

Health Equity Narrative

Yamhill County Public Health



Written Spring/Summer 2023



**HEALTH AND
HUMAN SERVICES**

Glossary of Terms

Access: Ability to obtain wanted or needed services that is influenced by factors like travel, distance, waiting time, and financial resources; refers to how readily available a service is to community members.

Accessibility: Refers to capacity of agencies to provide services in ways that reflect and honor the social and cultural norms of the community; focuses on agency efforts to reduce barriers to service utilization.

Culturally responsive: Organizational and individual capacity to deliver public health policies, programs, products, and services to people within the context of their own cultural background.

Determinants of health: Social, economic, political, and environmental conditions in which people are born, grow, work, live, and age; these conditions impact quality of life and contribute to health inequities.

Disproportionality: Subgroups perform better or worse in health outcomes compared to that group's proportion of the total population; can manifest as an over-representation (greater relative to their share of population) or under-representation (lower relative to their share of the general population).

Equity: Resources are distributed based on the tailored needs of specific audiences; recognizes that some communities will need increased (or different) access compared to other communities.

Exclusion: Process of denying someone or members of a specific group full participation in social, economic, and political activities; multi-dimensional process driven by unequal power relationships across economic, political, social, and cultural dimensions; occurs interpersonally and institutionally.

Health: The dynamic state of complete physical, mental, spiritual, and social well-being and not merely the absence of disease or infirmity.

Health equity: Absence of unfair, avoidable, and remediable differences in health outcomes among priority populations; when all people can reach their full health potential and are not disadvantaged from attaining it because of their social, economic, political, or cultural status.

Health inequity: Systemic and avoidable health differences that negatively affect priority populations; these differences result from environmental, political, social, cultural, and economic conditions.

Health outcomes: Changes in health status due to a planned intervention or series of interventions.

Health status: The current state of a given population using a variety of indices like available health resources, affordable health providers, and disease and death rates.

Inclusion: Individuals are treated fairly and respectfully and have equitable access to opportunities and resources; systems share power and decision-making with historically-excluded individuals and/or groups in processes, activities, programs, and services; occurs interpersonally and institutionally.

Inequity: A difference in the distribution or allocation of resources between groups.

Intersectionality: Framework for understanding intersecting and overlapping systems of oppression experienced by priority populations; term was coined in 1989 by Dr. Kimberlé Crenshaw.

LGBTQIA+: An acronym for "lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, and a-romantic." The "+" recognizes sexual orientations and gender identities used by members of the queer/genderqueer community.

Priority populations: Subgroups of the general population that experience a disproportional burden of disease, injury, and/or death due to external determinants; these groups include but are not limited to People of Color, older adults, rural residents, trans folks, people with disabilities, and immigrants.

System: Organized collection of parts that are highly integrated to accomplish an overall goal; current U.S. systems produce racially inequitable outcomes because they have been designed to do so.

Trauma-informed care: Service provision that does not re/traumatize patients; core values are safety, trustworthiness, transparency, peer support, collaboration, empowerment, humility, and responsiveness.

Underserved: When someone does not have access to resources or affordable services; includes people who are unfamiliar with the health system, receive less healthcare services, face barriers to accessing primary care, and/or live in an area with a shortage of healthcare providers.

Background

Oregon Health Authority (OHA)'s priority is to eliminate health inequities in Oregon by 2030. Health inequities are avoidable differences in health outcomes. They do not happen because of medical conditions but rather from social, political, economic, and environmental factors. These inequities disproportionately affect priority populations who often are less likely to receive quality care and assistance. OHA works to ensure that **all** individuals have access to quality care and can reach their full potential without facing barriers or disadvantages.

The World Health Organization (WHO) defines determinants of health as the context of people's lives that affect health outcomes. Some examples of the determinants of health are housing quality, education level, employment status, family medical history, race, ethnicity, age, ability, disability, sexual orientation, gender identity, and zip code. The determinants of health were developed in the 1900s to better understand differences in health statuses across populations. The idea was to collect data and examine social, political, economic, and environmental factors that affect physical, mental, and social well-being. For example, there are references within WHO publications to "the notion of social poverty," which was described as a harmful mix of underemployment, poverty, limited access to worldly goods, social apathy, poor sanitation, malnutrition, low education levels, inferior housing conditions, and poor physical health. Most of these factors relate directly to determinants of health today.

This health equity narrative describes some health inequities affecting Yamhill County residents. This narrative analyzes houselessness, housing cost burden, built environment, income, poverty, unemployment, childcare, school poverty, disconnected youth, education rates, walkability, car access, food insecurity, natural environment, emergency preparedness, social and systemic exclusion, social and systemic inclusion, health insurance, and culturally responsive healthcare.

Limitations of Data Analysis

This narrative represents a baseline for health inequities in Yamhill County. It is important to note it is not comprehensive due to incomplete and nonspecific data. There are many lenses to examine health data. This analysis focuses on a race and ethnicity lens, and to some extent on other lenses like age and location within the county. Another issue is the limitation of applying the data.

This discussion relies on data that use broad race and ethnicity categories. These groups represent many countries, cultures, and languages which do not align with each other just because they fall under a general grouping like "Hispanic or Latinx." According to 2021 U.S. Census Bureau data, there are over 61 million Hispanic/Latinx people living in the U.S. However, only two countries and one territory are included in the U.S. Census Bureau's question about Hispanic origin—Cuba, Mexico, and Puerto Rico. That means there are no specific origin data for the 17 million Central American and South American residents living in the U.S. While many Hispanic/Latinx individuals share similar experiences, there are essential cultural, social, environmental, political, and economic differences within the Hispanic/Latinx community. By using the umbrella term "Hispanic or Latinx," it is harder to isolate the impact of these factors. This example shows how **umbrella terms reduce specificity of data and create a barrier to understanding health inequities within and across groups of people.**

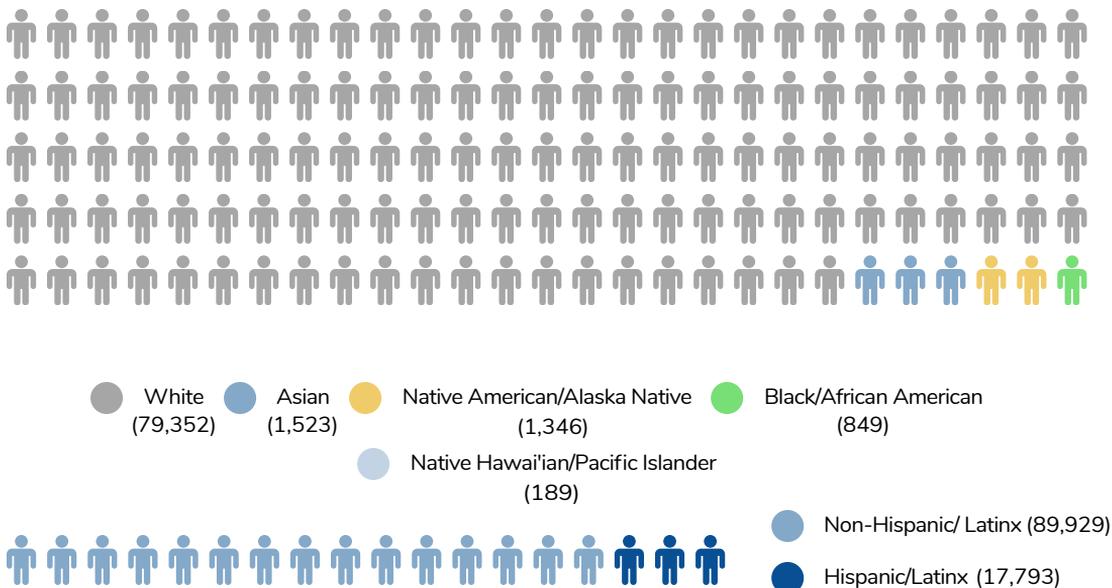
"Asian or Pacific Islander" is another umbrella term used by the U.S. Census Bureau when collecting and analyzing population data. It also publishes demographics broken down by nationality, highlighting the importance of providing specific information. In the U.S., there are over five million Chinese citizens; millions of Filipino, Indian, Japanese, Korean, and Vietnamese individuals; hundreds of thousands of Bangladeshi, Burmese, Cambodian, Chamorro, Guamanian, Hmong, Indonesian, Laotian, Native Hawai'iian, Nepalese, Pakistani, Samoan, Taiwanese, and Thai persons; and the smallest listed populations of less than 62,000 are Sri Lankans and Tongans. Since millions of Koreans and thousands of Tongans living in the States fall under the same race "category," data from both groups are examined

together as part of the Asian/Pacific Islander identity. Yet there are many historical, geographic, cultural, linguistic, economic, political, and societal **differences between these countries that affect health**.

Another issue is that these umbrella terms are not static. Surveys and researchers group priority populations differently making it hard to compare data—especially nonspecific data. Within this narrative a few sources use separate Asian and Pacific Islander categories, others combine the two, and most combine them with another identity (such as Native Hawaiians with Pacific Islanders). **Using umbrella terms like Asian/Pacific Islander or Hispanic/Latinx limits data comparison and applicability**—especially when studying specific communities and priority populations. This issue also affects other generalized identities like “Middle Eastern,” “Native American,” and “Black/African American.” While these broad terms make data collection simpler, data broken down by nationality provide essential context to address health inequities in culturally responsive ways. Since this narrative uses generalized identity data it is crucial to consider these limits on specificity and applicability.

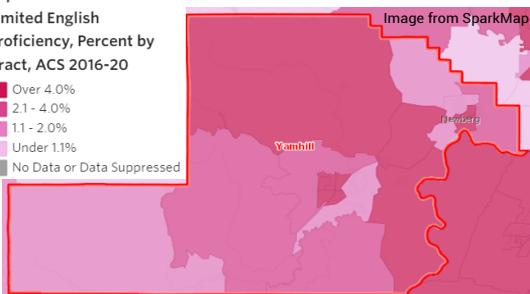
Yamhill County Priority Population Demographics

Priority populations experience marginalization and are underserved and underrepresented community members. By shifting away from describing people or communities as “marginalized,” the emphasis is now on centering these groups as **priorities** when creating health equity strategies. The following infographics show the county's race and ethnicity breakdown according to 2020 Census data.



