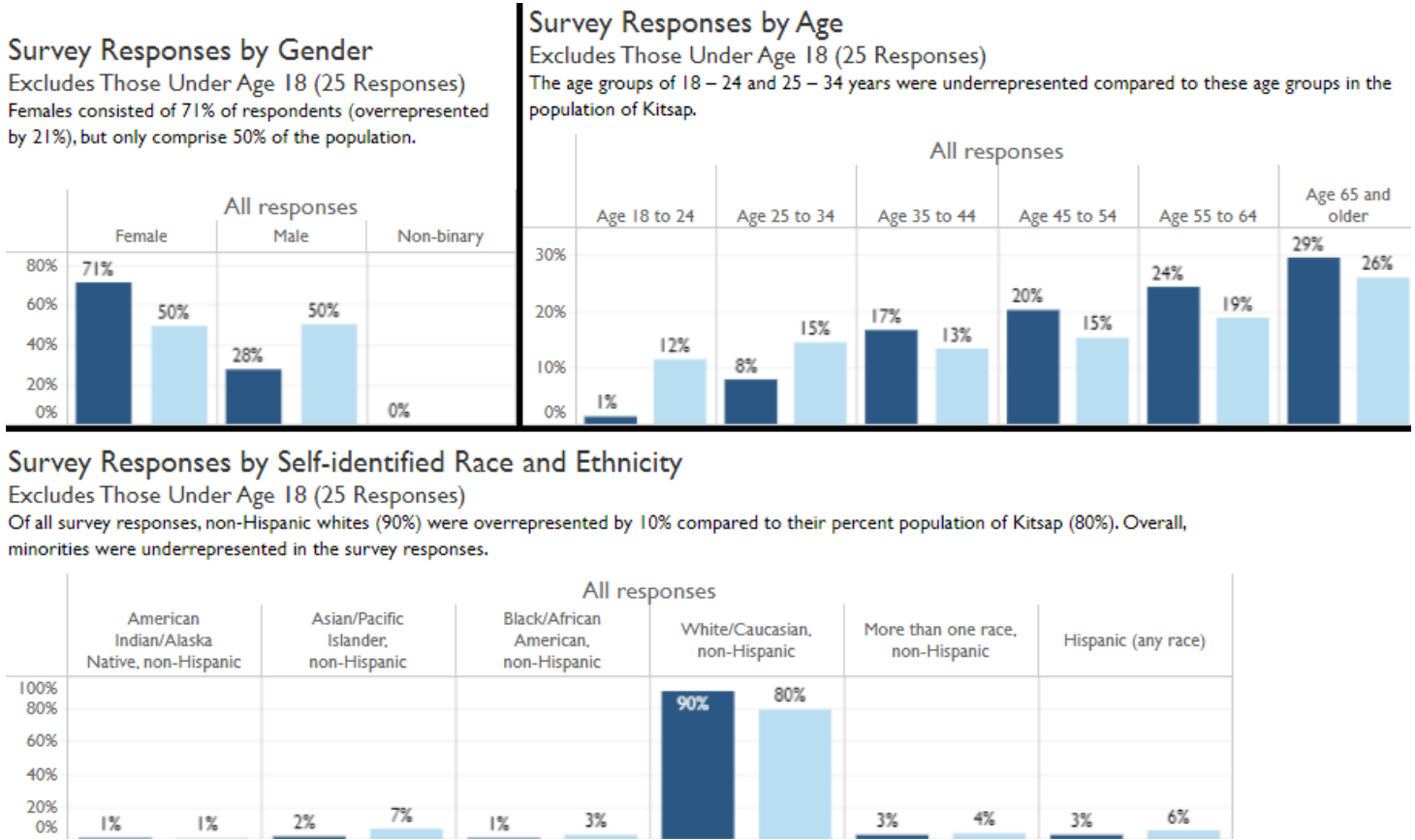


Figure 3: 2020 Kitsap County Community Health and Wellbeing Survey participant demographics