Population with Limited English Proficiency, Percent by Tract, ACS 2016-20

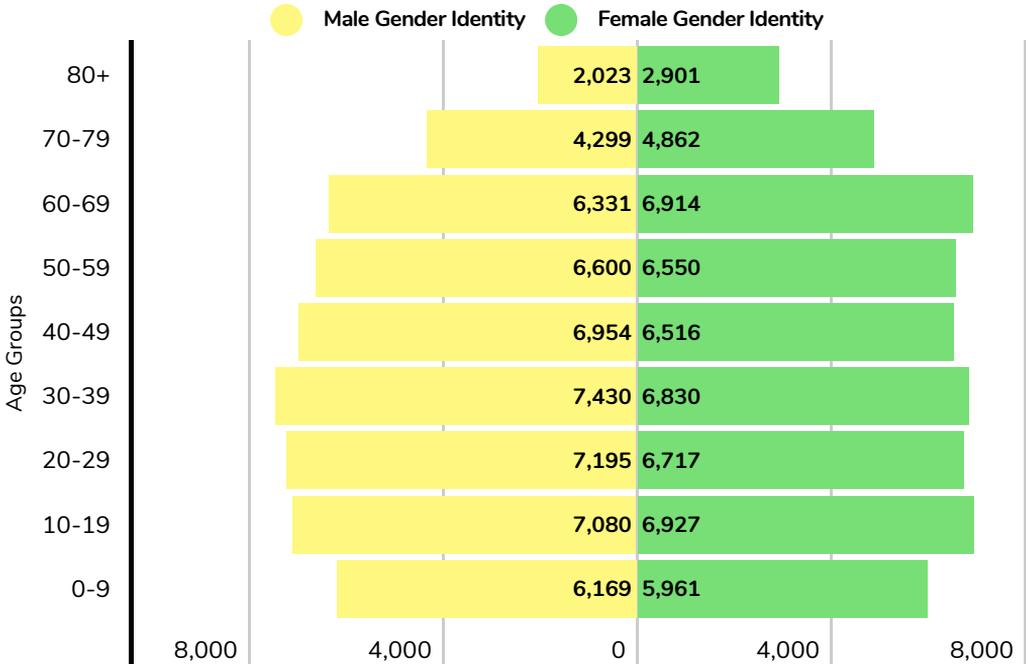
- Over 4.0%
- 2.1 - 4.0%
- 1.1 - 2.0%
- Under 1.1%
- No Data or Data Suppressed



Just under 8,600 residents in Yamhill County are born outside the U.S., or 8.1% of the county's population. 4.7% of Yamhill County residents are not U.S. citizens—or just over 5,000 people. Around 5,400 residents over the age of 5 have limited English proficiency (LEP). The map to the left shows that most residents with LEP live in downtown areas and in the northern part of the county while the rural areas around Grand Ronde and north of Newberg report less LEP.

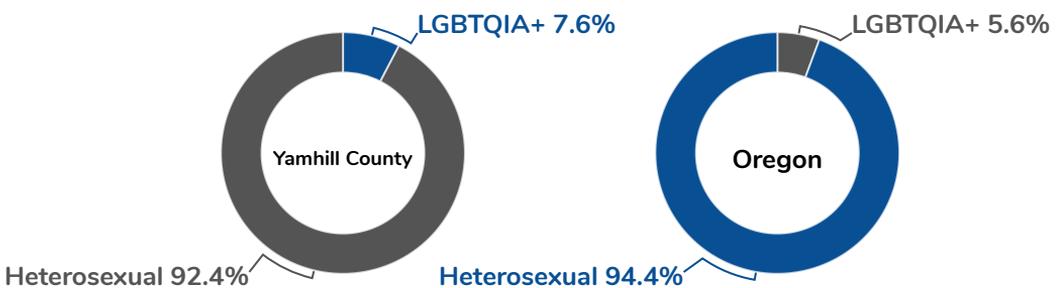
Census data from 2015-2019 estimate that the largest age group in Yamhill County is 10-19 year-olds with over 14,000 residents, followed by three groups—20-29, 30-39, and 50-59 year-olds. All three of these groups have over 13,000 residents. Three other age groups have a little over 12,000 folks per group: 10 and younger, 40-49, and 60-69 years old. The smallest age groups are 70-79 year-olds with over 7,000 people and 80 and older with over 3,000 residents. These same 2019 estimates show a split between male and female individuals, with 52,422 male and 52,409 female residents living in Yamhill County. From 2021 population estimates, there were 54,081 male and 54,177 female residents, suggesting this even split between these two genders will continue. The graph below shows the spread of age and gender identity across the county.

County Population by Age and Gender Identity



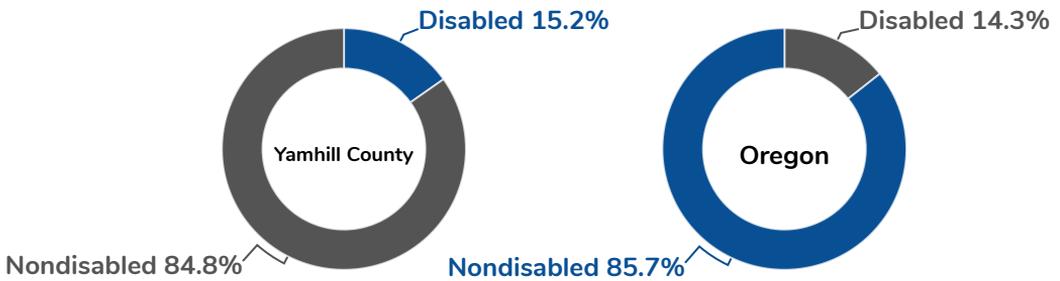
The U.S. Census Bureau and Yamhill Community Survey do not collect gender identity information outside of male or female, so estimates of nonbinary and genderqueer people rely on sexual orientation data and data nonspecific to the county. The graph below shows LGBTQIA+ data from two sources—local survey data from the Yamhill Community Survey and state data from the Williams Institute.

LGBTQIA+ Population Percentages by Location



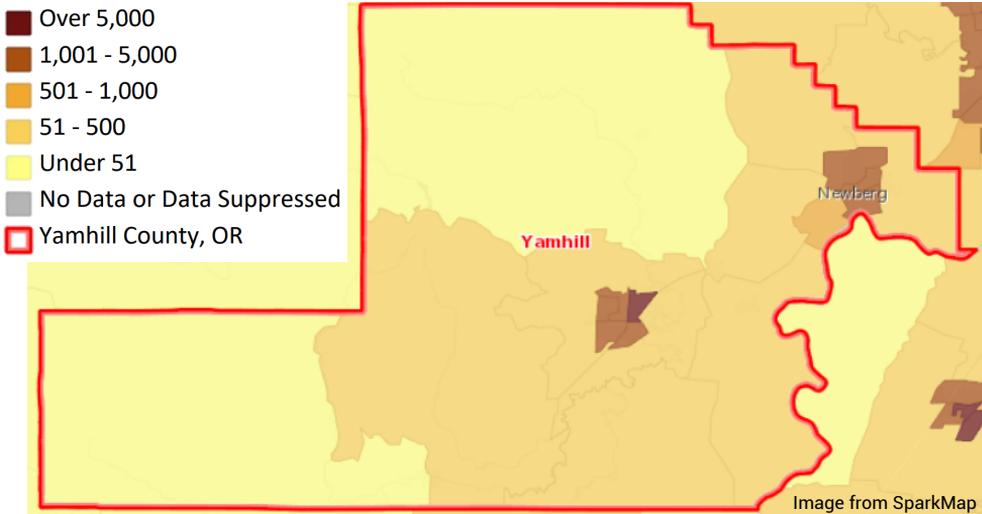
People with disabilities are another priority population. It is hard to capture data solely on disability because it does not exist alone. Someone’s disability status affects how they are perceived in society—and even more so if they belong to other priority populations. Disability can compound health issues, especially around well-being because the world is built for nondisabled people. Persons experiencing physical, cognitive, and/or mental disabilities have to navigate systems that were not made with them in mind. In Yamhill County, over 15,700 individuals are disabled while there are 592,689 Oregonians who experience disability. These numbers are represented as percentages in the chart below.

Disabled Population Percentages by Location



Rural residents are also a priority population. As of 2022 estimates, there are a little over 25,000 Yamhill County residents that live in unincorporated rural areas. The map below illustrates population density using 2019 U.S. Census Bureau data. The least densely populated areas are the northern and western parts of the county, while the highest density zones are McMinnville and Newberg. Areas with less people have under 51 persons per square mile while more populous areas have between 1,000-5,000 persons per square mile.

Population, Density (Persons per Sq Mile) by Tract, ACS 2016-20



Between 2010 and 2020 the population of Yamhill County grew 8.6% from a little more than 99,000 residents to over 107,000. McMinnville and Lafayette experienced a population increase of over 10% while Dayton, Dundee, Newberg, Carlton, Yamhill, Sheridan, Amity, and Grand Ronde experienced a population change between 2-10%. When people leave or move it affects the ratio of service providers like dentists, counselors, and doctors to residents. **Population density and changes in population over time are factors that affect provider-to-patient ratios which affect health outcomes and service utilization.**

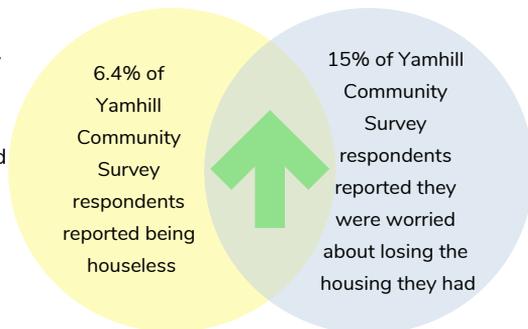
I. Access to affordable, safe, and secure housing

1. Houselessness

Housing insecurity is defined by the U.S. Department of Health & Human Services as experiencing houselessness, high housing costs in proportion to income, poor housing quality, overcrowding, and unstable neighborhoods. These factors affect housing stability **and** health outcomes.

Houselessness is the state of being unsheltered and not living in a permanent residence. It is linked to many poor health outcomes in adults, such as an increase in diabetes, heart disease, hypertension, Hepatitis C, substance use disorders, and depression. For unhoused children, there are higher rates of dental issues, physical ailments, mental distress, and impaired development.

In Yamhill Community Action Partnership (YCAP)'s 2020 Point-In-Time count, there were an estimated 1,400 unhoused people living in the county before the COVID-19 pandemic. Individuals are counted as unhoused if they live in shelters, outside, or couch surf. Over 75 kids—under 18—were counted as sleeping outside at night. And according to the Yamhill Community survey, over 50% of respondents (441) believe the county does not have housing for everyone. The diagram to the right explains the percentage of survey respondents that are unsheltered and those worried about losing housing.



2. Housing cost burden

Numerous economic, environmental, and societal factors have contributed to greater numbers of people experiencing housing insecurity. More and more families face moderate to extreme rent burden. A 2017 measure found that 14% of county residents (14,420) experienced severe housing cost burden where households spent more than half their income on housing. Individuals and families are unable to afford housing—even substandard housing—and are forced to make do. That can mean overcrowding, which happens when more people live in a space than is considered acceptable from a health and safety perspective. Or to offset high housing costs, families are forced to spend less on other expenses like health insurance and nutritious food. **The rising cost of housing without similar increases in wages affects the community's economy as well as reduces people's quality of life.**

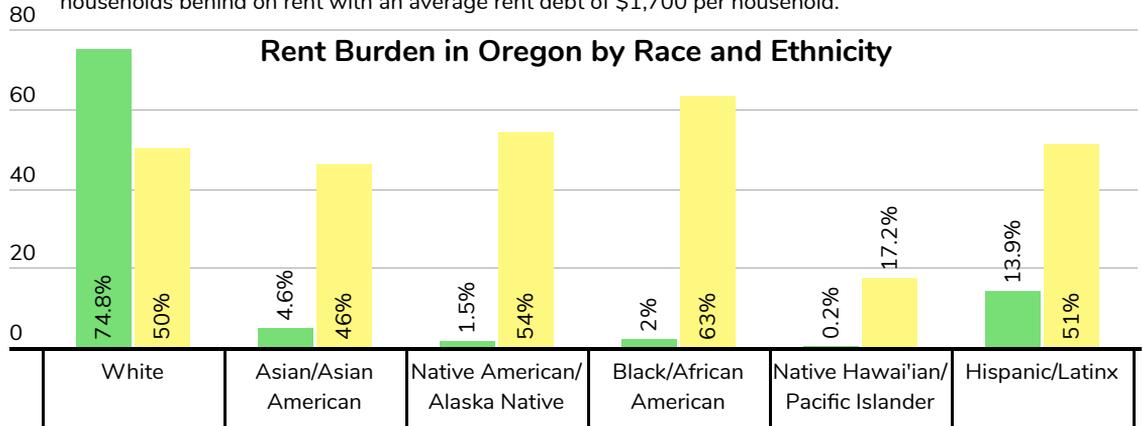
The COVID-19 pandemic worsened housing security due to job/income loss. People cannot pay rent because of rising costs of living without similar increases in income. Most renters are low-wage workers, a group that is over-represented by People of Color who faced disproportionate housing issues long before 2020—including but not limited to redlining, racial segregation, legal discriminatory practices in lending and banking, and racially confined housing rules. The National Equity Atlas calculates rent burden as the share of owner- and renter-occupied households that have high housing costs.

These are split between “burdened” when people spend 30% or more of their income on housing and “severely burdened” for those that spend 50% or more of their income on housing. The infographic to the left summarizes the extent of housing cost burden in recent years for Yamhill County residents. Half of Oregon renters in 2020 experienced housing cost burden.



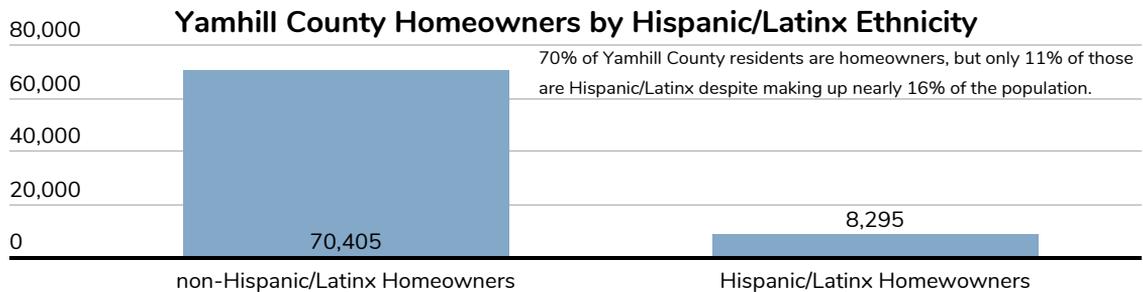
Around 5,400 Yamhill County renters were burdened and over 2,500 were severely burdened in 2019. For Yamhill County homeowners, about 6,980 experienced housing burden and around 2,400 were severely burdened.

On top of that, 40,000 Oregon households are behind on rent for an estimated total rent debt of \$62.9 million. The 2020 U.S. Census Bureau data estimated over 1.67 million housing units in Oregon. Less than 320,000 are owned outright while over 710,000 have loans or mortgages. There are 640,096 renter-occupied units in the state. In December 2022 there were an estimated 1,120 Yamhill County households behind on rent with an average rent debt of \$1,700 per household.



● Percentage of State Population ● Percentage of Renters Experiencing Rent Burden

The chart above illustrates rent burden data for Oregonian renters. There is a stark contrast between each race and ethnicity group as a proportion to the state's population compared to the percentage within that subgroup that experience rent burden. As this chart shows, Oregonian People of Color experience disproportionate levels of rent burden. Black and Native American renters are some of the most likely racialized groups to experience rent burden. These data points demonstrate the severity of the housing crisis especially for People of Color and how it will worsen as income inequality grows.

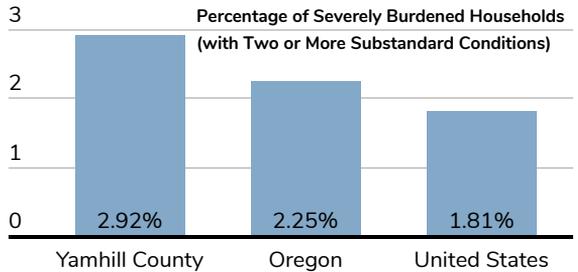


Homeowners also experience housing cost burden, and once again People of Color are affected disproportionately. Nearly 30% of owner-occupied homes with mortgages experience housing burden (5,460) and almost 19% of owner-occupied households without mortgages experience housing burden (1,524). In 2020, 63% of Oregon households (1.03 million) were owner-occupied. The homeownership rates broken down by race and ethnicity show the inequitable homeownership among Oregonian owners. The highest rate was 66% for white residents (882,000) while the lowest homeownership rate was 33% for Black/African American residents (9,100). 63% of Asian American Oregonians own their homes (40,100), 52% of Native American residents (7,090), 44% of Hispanic/Latinx residents (63,100), and 40% of Pacific Islander Oregonians (1,650). While homeownership has decreased overall from 64% in 1990 to 62% in 2019, white owners have remained the most likely demographic to own their own homes compared to People of Color. These data illustrate that many Oregonians but especially **People of Color and women experience extreme rent burden.**

3. Built environment

Low-quality housing conditions can lead to poor health outcomes by not providing a safe and healthy space for people to grow, eat, play, and sleep. For example, extreme temperatures inside homes contribute to poor heart health and increased mortality risk, residential crowding is linked to psychological distress for both adults and children, and water leaks, pests, and poor ventilation affect indoor air quality and contribute to health hazards like mold, mites, and allergens. The American Community Survey reports on the number of owner- and renter-occupied households with at least one of the following substandard housing criteria: 1) incomplete plumbing, 2) incomplete kitchen, 3) one or more occupants per room, 4) monthly costs exceed 30% of household income, and 5) rent is greater than 30% of household income.

Over 12,600 households in Yamhill County have one or more of these inferior housing conditions. There is also a greater percentage of households that are severely burdened with multiple substandard housing issues in Yamhill County compared to Oregon and the United States. This is shown in the graph to the right.



The map below shows the percentage of households across Yamhill County that have at least one substandard housing condition. Over a third of county households have one or more inferior housing conditions with a greater concentration of low-quality households in Newberg, Dundee, McMinnville, Sheridan, Willamina, and Grand Ronde. **Households that have multiple substandard conditions are at greater risk for experiencing poorer health outcomes.**

Substandard Housing Units, Percent of Total by Tract, ACS 2016-20

- Over 34.0%
- 28.1 - 34.0%
- 22.1 - 28.0%
- Under 22.1%
- No Data or Data Suppressed
- Yamhill County, OR

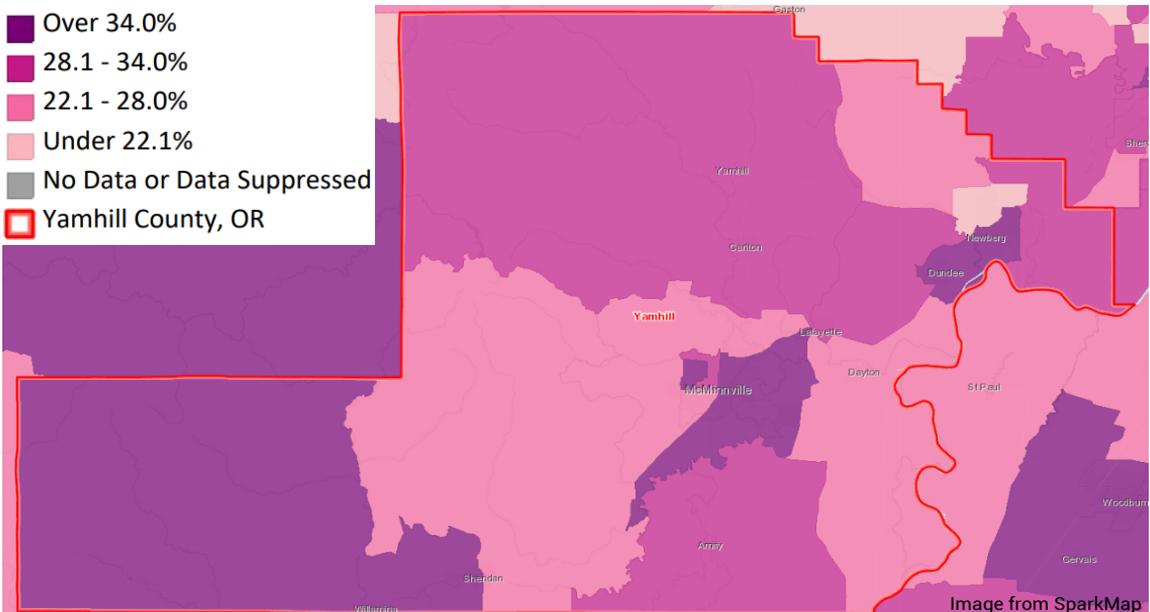


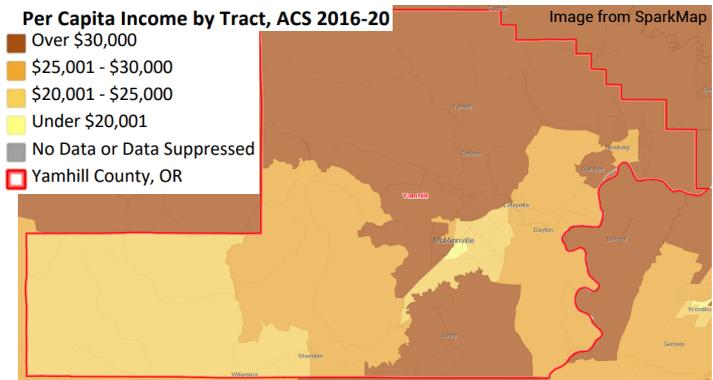
Image from SparkMap

II. Access to quality economic opportunities

4. Income

Income is a strong predictor for individuals' health outcomes because **as income increases, life expectancy improves**. The median household income was \$63,902 for Yamhill County residents in 2019 —yet that number varied when looking at racial and ethnic identity. The median household income was \$48,000 for Native American/Alaska Native residents, \$52,200 for Latinx/Hispanic residents, \$69,800 for white residents, and \$82,700 for Asian/Pacific Islander residents. While it appears that Asian/Pacific Islanders make more money than other racialized groups, the truth is that “the gains in income for lower-income Asians [trail] well behind the gains for their counterparts in other groups.” It is important to highlight the lack of specific data on Asian and Pacific Islander communities—by combining Asian American and Pacific Islander data points, differences between nationalities and cultural groups are hidden. In addition, there were no data to determine the median household income for Black/African American residents. These numbers show the inequitable income distribution in Yamhill County across some racial and ethnic groups, yet do not tell the whole story since the data were not comprehensive.

Another income measure is per capita income, or the average income of all persons living in a specific area. For half of Yamhill County the per capita income is over \$30,000, but as the map to the left shows there are large sections of the county where the per capita income is less than \$25,000.