Data source: 2020 Kitsap County Community Health and Wellbeing Survey report

### E. Assessment of e-cigarette, cigarette, and marijuana use among pregnant women in Kitsap County, Washington Survey Demographics, 2016

Over a 5-week period in June and July of 2016, a total of 468 surveys were completed by pregnant women, which represents nearly a quarter of the annual civilian births in Kitsap County. The majority of survey respondents were Caucasian (78%); only 6% were Hispanic (Table 1). A little more than a third (37%) were 24-28 years old and 41% were covered by Medicaid. This demographic profile closely mirrors the typical annual county births profile. Half of the survey respondents were in their third trimester, 38% were in their second, and 12% were in their first.

<b>Race</b>	<b>#</b>	<b>%</b>
American Indian / Alaska Native	9	1.9%
Asian	19	4.1%
Black	5	1.1%
Hispanic (only)*	20	4.3%
Native Hawaiian or Other Pacific Islander	9	1.9%
White	364	77.8%
Other	4	0.9%
Multi-race*	34	7.3%
Unknown	4	0.9%
* Total Hispanic (single or multi-race)	28	6.0%
<b>Age Group</b>	<b>#</b>	<b>%</b>
18 - 23	86	18.4%
24 - 28	171	36.5%
29 - 33	133	28.4%
34 - 38	64	13.7%
39+	13	2.8%
not answered	1	0.2%
<b>Medical Insurance</b>	<b>#</b>	<b>%</b>
Private via Employer/Spouse	184	39.3%
Private via Health Exchange	20	4.3%
Medicaid	192	41.0%
Military	46	9.8%
Multiple	22	4.7%
None	4	0.9%

Figure 4: Demographics of patient survey respondents

Data source: Assessment of e-cigarette, cigarette, and marijuana use among pregnant women in Kitsap County, Washington Survey Demographics, 2016

## F. Quantitative data sources

- Behavioral Risk Factor Surveillance System (BRFSS):** This is the largest, continuously conducted, telephone health survey in the world. The survey collects information on a vast array of health conditions, health-related behaviors and risk and protective factors about individual adults. It enables the Centers for Disease Control and Prevention (CDC), state and local health departments, and other health agencies to monitor the health and health behaviors of adults to guide policy and programs. In 2011, a new data weighting approach and a new

method of reaching respondents (cell phones), was implemented, making data prior to 2011 unreliable for comparison to current data.

- **Child Care Aware (CCA) of Washington:** This data source provides the number of childcare provider slots in Washington state and by county including family childcare, childcare centers, and school-age facilities.
- **Centers for Disease Control and Prevention (CDC):** The CDC administers the National Health Interview Survey, which monitors the health of the nation with questions on a broad range of health topics asked through personal household interviews. Survey results provide information on health status, health care access and progress toward achieving national health objectives.
- **Centers for Disease Control and Prevention (CDC), National Syndromic Surveillance Program (NSSP):** The NSSP is a collaboration among CDC, federal partners, local and state health departments, and academic and private sector partners to collect, analyze, and share electronic patient encounter data received from emergency departments, urgent and ambulatory care centers, inpatient healthcare settings, and laboratories. States and communities use syndromic surveillance data to investigate and respond to potential health threats.
- **County Health Rankings & Roadmaps:** County Health Rankings & Roadmaps is a program of the University of Wisconsin Population Health Institute, with funding from the Robert Wood Johnson Foundation. The Rankings are compiled using county-level measures from a variety of national and state data sources and provide data, evidence, guidance, and examples to build awareness of the multiple factors that influence health and support leaders in growing community power to improve health equity. See the rankings at <https://www.countyhealthrankings.org/>
- **COVID After Action Report (AAR):** The Kitsap Public Health District (KPHD) Coronavirus-19 (COVID-19) Pandemic After Action Report (AAR)/Improvement Plan (IP) was developed to synthesize the initial response of KPHD, the Kitsap County Department of Emergency Management (KCDEM) and select partners to the global COVID-19 pandemic. This AAR/IP focuses on the initial response spanning from March 2020 through April 2023. An after-action review process was conducted to capture lessons learned and areas for improvement for future public health and emergency responses.
- **Feeding America, Map the Meal Gap:** Since 2011, Feeding America has produced estimates of local food insecurity and food costs to improve our understanding of people and places facing hunger and inform decisions that will help ensure equitable access to nutritious food for all. Their interactive map features annual food insecurity estimates from their Map the Meal Gap study for the overall population and children in every county, congressional district, and state, as well as for every service area within their nationwide network of food banks. More information can be found at <https://map.feedingamerica.org/>.
- **Health Care Authority (HCA):** HCA measures are calculated using ProviderOne Medicaid claims and enrollment data, also known as the Medicaid Management Information System (MMIS). The MMIS data includes all healthcare and encounters for Medicaid beneficiaries, enrollment periods, and demographic and address information. To represent the most complete dataset for the performance period, the state observes a six-month claims lag to account for data maturity and processing time.