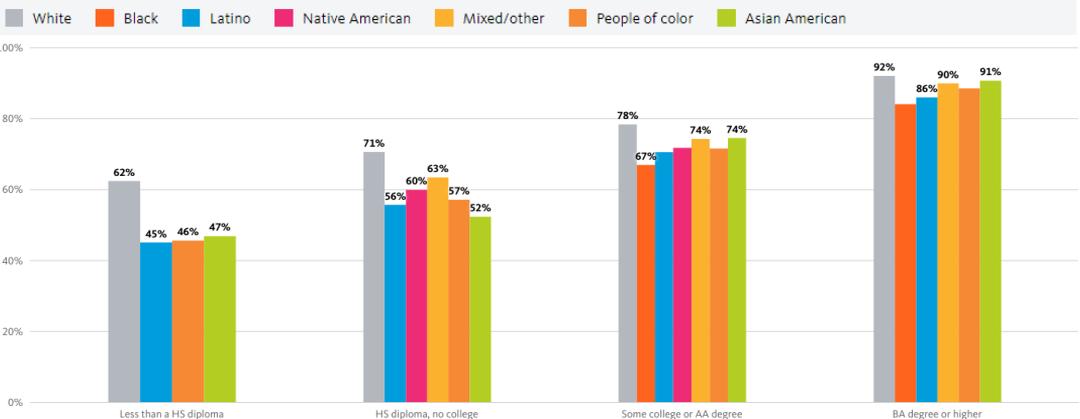


Another income measure is hourly wages. In 2020 just 69% of Oregonian People of Color (187,000) earned at least \$15/hour compared to 82% of white Oregonians (678,000). Wage inequity between People of Color and white people occurs **even when education levels are the same**. The graph below illustrates how there are lower percentages of Oregonian People of Color with higher education making at least \$15/hour compared to white people with less education.

Wages: \$15/hour + Oregon

Graph from National Equity Atlas

Share of workers earning at least \$15/hour by race/ethnicity and education: Oregon; **Age Group:** 25 to 64; **Year:** 2020

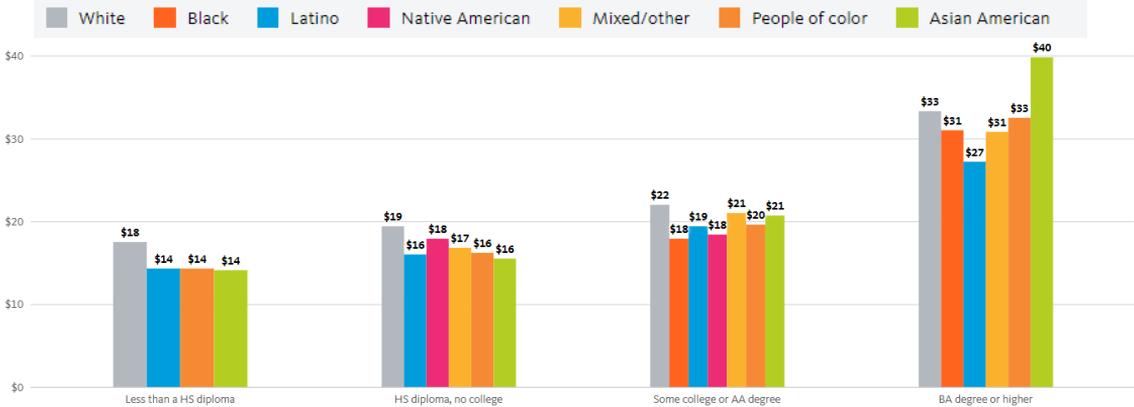


The median hourly wage from 2020 also shows how disproportionate income is within Oregon. Illustrated by the table below, it is clear these **wage inequities between race and ethnicity groups continue even when education is dissimilar**. For example, in 2020 white people without a high school diploma made a median of \$18/hour compared to People of Color with a high school degree making a median of \$16/hour. These measures show that wage inequity is felt by People of Color at extreme and disproportionate levels where even education does not level pay.

Wages: Median Oregon

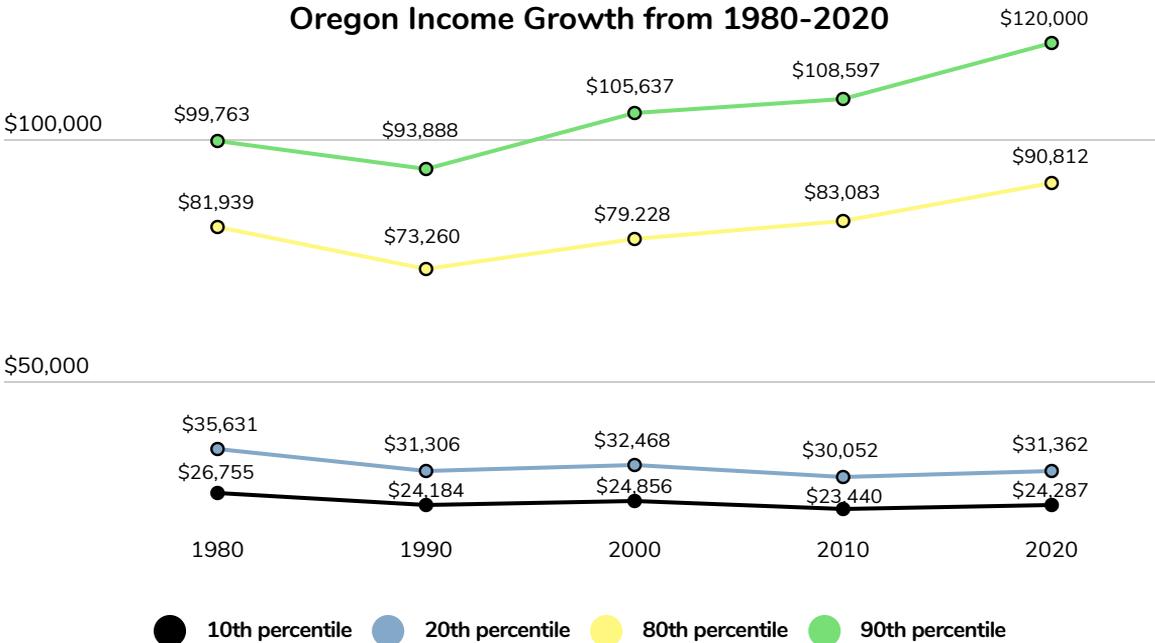
Graph from National Equity Atlas

Median hourly wage by race/ethnicity and education: Oregon; **Age Group: 25 to 64; Year: 2020**



Another key measure to examine is Oregonian income growth from 1980 to 2019, as shown in the chart below. The most change was an income **decrease** felt by the lowest-earning workers at the 10th percentile while the highest-earning workers in the 90th percentile saw an income **increase** by 12%.

Oregon Income Growth from 1980-2020



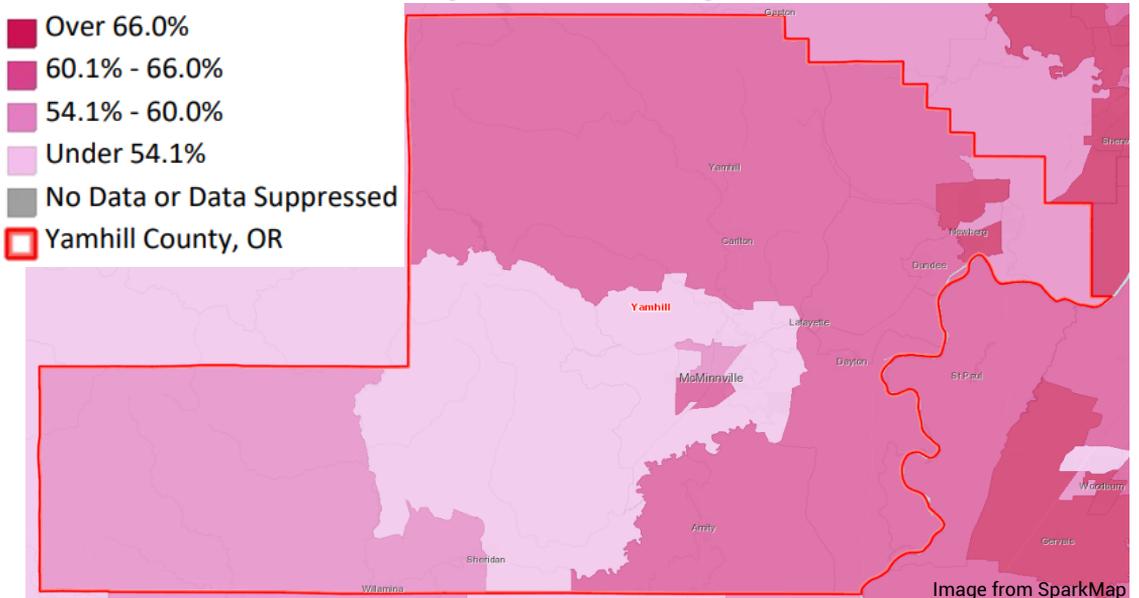
Business ownership is another indicator of economic inequities disproportionately felt by People of Color. For every 100 Latinx/Hispanic workers in Oregon, one owns a business, and for every 100 Black/African American workers, about two are business owners—which holds true for every 100 Native American/Alaska Native workers as well. In contrast, for every 100 white workers, five are business owners, and for every 100 Asian/Pacific Islander workers, six are business owners. When looking at business revenue, the National Equity Atlas reports that in 2017, white-owned companies earned an average of \$1.9 million, approximately \$798,000 more than People of Color-owned companies, which made an average of \$1.1 million in 2017.

It is clear that over the last four decades, income has steadily increased—but only for the highest-earning workers, while the lowest-earning workers experienced a decline in income. This growing income inequality disproportionately affects the entire community but especially People of Color and women since these groups are typically concentrated in low-wage jobs due to discrimination and historic oppression. **The data broken down by race, ethnicity, and location show that People of Color and rural residents in Yamhill County experience disproportionate levels of income inequality which is linked with negative health outcomes.**

5. Unemployment

The U.S. Census Bureau collects data on labor force participants defined as the number of people seeking work or actively working. As the map below shows, urban areas in Yamhill County have a higher percentage of labor force participants with nearly 69,000 workers compared to rural areas that report about 47,000 active laborers. These numbers suggest that urban areas have more job opportunities than rural areas and attract more labor force participants.

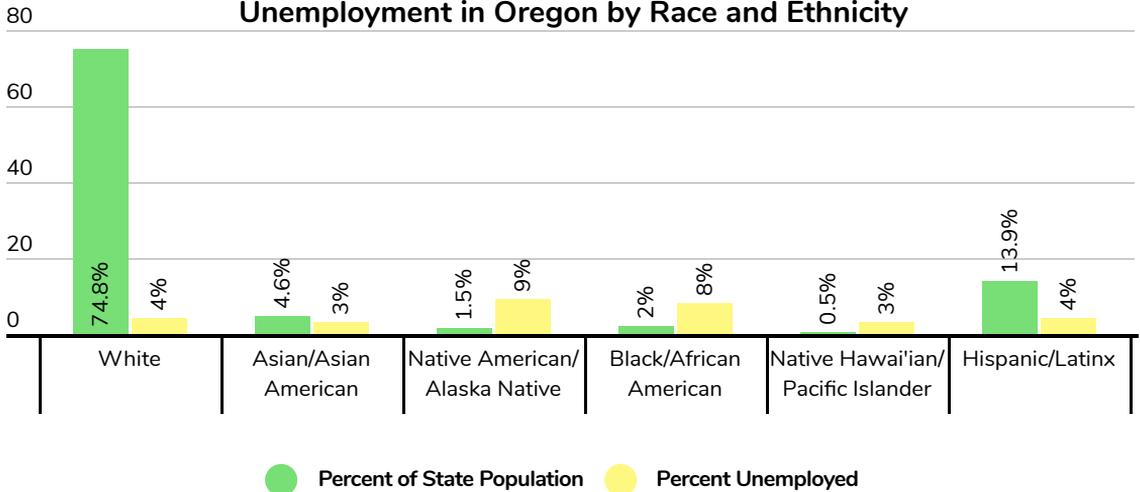
Labor Force, Participation Rate by Tract, ACS 2016-20



In addition to labor force participation, unemployment and underemployment rates highlight an area’s economic opportunity. Underemployment during the COVID-19 pandemic affected over a quarter of Yamhill Community Survey respondents (213).

From 2010-2023, the lowest unemployment rate recorded in Yamhill County was 2.6 during November 2019 while the highest unemployment rate of 11.6 occurred five months later in April 2020. The rate has decreased since the height of the COVID-19 pandemic but has not returned to pre-2020 numbers; as of February 2023, the unemployment rate was 4.3 for the county and 3.6 for the country. The table below shows the 2019 Oregon unemployment rates broken down by race and ethnicity demographics. It is clear that Native American/Alaska Native, Native Hawai'ian/Pacific Islander, and Black Oregonians disproportionately experience higher rates of unemployment compared to their share of the total state population.

Unemployment in Oregon by Race and Ethnicity



The percentages above show how disproportional economic prospects are for priority populations, including low-wage workers, People of Color, and rural residents. Being employed or underemployed is linked to poor physical, mental, emotional, and social health outcomes. Unemployment can contribute to increased rates of depression, anxiety, substance use, mortality, suicide, and institutionalization while underemployment is related to an increase in drug use, anxiety, depression, and low self-esteem.

6. Poverty

Poverty rates, or the percentage of people living under the federal poverty line, are another indicator of economic opportunity. In 2021 that line was \$12,880 for one person and \$26,500 for four people.

Poverty affects quality of life in many ways, including limiting access to nutritious food options, educational prospects, and employment opportunities. It directly impacts health outcomes because healthcare is expensive. People with low income often cannot afford preventive care, health insurance, medicine, co-pays, and other health-related costs. As shown in the figures to the right, around 12% of Yamhill County residents live in poverty. Over a fifth of children under age 5 live in poverty and almost 17% of county residents between the ages of 18-34 live in poverty. Children who grow up in poverty often experience poorer health outcomes throughout their life than children who do not grow up in poverty, including earning lower wages, living in substandard housing, and developing fewer workforce skills.



12,900

Approximate number of Yamhill County residents living in poverty



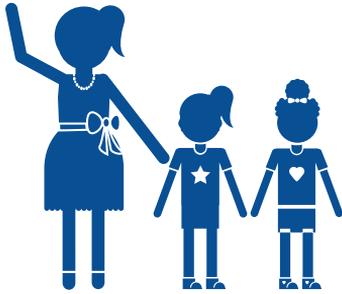
21.4%

Of residents under age 5 are living in poverty



16.7%

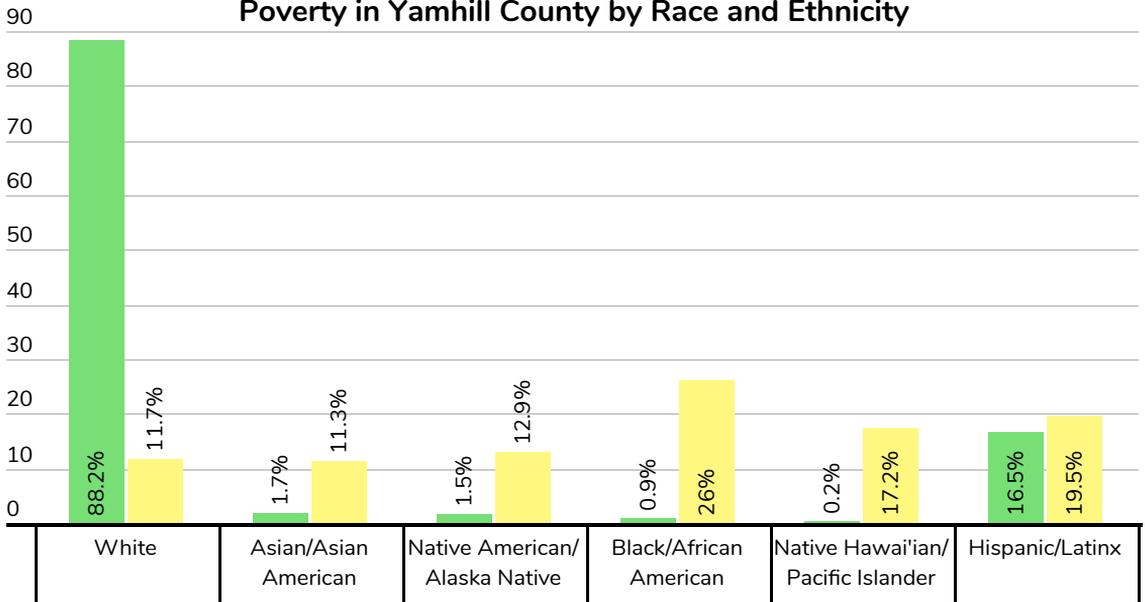
Of residents between the ages of 18-34 are living in poverty



In Yamhill County, 16.3% of all children under age 18 are living in poverty. In comparison, 29.3% of all Hispanic/Latinx children are living in poverty.

Poverty disproportionately affects People of Color as the image above and the chart below illustrate. Despite making up less than 1% of the county's population, 26% of Black/African American community members and 17.2% of Native Hawai'ian/Pacific Islander county residents live in poverty. This figure is starkly contrasted by the fact that 11.7% of white residents live in poverty yet make up almost 89% of the county's total population.

Poverty in Yamhill County by Race and Ethnicity



● Percentage of County Population ● Percentage Under Federal Poverty Line

Another poverty measure is neighborhood poverty which looks at the number of people living in neighborhoods where poverty rates are over 30%. Neighborhood poverty shows how systemic racial segregation affects community wealth and health. In 2020, 14.3% of People of Color in the U.S. lived in high-poverty neighborhoods compared to just 3.9% of the white population. When looking at Oregon, 11.4% of Native American residents lived in high-poverty areas compared to 3% of white Oregon residents. The second largest group was Black Oregonians at 7%, followed by Latinx/Hispanic residents at 5.6%, then 4.1% for Asian American residents, and 3.6% of Pacific Islander Oregonians.

III. Access to quality childcare and education

7. Childcare

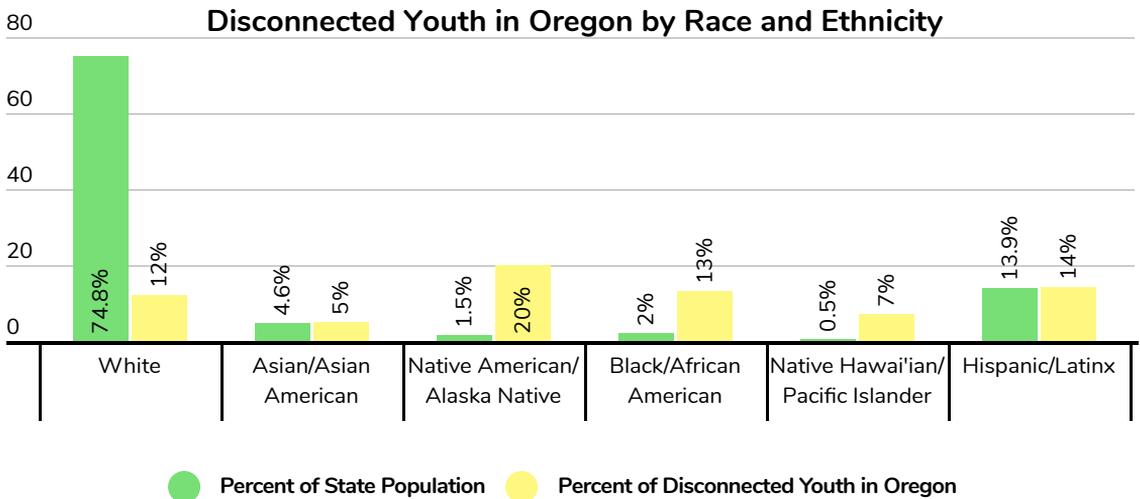
Quality childcare correlates with better academic scores, improved emotional regulation, and more economic success. It is also valuable for working parents, guardians, and caregivers who must rely on childcare to work and provide for their families. Yet Yamhill County lacks robust options for childcare. In 2020, only 18% of children under age 5 living in Yamhill County had access to a childcare slot. There are additional concerns over inclusive childcare options for LGBTQIA+ children, foster kids, and children with disabilities. For 38% of Yamhill Community Survey respondents (99), quality of care is the most vital factor when determining childcare.

8. School Poverty

School poverty is measured by the share of students who qualify for free or reduced-price lunch. Programs that offer school meals support students' academic futures and help meet their socio-emotional health needs. In Yamhill County, 8% of Latinx/Hispanic students, 7% of Native American/Alaska Native students, 5% of white students, 3% of Asian/Pacific Islander students, and 3% of Black/African American students are in high-poverty schools. As for the breakdown of free or reduced-price lunch in Oregon, the largest percentage of students who are in high-poverty schools are Black/African American students at 31% followed closely by Latinx/Hispanic students at 29%. 24% of Native American/Alaska Native students and 16% of Asian/Pacific Islander students attend high-poverty schools, compared to just 9% of white students. On the other hand, only 4% of Native American/Alaska Native students are in low-poverty schools, followed by 6% of Latinx/Hispanic students, 12% of Black/African American students, 17% of white students, and 31% of Asian/Pacific Islander students.

9. Disconnected Youth: Not in School or Working

Another important measure is disconnected youth. Disconnected youth are more likely to face health challenges as adults because participation in formal settings such as work or school is critical for gaining knowledge, skills, and abilities that assist when transitioning from adolescence to adulthood. In Yamhill County in 2020 the percentage of 16-24-year-olds not working or in school was 8% (478 teenagers) while there were over 55,600 teenagers disconnected across the state. As the table below shows, there are disproportionate percentages of Native American/Alaska Native, Hispanic/Latinx, Black/African American, and Native Hawai'ian/Pacific Islander teens experiencing disconnection across Oregon.