- **HealthData.gov:** The website HealthData.gov is maintained by the U.S. Department of Health & Human Services and is dedicated to making high value health data more accessible to entrepreneurs, researchers, and policy makers in the hopes of better health outcomes for all.
  - **Health Resources and Services Administration (HRSA):** Health Professional Shortage Areas (HPSA) information was obtained through the HRSA Data Warehouse and Map Tool available online, including point data for HPSAs in mental, dental, and primary care.
  - **Healthy Youth Survey (HYS):** HYS is a collaborative effort of the Washington State Office of the Superintendent of Public Instruction, the Department of Health, the Department of Social and Health Services Division of Behavioral Health and Recovery, and the Liquor Control Board. This public school-based survey provides information about the self-reported health and health behaviors of youth in grades 6, 8, 10 and 12 in Washington to guide policy and programs that serve youth. This report highlights data from students in grades 8, 10, and 12. This data represents a simple random sample of responses for Washington State estimates and a census of responses (all responses) for the county estimates, as recommended by the Washington State Department of Health.
    - Student participation is voluntary and anonymous. In 2021, participation rates among public school students by grade level were as follows:
      - 73% of 8th-grade public school students in Kitsap participated in the survey.
      - 61% of 10th-grade public school students in Kitsap participated in the survey.
      - 43% of 12th-grade public school students in Kitsap participated in the survey.
    - For more information on student participation rates overall, and for participation by district, please visit: <https://public.tableau.com/app/profile/kitsap.public.health.district.assessment.and.epi.team/viz/StudentDepression/HYSDepression>
- Special considerations for HYS 2021:** Due to concerns about the impacts of survey administration changes in 2021 and COVID-19, use caution when analyzing changes from previous years. Several factors may or may not have had an impact on 2021 data: (1) The vast majority of students took the survey in-person at school, though a small number did take the survey remotely and the potential impact of having students complete the survey remotely is still being assessed; (2) Delaying the survey by a year also means a change in the cohort of students being surveyed.*
- **Kaiser Family Foundation (KFF):** KFF is an independent source for health policy research, polling, and journalism. They publish State Health Facts, more than 800 health indicators at the state level that can be downloaded. Find out more at <https://www.kff.org/statedata/>.
  - **Kitsap Interagency Coordinating Council (KICC) Head Start/ECEAP Partnership Report:** The purpose of this report is to provide a comprehensive description, in accordance with the Code of Federal Regulations, 45 CFR Chapter XIII, Section 1305.3, of community strengths and needs, providing current data that pertain to the needs, priorities, and lives of low-income families in our community. To review the full report, please visit: [https://kitsappublichealth.org/information/files/CommunityAssessmentKICC\\_Annual.pdf](https://kitsappublichealth.org/information/files/CommunityAssessmentKICC_Annual.pdf)

- **Office of Superintendent of Public Health (OSPI):** The Washington State OSPI provides data for enrollment, graduation and drop-out rates, academic achievement as measured by standardized statewide exams, students experiencing homelessness and the number of students eligible for free and reduced-priced meals (FRL). FRL data have some limitations: 1) eligible students might be underrepresented depending on the time of year that statistics are collected, e.g. students may not yet be signed up in October; 2) eligibility status might change during the school year resulting in an under or overestimate of program participants; 3) data do not include children who are not enrolled in school, are home-schooled, or attend private schools.
- **Puget Sound Clean Air Agency:** The Clean Air Agency provides air quality data for Kitsap, King, Pierce and Snohomish counties. They maintain one air quality monitor in Kitsap on Spruce Avenue in east Bremerton.
- **Rapid Health Information Network (RHINO):** A Washington State Department of Health program that collects real-time, population-based healthcare visit data from hospitals, emergency departments, and urgent care clinics across the state. It is used primarily to identify, investigate, and design data-driven, rapid responses to emerging public health threats. These data can provide insight into chronic disease burden, environmental threats, communicable disease outbreaks, and injury trends.
- **U.S. Census and American Community Survey (ACS):** The ACS is a mandatory, ongoing statistical survey by the US Census Bureau that samples a small percentage of the population every year to gather information about population characteristics, housing, and economics among other topics. This mailed survey is an annual supplement to the 10-year Census and an address can only be selected for the ACS once every 5 years.
  - Due to the impact of the COVID-19 pandemic, the Census Bureau changed the 2020 ACS release schedule. Instead of providing the standard 1-year data products, the Census Bureau released only experimental estimates from the 1-year data, which included a limited number of data tables for the nation, states and the District of Columbia, but did not provide data at the county level. Because of this, 2020 estimates are missing for Kitsap and sub-county populations. The 5-year estimates were not affected.
  - The ACS location of residence is based on census tracts, which are converted to ZIP Code Tabulation Areas (ZCTAs) for analysis.
- **U.S. Department of Labor, Local Area Unemployment Statistics (LAUS):** The Department of Labor, Bureau of Labor Statistics publishes databases, tables and calculators on inflation and pricing, employment and unemployment statistics and projections, pay and benefits and other occupational data, and spending and time use in the U.S.
- **Washington Association of Sheriffs & Police Chiefs:** The Washington Association of Sheriffs and Police Chiefs provides annual crime and jail statistics for Washington.
- **Washington State Department of Commerce, Point-in-Time Count:** The Homeless Housing and Assistance Act (ESSHB 2163-2005) requires each county to conduct an annual point-in-time count (PIT) of sheltered and unsheltered homeless people (RCW 43.185C.030) in accordance with the requirement of the United States Department of Housing and Urban Development (HUD). Data was made available for this assessment by Pierce County; however, data for zip codes outside Pierce County were not available. Estimates were generated using data with a geographic identifier (city or zip code).