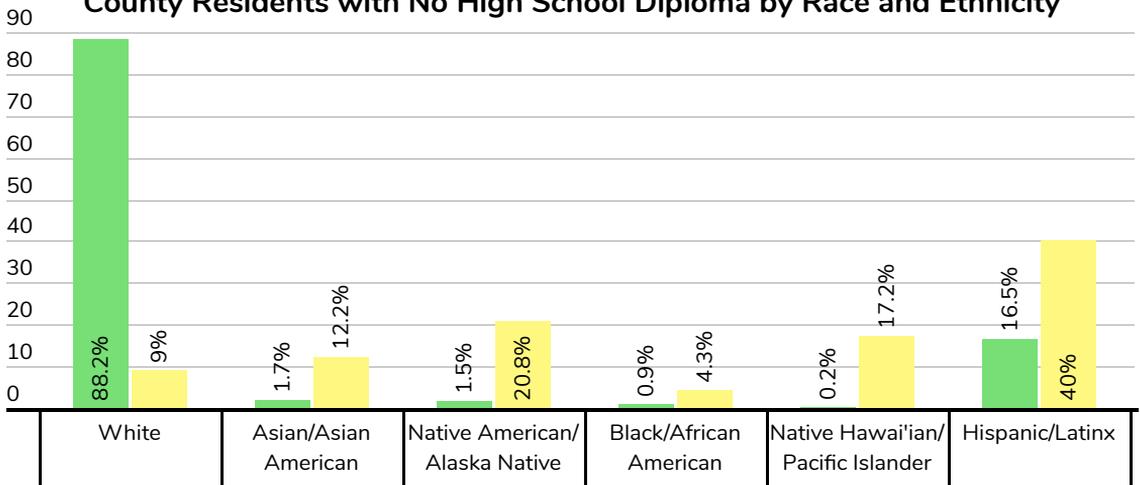
10. Graduation and Education Rates

Education correlates to improved economic opportunities, reduced stress, and healthier lifestyles which are all associated with improved health outcomes. Yamhill County does better than Oregon and is closing the gap with the U.S. when it comes to graduation rates. In the 2012-2013 school year, the county's high school graduation rate was four percentage points higher than Oregon's but still ten percentage points lower than the U.S. rate. By the 2018-2019 school year, Yamhill was less than a percentage point from matching the nation's graduation rate of 87.7% while Oregon was still seven percentage points lower at 80.7%.

By the 2020-2021 school year, almost 90% of 9th graders in Yamhill County completed high school in four years compared to 83% of Oregon 9th graders completing high school in the same time frame. This is good news as the COVID-19 pandemic affected every school district in some capacity, including lower graduation rates for seven out of ten high schools between 2020 and 2021 than in previous years. Another important aspect of good quality education is providing physical, emotional, and mental health resources for students. Unfortunately, over a third of Yamhill County schools do not have a counselor, and only 17% of those with counselors have two or more.

When looking at education levels for Yamhill County residents aged 25 and older, over half have completed high school or attended some college. The largest group of 28.7% have some college education, while the smallest group of 9.7% have a graduate degree. 24.3% of residents have high school or equivalent degrees and another 17.7% have bachelor's degrees, while 10.3% of residents have no high school diploma.

County Residents with No High School Diploma by Race and Ethnicity



● Percentage of County Population ● Percentage of Residents with No High School Diploma

The chart above illustrates the disproportionality of high school diploma rates when examining race and ethnicity. For example, while the vast majority of the county identify as white only 9% of white residents do not graduate high school. In comparison the smallest population percentage is just 0.2% for Native Hawai'ian/Pacific Islander residents. Yet over 17% of Native Hawai'ian/Pacific Islander residents do not have a high school diploma in Yamhill County. This disproportionality can also be seen with Hispanic/Latinx, Asian/Asian American, Native American/Alaska Native, and Black/African American residents across the county.

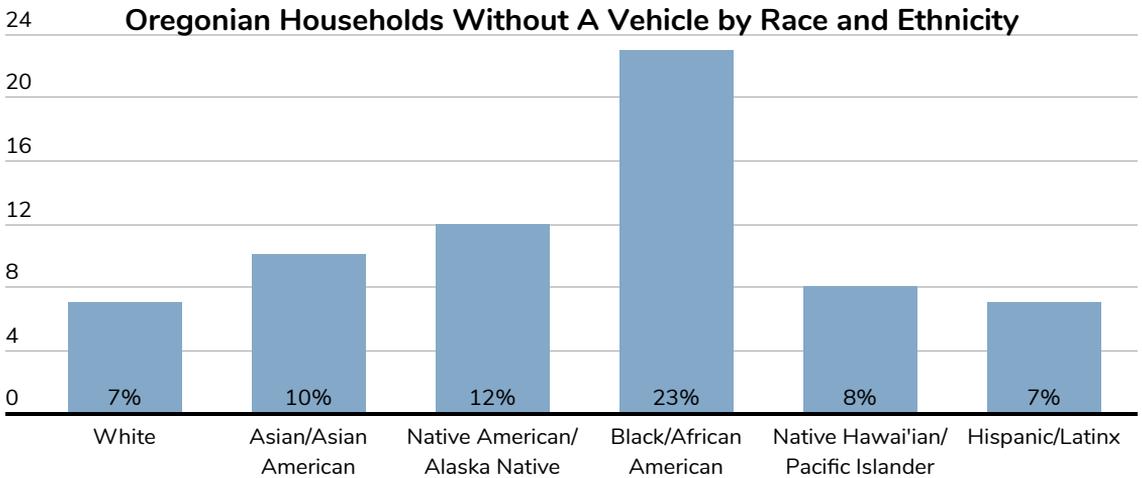
IV. Access to an accessible, healthy, and safe local environment

11. Walkability

Walkability refers to how accessible spaces are for everyone regardless of their ability to interact and move throughout an area. Unfortunately in Yamhill County **very few areas outside of city centers are easily walkable**. Yet 12% of Yamhill County Community Survey respondents (104) reported walking, cycling, and/or carpooling as their main form of transportation while only 5% of respondents (35) reported that they primarily use public transportation. When areas are walkable, not only is there increased physical activity, but it also betters communities by increasing resident interactions, reducing air pollution, bolstering local economies, and improving safety.

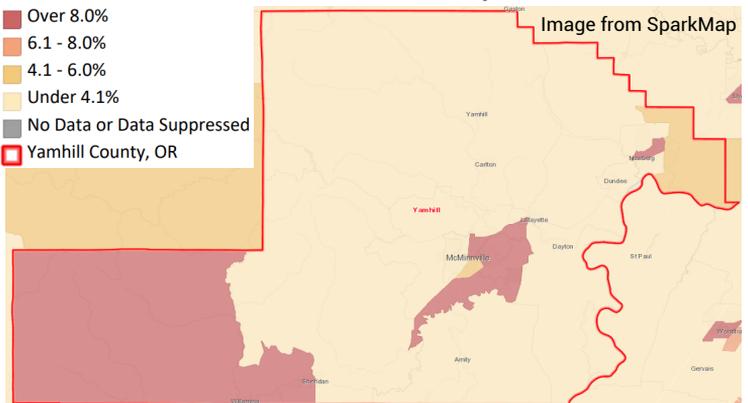
12. Car Access

Reliable transportation is a key driver to households meeting health needs. Since 1990, the number of households without vehicles has been steadily growing. For example, there were less than 87,000 Oregon households in 1990 without cars, but that number in 2020 grew to over 121,000 households (approximately 7.2% of Oregon households). The chart below shows the percentage of Oregonian households without a car broken down by race and ethnicity. Black/African American households are the least likely race and ethnicity group to have access to a vehicle at 23%. In comparison 7% of white and Latinx/Hispanic households report no vehicle access.



Around 5% of Yamhill County households (1,836) do not have motor vehicles. 1.6% of owner-occupied households (424) do not own a car, while 12.6% of renter households (1,412) do not have motor vehicles. The map to the right shows that the entire county reports at least 4% of households with no motor vehicle access. There are greater numbers of households without car access in McMinnville, Newberg, Sheridan, Willamina, and Grand Ronde.

Households with No Vehicle, Percent by Tract, ACS 2016-20



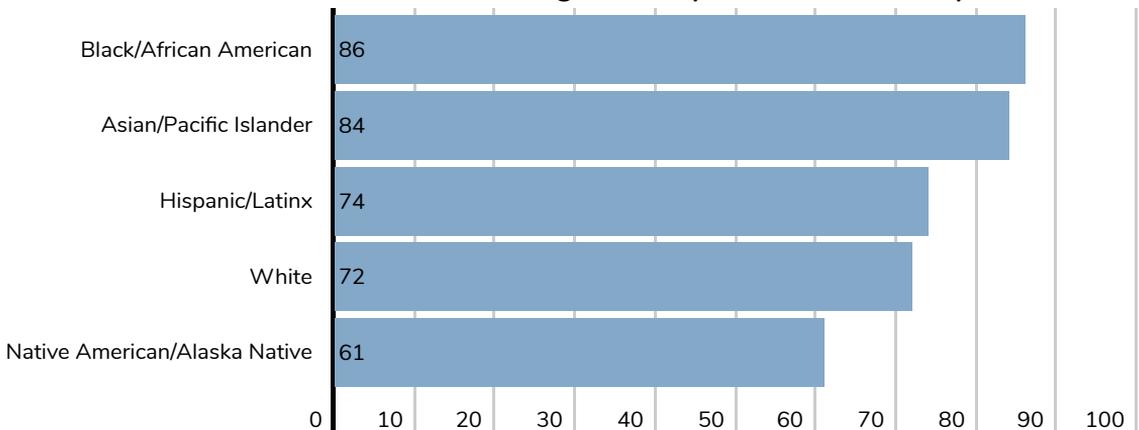
13. Food insecurity

Unreliable access to nutritious food correlates with negative health outcomes such as premature death, asthma, and increased healthcare costs. Most Yamhill County residents are food secure and do not have to worry about their next meals. Compared to 12% of Oregon residents, 10% of Yamhill County residents are food insecure. The Food Environment Index (FEI) examines an area's food environment and ranks them from worst (0) to best (10). Yamhill County's value is 8.5, which is higher than Oregon's 8.1. Over 75% of Yamhill Community Survey respondents (651) agree that there is nutritious food available in the county.

While the county ranks well on these data points, there are **over 11,000 county residents living in a food desert**. Food deserts are areas that lack sufficient access to affordable nutritious foods. In addition, over 14,200 people living in Yamhill County (13.3% of the population) receive SNAP benefits. This program offers nutritional assistance to low-income families through federal funds. Other food sources include grocery stores and restaurants. In 2020 there were an estimated 50 fast-food restaurants in the county, or a rate of 46.42 fast-food places per 100,000 residents, while Oregon's rate was 70.68 and the nation's 75.89. There are 24 grocery establishments total in the county, a rate of 22.28 stores per 100,000 residents, while the nation's rate is 18.79 and Oregon's 17.16.

While these resources are promising, **the availability of nutritious food does not mean it is consumed. There are still barriers like location, cost, and awareness to remove, especially for low-income households.** Community members also expressed concern over the lack of nutritious food in food banks and increased food assistance requests alongside COVID-19-related job losses.