- **Washington State Department of Health (DOH):** DOH maintains databases of vital records for births, deaths, stillbirths, fetal deaths, marriages, and divorces that took place in the state of Washington. The Department of Health also maintains information on hospitalizations, life expectancy, and cancer incidence and makes this data available through the Community Health Assessment Tool (CHAT), which is available to Local Health Jurisdictions, such as Kitsap Public Health District.
- **Washington State Department of Health, Community Health Assessment Tool (CHAT):** This data source is a web application that incorporates data from a variety of sources and quickly generates estimates for different geographies depending on the data source. Hospitalizations and death data are available through CHAT. For hospitalizations, data only include inpatient stays at state licensed acute care hospitals, and do not include military, DOD, VA, Indian Health Services, Rehabilitation or State Psychiatric Hospital stays.
- **Washington State Department of Health, Comprehensive Hospitalization Abstract Reporting System (CHARS):** Database that stores hospital discharge data, including records on inpatient and observation patient hospital stays.
- **Washington State Department of Health, Opioid and Drug Overdose Data Dashboard:** Public dashboard that provides data on deaths, hospitalizations, and EMS responses to incidents related to drug and opioid overdoses. The information can be accessed at <https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/opioids/overdose-dashboard>.
- **Washington State Department of Social and Health Services (DSHS):** DSHS's Facilities, Finance and Analytics Administration (FFA) provides leadership in financial, operational and risk management services. This administration produces a comprehensive time-series collection of county and school district-level data related to substance use and abuse, and the risk factors that predict substance use among youth, called the Risk and Protection Profiles for Substance Abuse Prevention for Washington State and its Communities.
- **Washington State Immunization Information System (WAIS):** This online immunization registry is maintained by the Washington State Department of Health Immunization Program. Data that can be accessed include numbers of children entering kindergarten, by county, with a complete, conditional, out of compliance (incomplete) immunization series, or exempt status. A new law took effect in July 2011 requiring a licensed health care provider to sign the Certificate of Exemption for a parent or guardian to exempt their child from school and childcare immunization requirements.
- **Washington State Office of Financial Management (OFM):** OFM provides population estimates by age, sex, race, and Hispanic origin, as well as estimates of population density and change. Note that the Washington State Department of Health recommends using the population interim estimates (PIE) developed by Public Health Seattle and King County (PHSKC) for calculation of disease, risk, and protective factor rates until the Office of Financial Management (OFM) can resume development of the Small Area Data Estimates in 2024. Health indicators in this report with subpopulation data use the PHSKC PIE estimate as denominators when not provided by the estimate data source.
  - OFM also provides the healthcare workforce supply reports referenced throughout this report. For more information on the methods used for these reports, please visit: <https://ofm.wa.gov/washington-data-research/health-care/health-care-workforce>. OFM's Statistical Analysis Center provides the Washington State County Criminal Justice Data Book, which is a clearinghouse for state data on crime and justice

topics, brought together from many different agencies and reporting systems. See <https://sac.ofm.wa.gov/data> for more information about these data sources.

- **Washington State Population Interim Estimates (PIE):** PIE were created by Public Health – Seattle & King County using a combination of the race/ethnicity and geography pattern from Census 2020 redistricting data and the age and sex pattern from Census 2010-based SADE from OFM. Once combined, the resulting estimates were calibrated to available Census 2020 based population estimates at the county level. For more information, see the PIE Summary of Workgroup findings at 1-PopulationInterimEstimatesGuidelines\_Final05082023.docx (live.com).
  - Washington State Department of Health recommends using PIE for calculation of disease, risk, and protective factor rates until the Office of Financial Management (OFM) can resume development of the Small Area Data Estimates in 2024. Health indicators in this report with subpopulation data use the PHSKC PIE estimate as denominators when not provided by the estimate data source.

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## ENDNOTES

<sup>1</sup> Braun, V., & Clarke, V. (2022). Thematic analysis: A practical guide. SAGE Publications.

<sup>2</sup> For a copy of the survey questions, or to review eliminated responses, please contact the Kitsap Public Health District Assessment and Epidemiology Program at [epi@kitsappublichealth.org](mailto:epi@kitsappublichealth.org)

<sup>3</sup> To explore the public dashboard, please visit: [ow.ly/tbvZ50Naanp](https://ow.ly/tbvZ50Naanp)

<sup>4</sup> Washington State Population Interim Estimates (PIE), December 2022

<sup>5</sup> For more information on confidence intervals, please visit: <https://www.census.gov/programs-surveys/saipe/guidance/confidence-intervals.html>

<sup>6</sup> Survey participants were counted toward each race/ethnicity category they selected on the survey. This means individuals can be in multiple categories, category counts will not add up to 100%, and survey population race/ethnicity categories are not directly comparable to Kitsap County race/ethnicity population estimates, where individuals who identify as multiple races are categorized as multiracial.