Risk of Air Pollution for Oregonians by Race and Ethnicity



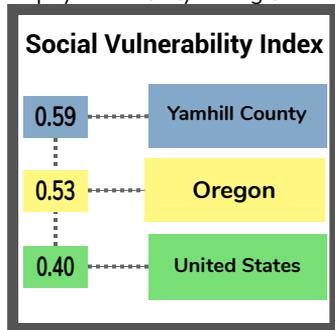
14. Natural environment

One way to measure healthy neighborhoods is to analyze the level of exposure to air toxics. This measure is weighed on a scale from 1 (lowest risk) to 100 (highest risk). The table above shows 2020 Oregon data on air pollution broken down by race and ethnicity. The values represent an index of the pollution exposure experienced by residents based on **all** U.S. census tracts. For example, the average pollution risk for Black Oregonians is higher than 86% of the nation's census tracts. Environmental hazards disproportionately affect Oregonians of Color, as the data on the air toxics reveal with Black/African American and Asian/Pacific Islander community members. Higher levels of air pollution are linked to an increased risk of medical problems, especially respiratory illness, heart disease, cancers, and even premature death.

One way to combat air toxics is ensuring abundant green space in and around neighborhoods and high-density areas. Plants and trees provide sources of clean air and purify the air of harmful toxins. The majority of Yamhill County residents live within half a mile of a park. This provides additional health benefits for community members like boosting physical activity and improving mental health. However, according to the EPA's community walkability measures, the vast majority of the county's rural areas are not walkable, while urban downtown areas are most walkable and the cities of Yamhill, Willamina, Sheridan, Newberg, McMinnville, Dundee, Dayton, and Carlton are above average walkable. There are also limited options for indoor fitness as there are only 3 fitness and recreation facilities in the county, a relatively new trend since 2016 when the rate for Yamhill County was 7.43 facilities per 100,000 people. Since then, the rate has dropped each year, from 6.5 in 2017 to 4.64 in 2018 and 2019 to just 2.72 in 2020. A lack of indoor recreational spaces contributes to reduced physical activity during the cold and rainy seasons, and even during extreme hot weather events.

15. Emergency preparedness

The Social Vulnerability Index (SVI) is a measure of a community's capacity to respond to disasters, both nature- and human-caused. The CDC and other groups condense sixteen conditions from the U.S. Census into four themes to best summarize the degree an area is socially vulnerable to catastrophe. As the graphic to the right shows, Yamhill County has a higher SVI compared to Oregon and the U.S.



Yamhill County Emergency Management publishes a hazard and vulnerability mitigation plan every five years. This plan prepares county residents for potential long-term consequences from environmental hazards and extreme weather events. The 2020-2025 plan includes threat evaluation of the risk, severity, and likelihood of natural disasters and groups them according to high, moderate, and some risk to the region. The highest risk comes from floods, winter storms, and future Cascadia earthquakes, while moderate risk represents droughts, windstorms, and wildfires, and the final category of some risk includes landslides, future Crustal earthquakes, and volcanic events.

Flood risk is steadily rising worldwide as heavy rainfall has increased over the last 50 years. In 2017 the precipitation levels were higher than average in both winter and spring, contributing to flood risk. 14% of Yamhill County properties (4,755) have a greater than 26% chance of being severely affected by flooding in the next three decades. This poses a major risk to roads and critical infrastructure like hospitals, fire stations, wastewater treatment facilities, and power stations. There is also a moderate risk to residential, commercial, and social facilities like places of worship, schools, museums, government offices, and historical buildings. Floods harm more than just infrastructure; they affect sewage and drainage systems which contaminate drinking water, cause erosion, destroy wildlife habitats, drown animals, and increase the risk of people getting water-borne diseases like cholera and hepatitis A.

With a rise in temperatures globally, another major concern is increased drought severity. It has a disastrous impact on the number of wildfires because the harsher and longer a drought lasts, the greater the risk of wildfire. From 2010 to 2019, Yamhill County experienced 122 wildfires, of which 95% (116) were caused by people. In addition to more wildfires, the Pacific Northwest has experienced more moderate to severe droughts since 2017. In 2020, Yamhill County had lower levels of rainfall from February to April, which increased the likelihood of drought. In 2021, over 52% of weeks (27) were in a moderate drought, more than 45% of weeks (23) were in a severe drought, and over 30% of weeks (16) were in an extreme drought.

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52.2%

Percent of weeks (27) in 2021 were in moderate drought or greater in Yamhill County



45.7%

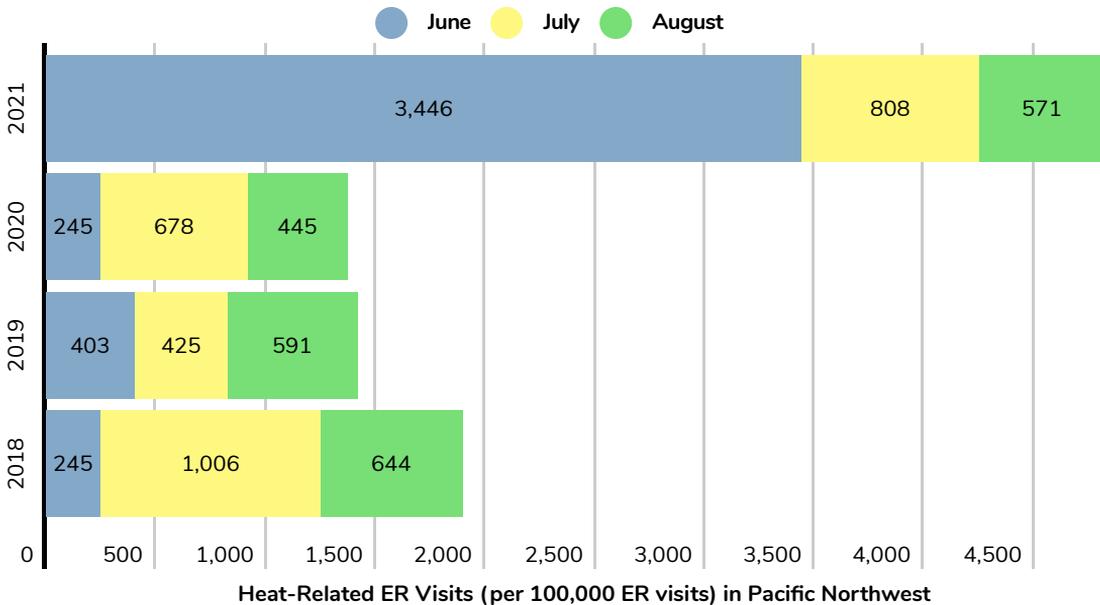
Percent of weeks (23) in 2021 were in severe drought or greater in Yamhill County



30.4%

Percent of weeks (16) in 2021 were in extreme drought or greater in Yamhill County

These droughts are dangerous for people, especially in regions where residents are unused to such conditions. From June to August 2021, more Pacific Northwest residents were admitted into emergency rooms for heat-related illnesses than in the previous three summers combined. These data points are summarized in the table below.



In 2021 there were 54 heat-related emergency room (ER) admittances among Yamhill County residents, compared to just 11 ER visits the previous year. **These dangerous situations are likely to continue on larger and more harmful scales as extreme weather patterns become the norm.**

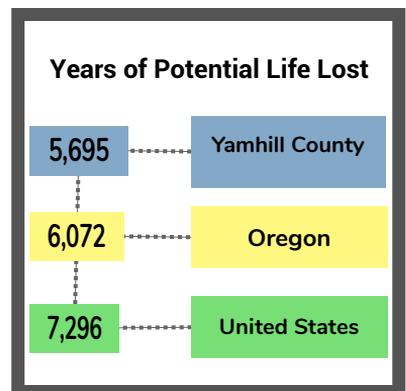
V. Access to inclusive, affordable, and effective culturally responsive care

16. Social and systemic exclusion

Social exclusion is defined as the disadvantages faced by certain identity groups and members of those groups who are removed from and therefore cannot participate fully within mainstream society. It is crucial to highlight that communities often experience social exclusion through the creation, implementation, monitoring, and evaluation of public policy. Examples of harmful systemic exclusion include procedures, programs, and practices that protect or promote racism, sexism, misogyny, classism, ableism, ageism, heterosexism, homophobia, transphobia, fatphobia, religious persecution, and oppression of any kind. Some of the most commonly excluded members of society include people who are unhoused, folks who are unemployed, individuals with disabilities, persons living in rural areas, sex workers, migrant workers, immigrants, refugees, older adults, women, children, LGBTQIA+ community members, and members of racialized identities. **Social exclusion harms health status by reducing people's rights, limiting capability and capacity, and restricting access to resources.**

There are many examples of how members of these identities experience exclusion in healthcare systems. For example, pregnancy-related death rates broken down by race in the U.S. reflect disproportionate health inequities. Native American/Alaska Native pregnant people die from pregnancy complications at twice the rate compared to their white counterparts. For Black/African American pregnant people, the death rates tripled compared to white pregnant people. **Factors like higher education lower pregnancy-related death rates for white people yet does not have the same impact on members of other racialized groups.**

Another major example is life expectancy, which in Oregon is still inequitable despite closing gaps in recent years. For example, Asian/Pacific Islanders on average live to 83, which is seven years longer than the average life expectancy of Black/African Americans (76) and six years longer than the life expectancy of Native Americans/Alaska Natives (77). Latinx/Hispanic residents are expected to live until 82 while white Oregonians have an average life expectancy of 79. Premature death affects communities because of the years of potential life lost (YPLL). This measure (shown to the right) calculates the number of years lost to all causes of death before age 75 per 100,000 persons.

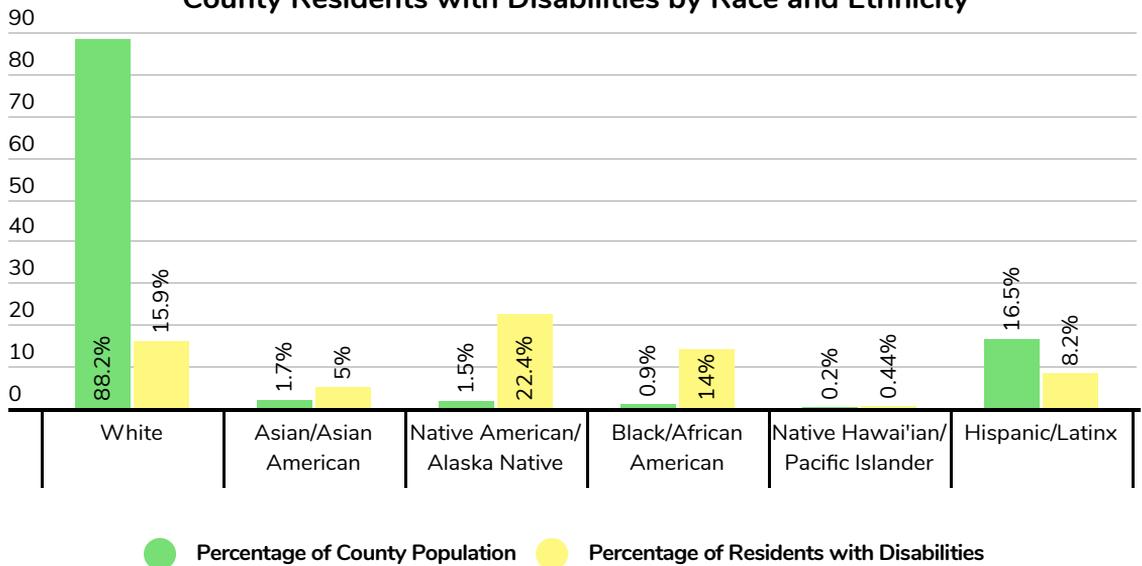


Other severe examples of institutional exclusion show up in the prison system within the U.S., which incarcerates People of Color at disproportionate rates five to eight times higher than white people. And children of people incarcerated in Oregon experience poor health outcomes: they are more likely to develop behavioral issues, not perform well in school, and die at a young age. A final example of exclusionary systemic practices is the record number of anti-LGBTQIA+ bills introduced in recent years across the nation to reduce the rights and protections of queer and trans folks.

Systemic exclusion contributes to overall poor health outcomes by negatively affecting individuals' and groups' emotional, mental, and social health. These inequities are especially harmful in health and human services because people rely on the healthcare system to provide culturally responsive quality care. The WHO emphasizes addressing health inequities because they are not just differing health outcomes, but rather a systemic issue that cannot be explained by the underlying health condition. **Intersectionality directly influences health outcomes because the more identities that intersect, the more opportunities for oppression to act.** Therefore, many of these identities should be considered fluid and evaluated together.

One example of the importance of intersectionality is data on people with disabilities. It is important to include other demographic points that influence disability statistics because the identity of disability does not exist alone. For example, an Afro-Latinx trans woman with cerebral palsy and depression **faces oppression based on those identities alone and faces intersectional discrimination** like being Latinx and trans, disabled and Black, and/or depressed and a woman. Recent census data estimates around 15.2% of Yamhill County residents (15,781) live with a disability. The graph below shows disability data broken down by race and ethnicity in Yamhill County. This is just one example of the intersection of race and disability, and how disability rates are often disproportional compared to their percentage of county population.

County Residents with Disabilities by Race and Ethnicity



18. Social and systemic inclusion

Exclusion is part of the spectrum of social inclusion, which is defined by the World Bank as “the process of improving the terms on which individuals and groups take part in society [by] improving the ability, opportunity, and dignity of those disadvantaged [based on] their identity.” Discrimination and oppression of priority populations affect not just their feelings of safety, security, and belonging, but also harm their individual health and collective well-being. **Inclusion in society is crucial to people’s mental and emotional well-being because positive interactions and relationships help reduce negative health impacts.** According to a recent U.S. Surgeon General report, loneliness and isolation may increase the risk of mental health challenges and **lacking social connection can increase the risk for premature death to levels comparable to smoking daily.**

The Yamhill Community Survey reflects a divided opinion on inclusion: 38% of respondents (326) agreed that “people of all races, ethnicities, backgrounds, and beliefs are treated well” here while 31% disagreed (260), and the last third of survey respondents responded “neutral” (182) or “don’t know” (73), which shows inclusion must be prioritized moving forward.

Exclusion affects social cohesion and mental health, but it also has a high economic cost. The Portulans Institute estimates that most nations forego up to 7% of their Gross Domestic Product (GDP) just by excluding people with disabilities from fully participating in society. In contrast, if nations fully embrace and accept people with disabilities within their societies, an additional **\$1.2 trillion** could be earned worldwide. This one example of health equity for all people with disabilities would strengthen community, pave the way for larger societal benefits, and help achieve other essential economic, political, and social rights, including more education, higher gross national product, increased workforce productivity, and a more resourceful economy.

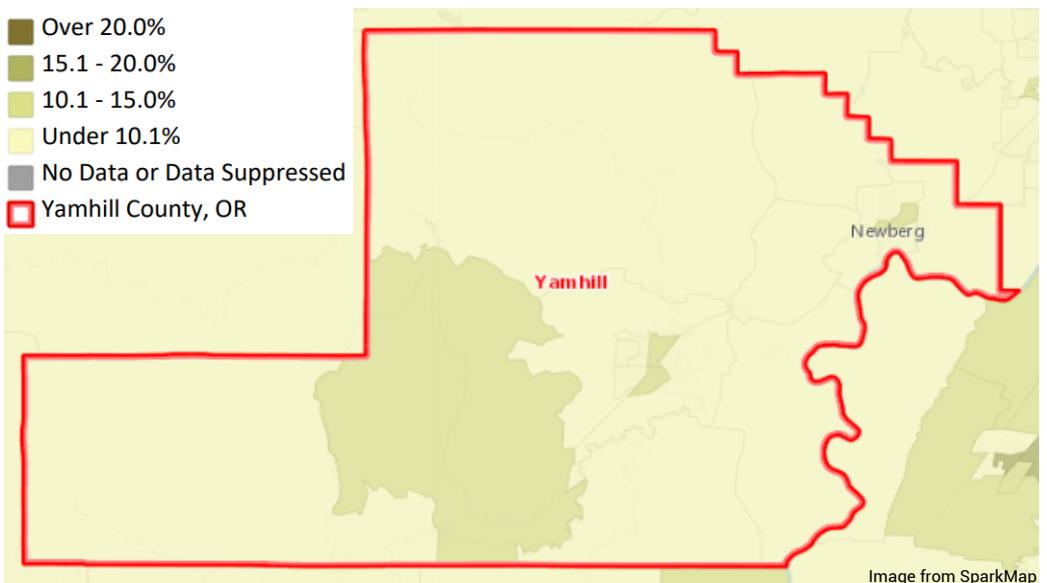
19. Affordable and effective health insurance

Barriers to healthcare access include cost, insurance coverage, siloed healthcare system, and a lack of clarity on what services to get or where to go to access such care. There are also growing numbers of health insurance agencies and providers refusing to offer gender-affirming services, as well as rejecting new applicants with pre-existing conditions.

The cost of health insurance is a huge barrier to people accessing the care they need. The Kaiser Family Foundation found that 4 in 10 American adults have trouble paying for health insurance and must delay care or treatment, while a quarter save costs by not filling prescriptions, skipping dosages, or cutting dosages in half. Most of these issues are reported by women, Black/African Americans, Hispanic/Latinx persons, and lower-income households. High healthcare costs disproportionately affect uninsured persons because affordable prices are related to health insurance. If someone does not have coverage they will not get the discount on their prescription despite needing it just as much as someone with insurance. Even for people with health insurance, nearly a third report concerns about paying for monthly premiums while another 44% worry about meeting deductibles.

Insurance is an essential part of the American health system because healthcare coverage is a key driver of positive health outcomes. The map below shows that most of Yamhill County reports less than 10% of uninsured residents with three areas reporting higher percentages. 5.9% of Yamhill County residents are uninsured (6,201) compared to 6.6% of Oregon residents (274,414) and 8.7% of Americans (28.05 million).

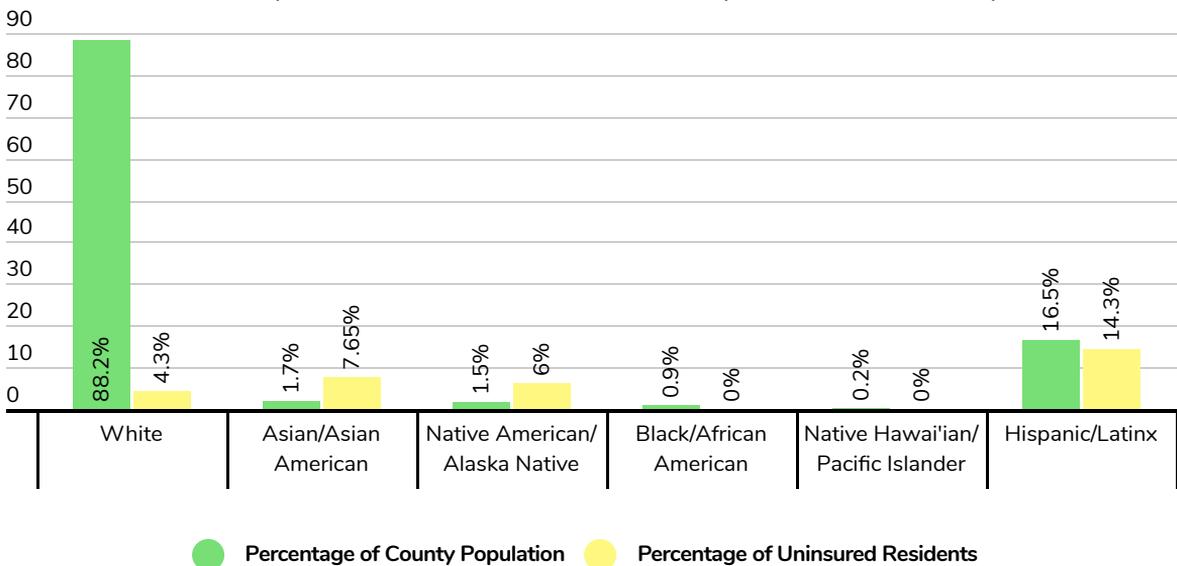
Uninsured Population, Percent by Tract, ACS 2016-20



When people do not have insurance, they often wait until health problems worsen to receive emergency care. Hospitals are now places to treat preventable conditions because many uninsured people experience challenges in accessing primary care. Among Medicare recipients in the county, the rate of hospitalizations for preventable conditions in 2020 was 2,324 per 100,000 beneficiaries, higher than Oregon's rate of 1,923. Hospital admissions for asthma, bacterial pneumonia, chronic obstructive pulmonary disease, controlled and uncontrolled diabetes with short- and long-term complications, heart failure, hypertension, or urinary tract infections are among the most common preventable illnesses that result in hospitalizations.

5.4% of non-Hispanic/non-Latinx county residents are uninsured while 15.1% of Yamhill County Latinx/Hispanic residents are uninsured. The graph below illustrates Yamhill County's breakdown of race and ethnicity data for residents without insurance. As for Oregon, 5.1% of Asian residents, 5.2% of white residents, 7% of Black/African American residents, 11.1% of Native Hawai'ian/Pacific Islander residents, 12.3% of Native American/Alaska Native, and 15.1% of Hispanic/Latinx residents are uninsured.

County Residents without Insurance by Race and Ethnicity



20. Culturally responsive good-quality healthcare

Simply access to health insurance is not enough. Another issue Yamhill Community Survey respondents described was the need for more bicultural and bilingual providers, including primary care physicians and dental workers, to meet both the demand for culturally responsive services and trauma-informed medical care. According to the County Health Rankings, Yamhill County's primary care physician-to-resident ratio in 2022 was 1,650:1 which was only slightly better than the dentist-to-resident ratio of 1,710:1. In comparison, Oregon's physician-to-resident ratio was 1,060:1 while the dentist-to-resident ratio was 1,210:1. These data points show the need for more providers to meet the demand of services. Another concern of this ratio is that it causes long wait times and waiting lists for appointments. A similar gap is found with mental health providers, which include psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, providers who treat alcohol and drug use, and specialized advanced practice nurses. There are around 210 Yamhill County residents per one mental health provider compared to 170 Oregon residents to one mental health provider. These data points show the need for hiring and supporting more health providers, those that are understanding and accepting of differences in community members who will provide culturally responsive trauma-informed care.

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